



GANGA HOSPITAL

Coimbatore, India.



Pushing the Boundaries of Care

Department of Plastic Surgery
Hand Surgery and Reconstructive Microsurgery
Maxillofacial Surgery & Burns Surgery

Activity Report 2006 & 2007

Founders



Dr JG Shanmuganathan and Mrs Kanakavalli Shanmuganathan

The one important lesson that we learnt from our founders
To believe that it is possible to do it.



Dr S Raja Sabapathy and Dr S Rajasekaran



The Ganga Team



The two years2006 and 2007

Time flies fast and it becomes obvious when you realize that it is time to produce the next biennial report of the Department! We found it more exciting to do it this time, since in the two years in review we crossed quite a few milestones.

We have moved to our new facility, added up speciality sub sections, talented young people have joined the team and we served more patients than ever before – these are just a few of them.

As always, patient care has been the prime focus of the unit, but we could also provide adequate resources and time for teaching and training and contributing to the growth of the speciality.

This biennial report has a new format, attempting to answer the frequently asked question of many people, ‘What exactly do you do?’ Though the things could surprise many, one thing you could be sure – we are passionate in everything that we do, continuously pushing ourselves to do a little more.

We thank our parents, the founders of the Hospital for showing us the path and the Lord Almighty for leading us through. The Orthopaedic Department led by my brother Dr Rajasekaran has always been supportive. Hope with your good wishes we are able to serve better in the coming years.

S. Raja Sabapathy

Dr S Raja Sabapathy
Director, Ganga Hospital
Head, Department of Plastic Surgery, Hand & Reconstructive Microsurgery,
Maxillofacial Surgery and Burns

The cover picture



Cover depicts the picture of Mr. Sunil Kumar lighting a lamp for Lord Ganesha. The left hand which is holding the match box was totally amputated on 14th Oct 2007 in a work spot accident. The Plastic Surgery Department reattached the hand with the help of microsurgery in a 7 hour operation. He regained excellent function and went back to the same job in the aluminum fabrication company in 3 months.



Providing emergency microsurgery service 24 hours a day, throughout the year is a challenge to which the unit has lived up to since 1991, ***presently emerging as the largest emergency microsurgery care provider in the country.*** By a continuous process of team building and upgrading the infrastructure we are expanding the indications for replantation, thereby ***pushing the boundaries of care.***

See Sunil's hand at work at www.gangahospital.com/activity0607/cover

...and the Vision for 2012

(Statement first made in the 2002 activity report)

Our mission is to provide the best possible Plastic Surgical and Microsurgical services to every injured person who reaches our hospital at all times. With this we formulated the Vision 2012 statement which we published in 2002. It is reproduced here.

“As a Citizen of India, armed with knowledge and technical expertise and above all a great sense of patriotism for our country, I realize that Small Aim is a Crime”

Dr APJ Abdul Kalam
Former President of India

1. We wish to establish the role of Plastic Surgery and Microsurgery in acute trauma amongst the medical profession and increase the public awareness. A country of a billion people needs many dedicated centres where high quality care with Microsurgery facility is available. We would develop this as the best centre for Hand Surgery and Trauma Reconstructive Surgery which would serve as a prototype for the development of other centres in the country. It will develop with a high degree of social responsiveness so that every person who needs the exclusive services of the centre will have access to the facilities and expertise irrespective of their means.
2. The unit will serve to promote closer co-operation between Plastic Surgery, Orthopaedics and Anaesthesia in the management of major limb trauma. It is our intention that by 2012, every major trauma unit in the country will be supported by a high quality Plastic Surgical team, and 80% of them will have at least one member trained or influenced by Ganga Hospital.
3. We will become one of the preferred centres for training in the field on a global level, where trainees will come by choice. Putting Coimbatore and India as the destination for advanced training will be our goal. We realize that we should provide high quality care and a good academic environment with high volume of work to make it possible.
4. We will work to make the Hospital as one of the most valued and respected health care provider in the country. It will be driven by a team of people who share the same vision. The hospital will provide every team member the opportunity to reach their full potential.

***With every passing year -
closer to the Goal***



Patient Care



“The interest of the patient is the only interest that we have”

- William J Mayo

Will our son ever walk again ?

No parent ever wants to be in a situation where they need to ask this question. Unfortunately Mrs and Mr Saravanan, had to do that on the evening of 13th July 2007 when their 7 year old son Manikandan's foot was crushed when a lorry ran over his right leg while he was walking on the side of a road. The right foot was so badly crushed that the parents were so worried if it could be saved at all. They rushed him to Ganga Hospital.

Ganga Hospital has the system wherein all major injuries are immediately seen by the senior decision making people on arrival of the patient. The child was resuscitated by the anaesthesia department and the Plastic Surgeons reassured the parents that every effort would be taken to salvage the foot. Manikandan was on the operation table barely an hour after arrival to the hospital. His normal schedule would have had him at home doing his school home work. Such major injuries are heavily contaminated and the first step taken by the surgeon is to remove all the dead and damaged tissue and the contaminants. This is a crucial step for success and technically it is called debridement. This done, the tendons which move the toes and the foot were reconstructed. All this will be successful if and only if the whole wound is covered with good tissue with blood supply. This is the challenging part of the reconstruction and requires microsurgical free tissue transfer. Plastic and Microsurgery department of Ganga Hospital has made a mark in this field. The procedure could take about 4 – 6 hours. It was thought too much for the child to do them all in one day. Manikandan was again on the operation table the next morning. A muscle from the back with its blood vessels was taken and joined to the blood vessels in the leg. The muscle became pink again and protected all our reconstructions. With each passing day Manikandan and his parents began feeling better. That 'goodness' feeling was so obvious when he greeted us with a note of thank you one morning. Four months from injury he is back to school, leaving the memories of the injury behind.

His parents have almost forgotten the question they asked on his arrival to the Hospital whether their son would ever walk again, because, Manikandan is now running.

See him run at www.gangahospital.com/activity0607/001



The mangled foot



After debridement and tendon reconstruction



After microsurgical muscle flap cover



*The healed foot and a
"Thank You" note to the Doctors*



Will I ever be able to bend my elbow ?

Dr Manish had just qualified as a doctor from a Medical College in New Delhi and was looking for a bright future. Then tragedy struck. He fell down from a two wheeler and sustained brachial plexus injury to his right hand. His shoulder and elbow muscles were paralysed.

When he reached us, it was more than 5 years after the injury, and had undergone many surgeries. Still he could neither bend his elbow nor lift his wrist. The time elapsed ruled out many treatment options but had not reduced his desire to get better. We offered him the only possible solution of bringing in a muscle from the thigh (Gracilis) to act as the biceps muscle.

The thigh muscle had to be harvested with its blood vessels and nerve and connected to blood vessels and nerves in the neck. The new blood supply makes the muscle live and the nerve has to regenerate to make the muscle work and bend the elbow. In a 7 hour operation, (Free Functioning Muscle transfer) it was successfully executed.

It took 6 months for his new 'biceps' to flicker and in a year's time he could bend the elbow. Another operation (tendon transfer) was done to enable him to extend (lift upwards) the wrist. Manish said, 'It is really marvelous to be able to bend the elbow and the wrist again. I almost thought it might never happen'.

It is easy to take things for granted until one is deprived of it. At Ganga Hospital we are alive to the needs of such people and are proud to be one of the very few centres in the country offering wholesome service to Brachial Plexus injury patients. It is difficult to match the original, but almost everyone can be made a little better. As Sterling Bunnell, one of the founding fathers of Hand Surgery said, **'For someone who has nothing, a little is a lot'**.

Brachial plexus injuries are devastating injuries which occur to young people. The nerves which supply the upper limb are damaged near the spinal cord. The effect may range from total paralysis of all the muscles from shoulder to the hand or partial functioning of some of them.

**Every patient just has the question,
'Can anything be done to get more movement in my hand?'**
and we strive hard to provide answers to that question.

See Dr Manish at www.gangahospital.com/activity0607/002



*Dr Manish as he reached us,
unable to bend the right elbow or
lift the wrist*



*The muscle harvested from
the thigh which will become
his biceps*



*Now he can bend the
elbow and comfortably steady
his wrist and carry weights*

Can I face the world again?

For 40 year old Haraprasad Sahu, from Berhampur, Orissa the worries were two fold. One, he was worried about the real danger of losing his left thumb, having lost part of the right thumb and ring finger in the same accident. Apart from that he could neither feel nor move any of the other fingers in the left hand. The tendons (structures which move the fingers) and the nerves had been divided. Unable to move and unable to feel - to him the hand was almost non existent.

We saw him a few weeks after the accident. The left thumb tip was precariously viable but most of the tissues were dead. Salvaging the thumb was the priority. Painstakingly we removed all the dead tissues (they have to be removed entirely). That itself was a challenge because there was the real risk of losing the thumb in the process. That left him with just a stump of bone with some skin on the back and the base of the index finger was also bare. We shaped tissues from the groin area and saved the thumb. At Ganga Hospital we have refined techniques in the transfer of tissues from the groin even from obese people and those techniques came in handy. The thumb was saved.

He came back again after a few months and we grafted all the flexor tendons and the divided nerves to make the hand functional. To reconstruct tendons we took tissues from the thigh (fascia lata grafts). Mr Sahu cooperated well with our trained physiotherapists and in a few months he was almost normal again. He could feel and move the fingers.



The way Mr Sahu arrived, the left thumb precariously viable, other fingers without sensation and movement with partial amputation of right thumb and ring finger.



What remained of the left thumb after removal of dead tissues



The soft tissue defect being reconstructed in stages with tissues from the groin region. The thumb has been saved but it has to be made to look good and functional.

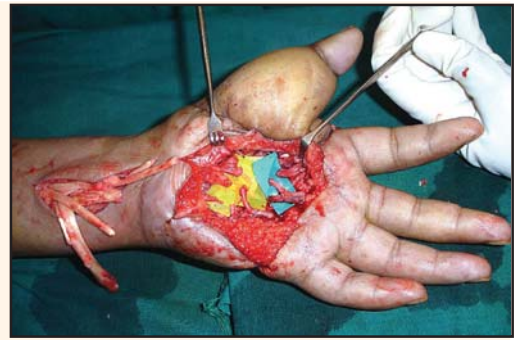
He had one more wish. ***“Can I get a prosthesis for the short thumb and ring finger of the right hand?”*** This was done at the Ganga Hospital Silicone Prosthetic centre where in association with Otto Bock silicone fingers are made.

They provide excellent colour match and are almost life like. After he got the prosthesis, for a few days Mr Sahu was in demand – doctors and therapists asking people to find out what is special in his right hand. Not surprisingly many stared at his right hand for some time and said, ‘It looks OK. I don’t know what the problem is’. Sahu’s confidence in himself bounced back.

Few months later, on a review visit he said that he was driving a motor cycle in the village. When the doctors told him that it is safer for him to drive a car, he said, ‘Sir, I have many cars but when I drove the motor cycle through the village, everyone was convinced that I was normal again’.

We say that we face the world with our faces, but many times people face the world with their hands too

See Mr. Sahu’s reconstructed hands at www.gangahospital.com/activity0607/003



All the tendons which move his fingers and the nerves which provide sensation to the finger tips were reconstructed by grafting.



His left hand a year after injury when he came for a followup visit. He has power, movement and sensation in the fingers and are aesthetically very acceptable.



Rehabilitation was complete with the provision of prosthesis to the right thumb and ring finger. The comprehensive care provided made him ready to ‘face the world again’

‘Uncle, my hands are so much better now. For the first time I walked a few steps myself’

Sure, you must be thinking that there must be something wrong in the printing of the sentence – we agree. It deserves some explanation as to how the hands getting better has made one walk a few steps.



14 years old Sakthisri is a bright and intelligent girl and full of life. She has been afflicted by cerebral palsy with severe spasm of all the four limbs. Surgery on the legs has just enabled to steady the legs. But she required the support of her hands to hold the crutches to take those few steps. The hands were severely spastic which prevented her from gripping objects. Tendon transfers were done to steady the wrist in good position and the spastic muscles were selectively weakened. Another surgery was done to correct the deformity in her fingers. All this done, and with the support of physiotherapy and a loving and supportive family, she was able to grip the crutches and take a few steps. Her joy knew no bounds. Now she thinks that her dream of becoming a professor will also be possible. This has given hope to her and fresh challenges to us to keep pace with her demands and aspirations.

Opportunity to make a difference in the lives of children like Sakthisri gives us tremendous joy and a sense of satisfaction. After all nothing could be more satisfying than helping a child's dream come true.



The right hand before operation



Made adequate to hold the crutches

See her take a few steps at
www.gangahospital.com/activity0607/004

Statistics of the clinical work done in 2006 & 2007

Methodology of Recording

Every new patient who undergoes a surgical procedure gets a serial number. Procedures in the Hand and Upper Limb are recorded separately and all others are recorded under General Plastic Surgery category. If one patient undergoes multiple procedures, even at intervals he or she is considered as one patient for statistical purposes. All operations done are recorded in a nominal register. If similar procedures are done, for example skin grafting at different sites it is considered as only one procedure. But if an individual has a flap cover and later tendon grafts it is considered as two procedures.

Description	2005	2006	2007
<i>New Hand Surgery Patients</i>	<i>1774</i>	<i>1940</i>	<i>2200</i>
<i>New General Plastic Surgery Patients</i>	<i>1269</i>	<i>1420</i>	<i>1687</i>
<i>Total Surgeries</i>	<i>4100</i>	<i>4636</i>	<i>5519</i>

Hand Surgery

	2006	2007	Non Micro Surgical Flaps in Upper Limb	
Finger Injuries			Abdominal/Groin Flap	94 138
Primary Skin Suturing	133	157	Transposition Flap	3 27
Nail Bed Repair	223	290	Posterior Interosseous Flap	10 7
Nail Bed Graft	7	10	Lateral arm flap	0 1
Straight Triangular Flaps	70	89	Becker Flap	1 1
Oblique Triangular Flaps	77	75	Pedicled LD	3 2
Little Island Flap	2	4	Perforator Flap	0 1
Cross Finger Flaps	126	127	Radial forearm Flap	1 1
Reverse Dermis Flap	2	1	Total	112 178
First Dorsal Metacarpal Artery Flap	5	1		
Transposition Flap	20	4	Replantations	
Full Thickness Skin Graft	10	6	Arm	0 1
Split Thickness Skin Graft	31	25	Forearm	3 5
Shortening And Closure	262	353	Hand	0 6
Ray Amputation	10	9	Transmetacarpal	2 4
Subungual Hematoma	5	9	Thumb	12 11
Nail Cyst Excision	3	2	Fingers	18 25
Palmar Grafting	2	2	Ring avulsion	5 1
Dorsal Dermodesis	8	9	Scalp	0 1
Total	996	1164	Foot Replant	0 1
			Heterotrophic Replant	0 1
			Total	40 56

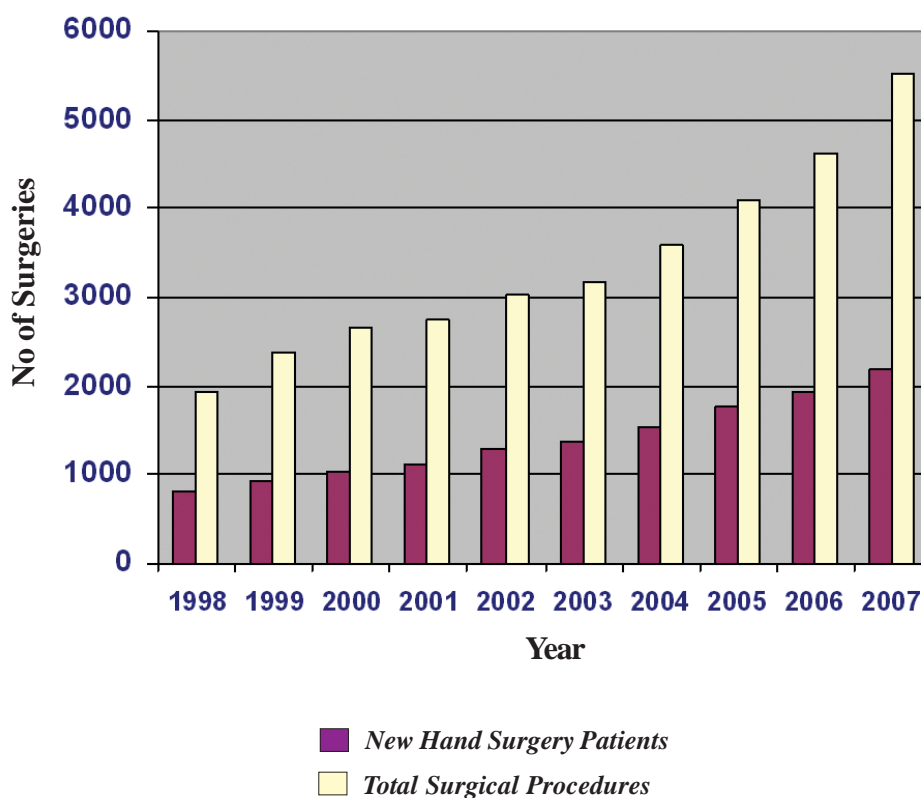
Critical Revascularization			Surgery On Flexor Tendons		
Digital Artery Repair	41	34	Zone I Tendon Repair	6	18
Palmar Arch Repair	5	1	Zone II Tendon Repair	14	13
Ulnar Artery Repair	9	24	Zone III Tendon Repair	24	7
Radial Artery Repair	8	8	Zone IV Tendon Repair	1	1
Brachial Artery Repair	8	10	Zone V Tendon Repair	27	25
Axillary Artery Repair	0	3	FPL Tendon Repair	4	7
Femoral Artery Repair	0	2	Flexor Tendon Graft	7	6
Popliteal Artery Repair	1	10	Flexor Tenolysis	6	4
Posterior Tibial Artery Repair	1	3	Flexor Reconstruction	3	1
Anterior Tibial Artery Repair	0	1			
Vein Grafts	7	12	Total	92	82
Venous Augumentation	0	2			
Total	80	110	Tendon Transfers		
Major Hand Reconstruction			Opponensplasty	2	5
Major Hand Debridement	59	66	Claw Correction	6	2
Skin Grafting	75	201	Radial Nerve Palsy Correction	5	12
Volkman's Ischemic Contracture	12	6	Pedicle LD Transfer for Elbow Flexion	0	4
Degloving Injuries Forearm	2	3	Pec Major for Elbow Flexion	1	0
Degloving Injuries Fingers	3	6	ECRL to FDP	4	0
Secondary Flap Procedures			EI to EPL	1	1
Syndactily Release (Groin Flap)	16	12	Brachioradialis to FPL	3	0
Debulking	22	20			
Web Release	4	5	Total	22	24
Side Swipe Injuries	0	2			
Primary Skin Suturing	21	28	Surgery On Bones		
One Bone Forearm	0	1	Moulding of Fractures	53	35
Post Traumatic Contracture Release	30	32	Zimmer Splint Traction	21	10
Osteoplastic Thumb Reconstruction	0	4	Open Reduction & Internal Fixation of Fractures		
Compartment Syndrome Reconstruction	3	1	Middle Phalanx	63	59
Fasciotomy Hand - Compartment Syndrome	0	2	Proximal Phalanx	97	98
Radio-ulnar Synostosis Release	0	1	Metacarpals	83	53
Total	247	390	Bennett's Fracture	14	15
			Scaphoid	1	2
			Capitate	0	1
			Closed Pinning	21	48
Surgery On Extensor Tendons			Dislocations		
Mallet Finger Correction	14	35	Lunate Dislocation	2	0
Central Slip Repair	6	9	Carpo Metacarpal Joint	12	12
Tendon Repair Over Phalanges	57	49	Metacarpophalangeal Joints	9	4
Tendon Repair Over Dorsum of Hand	19	24	Inter Phalangeal Joints	3	16
Tendon Repair Over Forearm	13	20	Carpal Injuries	2	2
EPL Repair	6	8	Proximal Row Carpectomy	2	8
Tendon Graft For Extensor	2	4	Collateral Ligament Injuries	8	6
Extensor Tenolysis	3	15	Arthrodesis		
Centralization of Extensor Tendon	0	1	Wrist	1	5
Boutonniere Correction	2	6	CMC Joint	4	5
Swan Neck Deformity Correction	4	6	MCP Joint	6	5
ECRB Plication	0	1	PIP Joint	19	22
Total	126	178	DIP Joint	8	27
			MCP Joint Capsulotomy	16	6

Trans-Scaphoid Perilunate Dislocation	1	2	Derotation Osteotomy	0	3
External Fixator Application	0	1	Shoulder Arthrodesis	1	0
Ulnar Collateral Ligament Repair - MCPJ Thumb	1	3	Botox Injections	0	8
Arthrolysis (Collateral Ligament Release)	0	1	Total	49	109
Corrective Osteotomy Finger	12	4	Compression Neuropathies		
Bone Grafts to Phalanges & Metacarpal	17	15	Carpal Tunnel Release	27	51
Total	474	467	Guyun's Canal Release	7	10
Surgery On The Nerves			Cubital Tunnel Release	0	1
Digital Nerve Repair	31	41	Thoracic Outlet Decompression	0	2
Median Nerve Repair	7	21	Total	34	64
Ulnar Nerve Repair	7	20	Congenital Hand Problems		
Radial Nerve Repair	3	2	Excision of Polydactyly	2	3
Facial Nerve Repair	1	1	Syndactyly Separation	12	6
Femoral Nerve Repair	0	1	Congenital Trigger Thumb, Finger Release	9	14
Sciatic Nerve Repair	2	1	Constriction Ring Syndrome	0	1
Nerve Grafting			Thumb Duplication	3	1
Digital Nerve	8	2	Radial Club Hand - Radialisation	3	0
Ulnar Nerve	3	3	Hypoplastic Thumb - Lig Recon. & Opponensplasty	2	2
Posterior Tibial Nerve	1	1	Pollicisation	2	5
Common Peroneal Nerve	0	2	Cleft Hand Correction	3	1
Anterior Transposition of Ulnar Nerve	2	5	Symbrachydactyly (Including free toe phalanx transfer)	1	8
Neuroma Excision	2	4	Macroductyly	2	3
VIC Neurolysis	5	11	Clasp Thumb Deformity	1	0
Neurolysis Posterior Tibial Nerve	0	1	Wind Blown Hand	1	0
Total	72	116	Total	41	44
Brachial Plexus Surgery			Rheumatoid Hand		
Brachial Plexus Neurolysis	1	4	Dorsal Synovectomy	2	7
C5 Direct Repair - Stab Injury	0	1	Centralisation of Extensor Tendon	1	0
C5 with Medial Cord	0	1	Flexor Synovectomy	3	16
Oberlin's Transfer	7	17	Ruptured Flexors	2	0
Spinal Accessory to Musculocutaneous	13	12	Intrinsic Release	1	0
Spinal Accessory to Supra Scapular Nerve	6	15	Adult Trigger Finger	12	21
Long Head of Triceps to Axillary	1	3	Adult Trigger Thumb	15	12
Long Thoracic Nerve to Supra Scapular	0	1	Dequervain's Release	6	6
Phrenic to Supra Scapular Nerve	1	0	Calcific Tendonitis	0	1
C6 to Supra Scapular Nerve	0	1	Darrach's Procedure	0	1
OBPI Neurotization	1	0	Total	42	64
Free Functioning Gracilis Transfer	7	0	Spastic Hand		
Trapezius Transfer	4	2	Flexor Release / Fractional Lengthening	4	5
Steindler's Operation	0	1	FCU to ECRB Transfer	7	4
David Chuang's Transfer	6	0	FCU to EDC Transfer	0	3
Triceps to Biceps	1	0	Total	11	12
Mod Quad Release	0	35			
Triangular Tilt	0	5			

Burns (Early Surgery)			Miscellaneous		
Hand Burns	7	9	Dupuytren's contracture	0	3
Fingers	5	1	Foreign Body Upper Limb	19	12
Electric Burns	2	5	Biopsy	4	8
Chemical Burns	1	2	Incision & Drainage	3	10
Face & Chest	2	2	Scar Excision Upper Limb	0	2
Scalds	2	2	Scar Revision	0	2
Tangential Excision	5	14	Total	26	37
Total	23	35	NON HAND PLASTIC SURGERY PROCEDURES		
Post Burn Contracture Release			Head and Neck		
Z Plasty	3	1	Face, Lip and Scalp Lacerations	144	292
Axilla	3	3	SSG Face, Scalp	10	14
Hand, Elbow, Wrist	15	6	Facial Scar Revision	11	9
Finger	13	5	Tagliacozzi Flap	0	1
Web Space Release	4	16	Commisuroplasty	0	1
Syndactyly Release	0	3	Surgery for Facial Nerve Palsy	3	0
Thumb	0	1	Hairy Naevus - Face Excision	4	2
Lower limb	12	6	Parotidectomy	1	3
Total	47	44	Parotid Duct Repair	1	1
Tumors			Sub Mandibular Gland Excision	1	0
Ganglion	12	16	Sebaceous Cyst / Lipoma	9	11
Soft Tissue	6	3	Dermoid Cyst	1	0
Enchondroma	2	2	Tongue Tie Release	3	2
Glomus Tumor	4	7	Tracheostomy	8	19
Giant Cell Tumour of Tendon Sheath	4	2	Earlobe Keloid / Repair	14	5
Giant Cell Tumor (PPx)	0	1	Haemangioma	1	2
AV Malformation	4	1	Torn Ear Lobe Repair	0	2
Haemangioma	2	0	Tooth Extractions	0	11
Fibromatosis	1	2	Scalp Biopsy	0	1
Pseudoaneurysm	0	3	Total	211	376
Aneurysmal Bone Cyst Hand	0	1	Faciomaxillary Surgery		
Total	35	38	Panfacial Fracture-ORIF	1	11
Amputations			Naso Maxillary Zygomatic Complex Fracture	0	2
Below Elbow	6	14	Nasal Bone Fracture Elevation	22	16
Mid Arm	1	12	Zygoma Fracture Elevation / ORIF	35	42
Total	7	26	Mandible Fracture ORIF / IMF	30	60
Infections			Dentoalveolar Fracture Wiring	0	13
Paronychia	12	3	Frontal Bone Elevation	6	2
Hand	4	2	Sagittal Split Osteotomy	1	0
Finger	7	1	Lefort Osteotomy	1	0
Osteomyelitis	7	3	Maxilla Fracture	10	18
Viral Wart	6	1	Orbital Blow Out Fracture	1	2
Papilloma	0	2	Submandibular Calculus Removal	0	1
Total	36	12	Bony Exostosis Mandible	0	1
			Septoplasty	1	0
			Mandible Plate Removal	0	1
			Eviscerations of Eye	1	0
			Total	109	169

Cleft Lip and Palate			Micro Surgical Free Flaps		
Lip Repair	1	9	Latissimus Dorsi	28	59
Abbe Flap	0	1	Gracilis	44	47
Palate Repair	1	5	Free Fibula	4	2
Secondary Cleft Lip/ Nose Deformity	1	6	Lateral Arm	1	0
Palatal Fistula Closure	0	1	Anterolateral Thigh Flap	1	0
Total	3	22	Toe to Thumb	0	4
Aesthetic Surgery			Fasciocutaneous free Flap	0	1
Rhinoplasty	4	1	Total	78	113
Gynecomastia	0	3	Pressure Sores		
Reduction Mammoplasty	1	0	Sacral	14	11
Liposuction / Abdominoplasty	1	4	Trochanter	4	1
Incisional Hernia/Abdominoplasty	3	4	Ischial	1	2
Hair Transplant	2	1	Heel	2	5
Rhinophyma	1	2	Ankle	0	1
Fat Injection	0	3	Foot (Hansen's - Fritschi's Procedure)	2	2
Eyelid Reconstruction	0	1	Total	23	22
Romberg's Suspension of Flap	0	1	Congenital- Lower Limb		
Cheek Adipo Facial Flap	1	0	Macrodactyly	0	1
Total	13	20	Toe Duplication	0	1
Lower Limb Trauma			Total	0	2
Grade III B Fractures	123	145	Diabetes - Complications		
Grade III C Fractures	5	12	Diabetic Foot / Ulcers	20	29
Major Degloving Injuries Lower Limbs	2	8	Total	20	29
Major Debridement	23	28	Amputations		
Crush Injury Foot with Skin Loss	10	44	Above Knee	19	27
SSG Lower Limb	250	385	Through Knee	0	1
Emergency Fasciotomy	3	5	Below Knee	35	53
Laceration / Abrasion	55	117	Forefoot	5	1
Heel Pad Avulsion	10	17	Total	40	82
Foot Fracture	8	9	Soft Tissue Tumors		
Toe injuries	102	124	Lipoma	0	4
Total	571	894	Lymphangioma Excision	0	1
Lower Limb Flaps			Total	0	5
Sural Artery Flap	14	5	Others - Lower Limb		
Fasciocutaneous Flap	73	136	Hallux Valgus Correction	1	1
Gastrocnemius	24	21	Haemangioma Foot	0	3
Soleus	1	1	Tarsal Tunnel Release	0	11
Cross Leg Flap	12	9	Foreign Body Leg	1	9
Cross Thigh Flap	1	0	Tibialis Posterior Tendon Transfer for Foot Drop	3	2
Adipo Facial Flap	2	0	Tendoachilles Repair	13	6
Lateral Calcaneal Artery Flap	5	0	Tendoachilles Lengthening	1	1
Extensor Digitorum Brevis	3	1	Extensor Tendon Repair - Foot	0	9
Debulking of Flap	0	1	Corn Foot	4	4
Debulking LD Flap	0	1	V-Y Flap Heel	0	1
VAC Leg	6	20			
Total	141	202			

V-Y Flap Toe	0	4	Appendicectomy	0	2
Corrective Osteotomy Toe	0	1	Laparotomy	14	5
Varicose Veins/Ulcer	8	6	Lymphedema Debulking	0	2
Incision Drainage Abscess Lower Limb	12	30	Pyogenic Granuloma	0	1
Toe Burns	0	1	ICD Insertion	0	4
Ingrowing Toe Nail	9	21	Umbilical Hernia	0	2
Total	52	110	Hernia	4	3
Miscellaneous			Tubal Recanalization	0	1
Lower Limb Burns	3	0	Sebacous Cyst	0	7
Seroma	0	5	Sternal Keloid	0	1
Breast Fibroadenoma	1	1	Penile reconstruction	0	1
Muscle / Node Biopsy	0	5	Hypospadias	1	0
Bursa Excision	5	4	Circumcision	5	1
Pilonidal Sinus Excision	3	0	Implant Removal	0	11
			Hematoma Drainage	0	7
			Total	38	65



Department of Anaesthesia

The volume of work of the Plastic Surgery Department is possible due to the round the clock availability of a skilled anaesthetic team headed by Dr Ravindra Bhat. Dr Boopathy joined the team in 2006.



Dr V Ravindra Bhat, Dr V Boopathi, Dr G Venkateswaran

Statistics (2006 & 2007)

Brachial Plexus Block	-	4946
Spinal Anaesthesia	-	2920
Combined Spinal Epidural	-	300
General Anaesthesia	-	1158

Popularisation of the Concept of the ‘On arrival block’

The department conceived the concept of the ‘On arrival block’, wherein major injuries to the limbs are given a regional block as soon as they arrive at the Hospital. It is given in the ante room of the operating theatre after preliminary examination excludes injury to the other systems. Removal of dressings, clinical examination and radiology are done after the block in a pain free state. The immediate members of the family are shown the wound and the options of treatment are discussed. Immediate pain relief provides confidence to the patient and allows better clinical and radiological examination. Discussion of the injury and the treatment with the patient and the family increases patient compliance for follow up and physiotherapy.



Resuscitation of Polytrauma Patients

They form the frontline members for resuscitation of polytrauma patients. This has enabled many patients to be taken for emergency surgery early. The window period between arrival of the patient at the hospital to the start of definitive treatment has been kept to a bare minimum.

Academic Activities

Dr V Ravindra Bhat was the Chairman of the Scientific Committee of the Annual Meeting of the International Trauma Anaesthesia and Critical Care Society (Indian Section)

Presentations

1. June 2006. Indian Society for Anaesthesia , Tamil Nadu State Chapter, Thanjavur.
Dr V Ravindra Bhat - Anaesthesia for Free Flaps
2. 7th - 9th Sept 2007, 4th Congress of the International Trauma Anaesthesia and Critical Care Society (Indian Section) ITACCS, Coimbatore.
Dr V Ravindra Bhat - Fluid Resuscitation in Trauma
3. Oct 2007. Symposia for Post Graduates of Southern States, GKNM Hospital.
Dr V Ravindra Bhat - Regional Anaesthesia

Visitors

2006

Dr Ananth J	Assistant Professor Anaesthesia, Kasturba Medical College, Manipal	23.10.06	28.10.06
Dr Punitha C	DNB Registrar, Dept of Anaesthesia, GKNM Hospital, Coimbatore	16.01.06	31.01.06
Dr Geetha S	DNB Registrar, Dept of Anaesthesia, GKNM Hospital, Coimbatore	16.01.06	31.01.06
Dr Sheeba Nambiar	DNB Registrar Dept of Anaesthesia, GKNM Hospital, Coimbatore	6.01.06	31.01.06
Dr Saravana Kumar S	Consultant Anaesthesiologist, Coimbatore	23.10.06	28.10.06

2007

Dr Jyoti Khanna	Anaesthesiologist, Dr Ruban Memorial Hospital, Patna	10.09.07	15.09.07
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Ganga Hospital - AESCULAP Academy Advanced Course in Regional Anesthesia and Pain Management

Ganga hospital along with B.Braun AESCULAP Academy launched the advanced course in Regional Anesthesia and Pain Management in October 2005. So far 39 anesthesiologists from India, Srilanka and Nigeria have undergone this course. The objective of the course is to train anesthesiologists in various types of peripheral nerve blocks and plexus blocks including placement of continuous indwelling catheters with the help of peripheral nerve stimulator. The duration of the course is one week.

B. Braun Fellows

Dr. L. Vinutha, Hosur	Dr. Sujatha Santosh, Chidambaram
Dr. B. Vasanthkumar, Trichy	Dr. Priyesh, Lucknow
Dr. P. Arthy, Coimbatore	Dr. Sameer Kapoor, Jalandar
Dr. Premanand, Chidambaram	Dr. Sandya Prakash Bhuva, Mumbai
Dr. Khatri Bhimesen, Mumbai	Dr. Venkat Raju, Bangalore
Dr. Bhamati Aohye, Pune	Dr. Jayanti A Bhate, Mumbai
Dr. Ravi Narayanan, Bangalore	Dr. Mrs. Oluwabummi, Nigeria
Dr. Archana Deka, Tezpur, Assam	Surg. Cor. Arindam Dutta, Mumbai
Dr. Vemulapalli Raja Gopala Rao, Vijayawada	Dr. Sandhya R Bhat, Mumbai
Dr. Dhina Dhedhia, Mumbai	Dr. Sonali Deoskar, Mumbai
Dr. Aparajitha Bhuyan, New Delhi	Dr. Meera Sundaram, Mumbai
Dr. Raajis Kanna, Tuticorin	Dr. V. Satheesh Kumar, Coimbatore
Dr. Reshmy Jayaraman, Mysore	Dr. Ajay Pillai, Trivandrum
Dr. C. Ravi Sankar, Madurai	Dr. Vinod Sonawane, Mumbai
Dr. Piyush N Mody, Mumbai	Dr. Viraj Namshikar, Nagercoil
Dr. Alia Rafique, Mangalore	Dr. Dr. Narendra Charma, Mumbai
Dr. Virupakshappa, Raichur	Dr. Rajesh Navale, Sangli
Dr. Prakash Deshmukh, Mumbai	Dr. Jose Joseph, Kottayam
Dr. Shyam Patil, Nasik	Dr. H. Perera, Colombo, Sri Lanka
Dr. K. Mendis, Colombo, Sri Lanka	

Hand Therapy and Physiotherapy Department

We are fortunate to have a dedicated Hand Therapy department. It has in house splint making facilities. The unit is popular with trainees from many physiotherapy colleges. They come as observers during their student days or as interns after the course.

Mr Balaji, Senior Hand Therapist participated in the 7th Triennial Congress of International Federation of Societies for Hand Therapist at Sydney and presented the following talks.

- ECRL Tendon transfer for Restoration of finger flexion in patients with Flexor Muscle Loss after Direct Trauma
- Functional Out-Come of Major Upper Limb Replantation



The Department



View of the New Facility

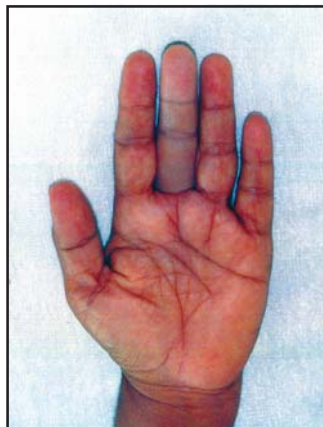
Statistics - Trainees in 2006 & 07

	2006	2007
Students-Clinical Posting	12	28
Internship	75	105

Ganga Hospital Silicone Prosthetics Centre

The Ganga Hospital Silicone Prosthetics Centre has become a regional training centre for Otto Bock centres in South East Asia. A course was held in March 2007 where 6 candidates from South Korea, Thailand and India attended.

Otto Bock
QUALITY FOR LIFE



Middle finger amputation fitted with prosthesis



Statistics

Year	Finger Prosthesis	Hand Prosthesis	Foot Prosthesis	Total
2006	29	06	08	43
2007	56	10	10	76

New Developments



***‘Compromise in organization is tantamount to making compromises
in the standards of treatment’***

*- Sir Benjamin Rank
A Pioneer in Hand Surgery*

We have moved to our new premises



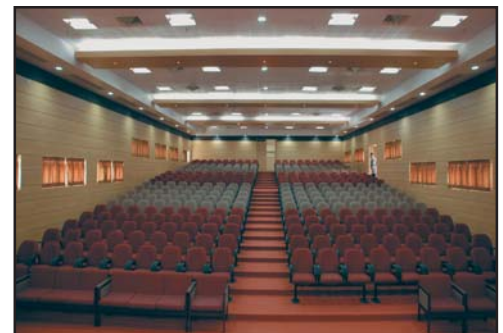
We at Ganga Hospital have strived our level best all the time to upgrade the infrastructure and the facilities to provide the state of art care to the patients.

Seven floors of state of art facility, 420 patient beds, 17 operation theatres, 10 outpatient cubicles each for Plastic Surgery and Orthopaedic departments, a blood bank with Regional Blood Bank status, seminar rooms for everyday teaching purposes and a 410 seater auditorium provide the team with passion for excellence to give their best towards patient care.

We steadfastly hold to our mission to provide the best possible care and comfort to everyone in need.



Out Patient Cubicles



Auditorium



Laboratory



Blood Bank



Plastic Surgery Seminar Room

Expansion of the Division of Maxillo Facial Surgery



*Dr. Kannan Balaraman
Consultant
Maxillofacial Surgeon*

The Division of Maxillo Facial Surgery was expanded with the induction of Maxillo Facial Surgeons Dr Kannan Balaraman and Dr Vimala Ramani into our team. Their expertise richly complements the skills of the Plastic surgical team and the work has improved considerably. About 165 facio maxillary fractures were treated in the year 2007 alone. We are now able to provide 24 hours cover for facio maxillary injuries.



*Dr. Vimala Ramani
Registrar*

Development of Departments of Neurosurgery and Surgical Intensive Care

Care of polytrauma patients has got even better with the joining of Dr Venkatesh as a full time Neurosurgeon and Dr Prabhu, Consultant Anaesthesiologist who has developed the Surgical intensive care division.

With this we have developed a Team to Trust in an emergency situation.



*Dr. G Venkatesh
Consultant
Neurosurgeon*



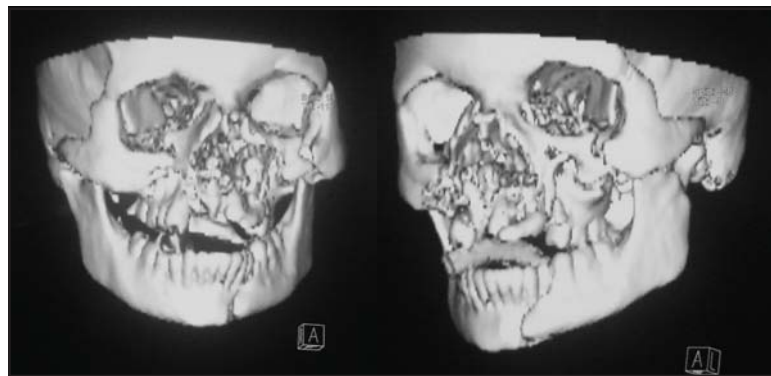
*Dr. C Prabhu
Consultant
Anaesthesiologist*

A Team to Trust ...

Mrs X accidentally fell from height and landed on the face. It resulted in multiple fractures of her facial bones. Though she had an endotracheal tube for the 100 odd kilometres journey to Ganga Hospital, she had aspirated blood into the lungs. All the facial bones were broken into many pieces, literally converting it into a bag of bones.



On arrival picture



Badly shattered face with multiple fractures

A combination of Plastic Surgical expertise and Maxillofacial surgical input is required for these patients. The unit at Ganga Hospital is well equipped to do that. All her fractured bones were internally fixed getting her facial framework back to shape.

Equally challenging was the management of her compromised lungs which got severely injured secondarily due to the massive insult suffered at the time of the accident. For days on end she battled with Multiple Organ Dysfunction Syndrome. The team of surgeons, intensivists and the nurses refused to give up. When things were really bad, they tried even prone ventilation and gradually perseverance worked. She picked up and on follow up a few months later, hardly any one can imagine that this lady could have been so sick just a while ago.



Patient on prone ventilation



Radiographs showing the type of fixation of fractures



Post operative outcome

Poly trauma patients need intense attention of many specialists like Anaesthesiologists, Surgical intensivists, Orthopaedic surgeons, Reconstructive surgeons, Maxillo facial surgeons, General surgeons and Neuro surgeons. In our newly created facility we are able to offer this comprehensive care to everyone who needs it.



Surgical Intensive Care

Today's patient deserves the best that today has to offer.

We strive to deliver it every day.

Creation of the Department of Burns

Ever since its inception, the unit has been managing burns with consistent good results. In an endeavour to do more to this field, as we have contributed to the care of injury to the extremities & microsurgery, a separate burns unit has been created. Moving to the new premises has given us the opportunity to fulfill this desire by providing the space and infrastructure.



Nurses who attended the burns training course at CMC Vellore



Grafting of a major burns in progress in the dedicated Burns operation theatre complex



Major flame burns with inhalational injury



Treated by early grafting

Highlights of the facilities

- A separate burns reception and resuscitation room
- A three bedded burns intensive care unit
- A dedicated operation theatre for burns
- A step down intensive care unit
- Burns Unit - Total bed strength - 18

Supported by

- A skilled anaesthesiology team
- Trained nurses
- In house regional blood bank
- Good physiotherapy cover
- In house facility for custom made compression garments

Burns Rehabilitation

Ganga Hospital - Mala Pressure Garments

Providing comprehensive quality care for every patient is our desire. Burn patients need to wear compression garments to reduce the effects of scarring and they need to be custom made for every individual. Keeping this in mind we collaborated with Mala Pressure Garments of Mumbai and an in house facility called Ganga Hospital - Mala Pressure Garments was inaugurated on 1st Nov 2007. This provides comfort and convenience to the patients making things available at their door step. Yet another instance of our efforts in *pushing the boundaries of care*.



*On the day of the inauguration.
Ms Mala making the first garment.*



*Preparation of the compression garments.
The work in full swing.*

Department of Radiology

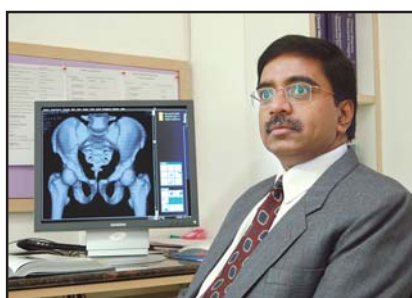
The radiology department has been upgraded with Siemens Magnetom Symphony 1.5 Tesla MRI, Siemens Spiral Emotion 6 Slice CT and Siemens Acuson X 500 ultrasound machines and OPG machine. It is headed by Dr Rajan who is also keen on increasing the academic activities.



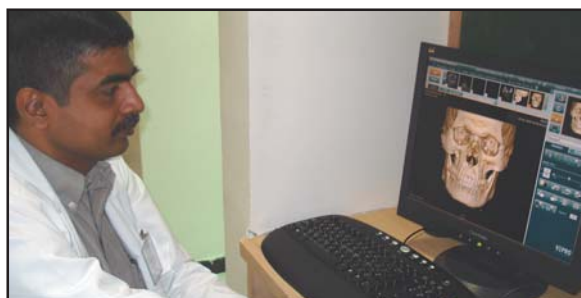
MRI



CT



Dr Rajan



Viewing picture through PACS

PACS

The hospital is now equipped with PACS (Picture Archival and Communication System) linking the laboratory and radiology department to all operation theatres and nursing stations, providing immediate accessibility to the results of investigations.

Ganga Hospital becomes a Smile Train partner

The international organization Smile Train is doing yeomen service to bring smiles to the faces of children with cleft lip and palate. Ganga Hospital joined hands to become a part of the team on 1st Sept 2007, following the visit of Mr Satish Kalra to our institution on 18th July 2007. This makes it feasible to treat children with cleft lip and palate totally free of charge. The cleft work in the institution has picked up momentum in 2008.



Before Surgery



After Surgery

We are very happy with this association and consider this as an opportunity to **push the boundaries of care.**

Expansion of Brachial Plexus Surgery Work

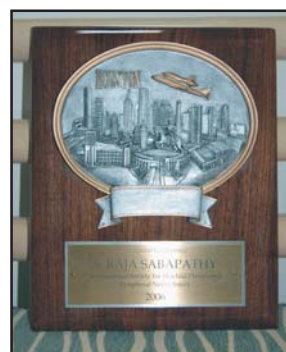
Surgery for adult traumatic brachial plexus injuries and obstetric brachial plexus injuries showed significant increase in the years 2006 and 2007. We spent more time with these patients which they need and deserve and we are happy that we are able to serve more patients in this demanding area. We drew patients from far and wide in India and from Sri Lanka, Bangladesh, Nepal, Maldives, Malaysia, Syria, Iraq and USA.

Dr Raja Sabapathy served as the Founder Secretary of the Brachial Plexus Surgery Group of India from 2004 to 2007. The 3rd Biennial Conference of the Brachial plexus Surgery Group of India will be conducted at Ganga Hospital from 6 to 8th Feb 2009. Dr Hari Venkatramani has taken special interest in this field and is undertaking a study on the outcomes of various modalities of surgical treatment in different sub sects of these patients. A paper on 'Functional Outcome Of Nerve Transfer For Restoration of Shoulder And Elbow Function In Upper Brachial Plexus Injury' has been published in the Journal of Brachial Plexus and Peripheral Nerve Injury.

Dr Sabapathy visited Dr Nath's clinic in Houston during a meeting when the Journal of Brachial Plexus and Peripheral Nerve Injury was launched. Dr Sabapathy was inducted into the editorial board of the Journal. Dr Ralph Birch was the Key note speaker on the occasion.



With Dr Rahul Nath(second from left) and Prof Ralph Birch (fourth from left) at Houston, Texas.



Ganga Hand Injury Support Group



This group was inaugurated by Hon Justice Shivaraj V. Patil on 20th December 2007 in the presence of Dr B A Anantharam, President, Indian Society for Surgery of the Hand. It is dedicated to better the lives of people who suffer serious injury to their hands and upper extremity. The group will comprise of patients who have suffered such injuries, surgeons involved in the care of patients, therapists, social workers, industrialists and any one who is willing to give a helping hand.

Good recovery after hand reconstruction often takes time, and it requires perseverance on the part of the patient. No one is able to provide this support better than a person who has been in similar circumstances and is presently doing well. Mr. Srinivasan and Mr Biju who had sustained very serious hand injuries gave inspirational speeches on the occasion. Former patients in this group will give valuable support to the patients and their families. It will provide the network and the needed information.



Mr Biju

Mr Biju sustained major electrical burns to both hands with amputations and overcame odds to become a lawyer.



Mr Srinivasan

Mr Srinivasan sustained amputations of both hands in a train accident. He underwent successful replantation of left hand and toe transfer for his right hand and continues to hold a senior managerial position in a multinational company.

Present day society does offer help to differently able persons. But many are not aware of the opportunities available. The group will serve as a resource base to help people know the possibilities.

Mr S Arun Kumar, a qualified social worker has been appointed to co-ordinate the activities of the group.

Ganga Hand Injury Support Group will



Help people live with change



Face the world with confidence



Open up windows of opportunities

Publications & Presentations



*“There are two objectives of medical education:
To heal the sick and To advance the science .”*

- Charles H. Mayo.

Publications in Peer Reviewed Journals

1

Raja Sabapathy S, Venkatramani H, Ravindra Bharathi R, D'Silva J.

Technical Considerations in Replantation of Total Scalp Avulsions.

Journal of Plastic, Reconstructive & Aesthetic Surgery, 2006;59:2-10

Abstract : Total scalp avulsions are devastating injuries and replantation is the best form of reconstruction. We present our experience of replantation of six totally avulsed scalps done between 1996 and 2004. All were technically successful, but one was lost in the post-operative period due to accidental shearing of the scalp during nursing care. A single team performed the surgery in all cases and the average operating time was 6 h. No vein grafts were used. Hair growth was satisfactory in all cases. None underwent formal nerve repair but there was adequate sensory recovery in all of them by 6-9 months. A small area of skin necrosis in the occipital area (three cases), telecanthus and epiphora (two cases) were the minor complications. The available literature highlights the need for multiple teams to reduce the long operating time, the use of multiple vein grafts and the complexities involved. Since, they are rare injuries, gaining wide experience is difficult. In this article we offer recommendations in pre-op preparation, vessel identification, technique of anchoring the avulsed scalp prior to vessel anastomosis and post-op care to make this rare procedure quicker, easier and successful.



(A) Totally avulsed scalp split in two halves. The two halves are sutured before revascularisation.

(B) Pre-operative view of the patient. (C) Repair of artery and veins on both sides resulted in complete survival of scalp

The article was abstracted in the **Year Book of Plastic Surgery & Aesthetic Surgery, 2007, 95-97.** as one of the significant articles published in the year 2006.

Awarded the inaugural **NH Antia Prize** by the Association of Plastic Surgeons of India for the best paper published by its member in an international journal in 2006.

This was based on the invited lecture in the symposium on Mutilated Hand Injuries at the 7th European Federation of National Associations of Orthopaedics and Traumatology (EFORT) Congress, Lisbon, Portugal.

Abstract : Most major Upper limb injuries are invariably associated with significant skin and soft tissue loss. With the recent technical advances, it is possible to cover most defects. This allows salvage of limbs which were being amputated before. Primary reconstruction of composite defects is also possible thereby shortening the reconstructive process. The ten key points are

- a. Debridement is the key to success. The quality of the bed determines the infection rate and the ultimate functional outcome. Good debridement is essential irrespective of the type of skin cover provided. You make it or miss it at this stage.
- b. Cover the wound as early as possible, preferably within 48 hours and certainly before infection sets in. Tendons and bones do not tolerate exposure. Dried and dead bones and tendons must be excised before providing skin cover.
- c. While providing skin cover, make the complete plan and not decide for the day. The cover provided should facilitate the next stage of reconstruction (bone or tendon graft or transfers)
- d. Good skeletal stability is a must before providing skin cover. In the upper limb stable internal fixation is preferable. Loose fixation is the beginning of the end.
- e. If secondary procedures are to be done, skin flaps provide better access than fascial flaps covered with graft.
- f. Composite defects need not always be reconstructed with composite flaps.
- g. One need not try every known flap. Do what you are good at. Repetition is the mother of skill.
- h. Having said that one must also recognize the inherent limitation of any technique. Be willing to change or try alternate plans when faced with problems.
- i. Don't forget donor site morbidity. Initial patient satisfaction is dependent on wound healing. Long term satisfaction is dependent upon donor site morbidity.
- j. Do not give up reconstruction of a major hand injury for fear of inability to cover the wound. Never hesitate to seek help. A well healed reconstructed hand is functionally far better than the best available prosthesis

Abstract : Management of complex tissue injuries and provision of replantation services calls for the availability of a dedicated team with high skill levels and good infrastructure.

Centres of excellence which provide consistent good care exist in many parts of the world, but large populations are still left uncovered. In the developed world, the reduced exposure to such injuries, lesser training opportunities and poor reimbursement for the efforts put in are the problems. In the developing countries, lack of awareness of the possibilities, inadequate transport systems and infrastructure are the problems. In both systems the cornerstone for improvement will be the availability of well trained surgeons who will deliver consistent good results. Public education and developing a team around the surgeon will improve the results in developing countries. Collaboration with good units with high volume load in the developing countries will be beneficial for training and maintenance of the required skill levels in the developed world.

4

Dias J, Chung KC, Garecia – Elias M, Sabapathy SR, Tang JB.
Recommendations for the improvement of Hand Injury Care across the world.
Injury, 2006;37:1078-82.

Abstract : This paper discusses the four aspects, which need attention if the management of hand injury is to improve globally. These areas include the provision of information, targeted education, relevant and well-supported audit and research and the improvement of infrastructure. The paper explores what needs to be done, the time frame for improvement and how this may be achieved. The strategy developed needs to remain sensitive to the local needs and capacity.

5

S Rajasekaran, J Naresh Babu, J Dheenadhayalan, A P Shetty, SR Sundararajan, M Kumar, S Raja Sabapathy. A score for predicting salvage and outcome in Gustillo type –III A and type-III B open tibial fractures.
J Bone Joint Surg [Br] 2006;88-B:1351-60

Abstract : Limb-injury severity scores are designed to assess orthopaedic and vascular injuries. In Gustilo type-IIIA and type-IIIB injuries they have poor sensitivity and specificity to predict salvage or outcome.

We have designed a trauma score to grade the severity of injury to the covering tissues, the bones and the functional tissues, grading the three components from one to five. Seven comorbid conditions known to influence the management and prognosis have been given a score of two each. The score was validated in 109 consecutive open injuries of the tibia, 42 type-IIIA and 67 type-IIIB. The total score was used to assess the possibilities of salvage and the outcome was measured by dividing the injuries into four groups according to their scores as follows: group I scored less than 5, group II 6 to 10, group III 11 to 15 and group IV 16 or more.

A score of 14 to indicate amputation had the highest sensitivity and specificity. Our trauma score compared favourably with the Mangled Extremity Severity score in sensitivity (98% and 99%), specificity (100% and 17%), positive predictive value (100% and 97.5%) and negative predictive value (70% and 50%), respectively. A receiver-operating characteristic curve constructed for 67 type-IIIB injuries to assess the efficiency of the scores to predict salvage, showed that the area under the curve for this score was better (0.988 (\pm 0.013 SEM)) than the Mangled Extremity Severity score (0.938 (\pm 0.039 SEM)). All limbs in group IV and one in group III underwent amputation.

Of the salvaged limbs, there was a significant difference in the three groups for the requirement of a flap for wound cover, the time to union, the number of surgical procedures required, the total days as an in-patient and the incidence of deep infection ($p < 0.001$ for all). The individual scores for covering and functional tissues were also found to offer specific guidelines in the management of these complex injuries.

The scoring system was found to be simple in application and reliable in prognosis for both limb-salvage and outcome measures in type-IIIA and type-IIIB open injuries of the tibia.



Major crush injury of the left leg with heavy contamination and soft tissue loss treated by radical debridement, skeletal stabilisation and latissimus dorsi flap cover

The Plastic Surgery department has a busy work load in providing soft tissue cover for open fractures. The Unit has refined the techniques for the coverage of major soft tissue losses as in the injury depicted above. This work formed part of the basis for the development of the Ganga Hospital Injury Severity Score.

The Ganga Hospital Injury Severity Score

	Score
Covering structures: skin and fascia	
Wounds without skin loss	
Not over the fracture	1
Exposing the fracture	2
Wounds with skin loss	
Not over the fracture	3
Over the fracture	4
Circumferential wound with skin loss	5
Skeletal structures: bone and joints	
Transverse/oblique fracture / butterfly fragment < 50% circumference	1
Large butterfly fragment > 50% circumference	2
Comminution / segmental fractures without bone loss	3
Bone loss < 4 cm	4
Bone loss > 4 cm	5

Functional tissues: musculotendinous (MT) and nerve units

Partial injury to MT unit	1
Complete but repairable injury to MT units	2
Irreparable injury to MT units / partial loss of a compartment / complete injury to posterior tibial nerve	3
Loss of one compartment of MT units	4
Loss of two or more compartments/subtotal amputation	5

Co-morbid conditions: add 2 points for each condition present

Injury - debridement interval > 12 hours
Sewage or organic contamination/farmyard injuries
Age > 65 years
Drug-dependent diabetes mellitus / cardiorespiratory diseases leading to increased anaesthetic risk
Polytrauma involving chest or abdomen with injury severity score > 25 / fat embolism
Hypotension with systolic blood pressure < 90 mmHg at presentation
Another major injury to the same limb / compartment syndrome

- A Score below 14 - attempt salvage
- A Score above 17 - may need primary amputation
- A Score of 15 & 16 - salvage depending upon patient factors, skills of the surgical team and the available infrastructure.

Statistics of Flap Cover for the Coverage of Open Fractures

Microsurgical Flaps	2006	2007
Latissimus Dorsi	28	59
Gracilis	44	47
Total	72	106
Non Microsurgical Flaps		
Sural Artery Flap	14	5
Fasciocutaneous Flaps	73	136
Gastrocnemius Flap	24	21
Soleus Flap	1	1
Cross Leg Flap	12	9
Extensor Digitorum Brevis Flap	3	1
Total	127	173

6

Mckenzie JRW, Mac Lean G, Bharathi RR, Raja Sabapathy S.
 Tube Pedicle Flap in the Management of a Grade III C Lower Limb Injury.
Journal of Plastic, Reconstructive & Aesthetic Surgery, 2006;59:1420-23

Abstract : Salvage of a Grade III C lower limb injury is a challenging problem. Apart from microsurgical revascularisation, they frequently need soft tissue coverage procedures. Due to the magnitude of the injury, local flaps from adjacent tissues may not be available and microsurgical free flaps are the flaps of choice. We present an instance where the defect in the middle third of a revascularised leg was covered by a tube pedicle flap raised from the groin and transferred, with the wrist as the carrier. This was chosen because of the below knee amputation on the opposite side combined with long segment circumferential loss of skin in the affected extremity and paucity of vein graft sources. Thus the reconstruction of a limb which was saved by microsurgery was completed by tube pedicle flap. In exceptional circumstances ‘old’ techniques are still useful.

7

Rajasekaran S, Raja Sabapathy S.

A philosophy of care of open injuries based on the Ganga Hospital score.

Injury, 2007;38:137-146.

Abstract : In the management of Type IIIB injuries, Gustilo’s classification has the disadvantages of a poor intra and inter-observer agreement rate, low specificity and sensitivity to salvage and inability to predict functional outcomes. We propose here a validated score which assesses the severity of injury to the covering structures, skeletal structures and functional tissues of the injured limb separately along with providing weightage to the presence of co-morbid factors. A high sensitivity and specificity for amputation was documented when a score of 14 was used as the threshold score. In salvaged limbs, the score was found to offer guidelines in protocols for reconstruction. According to the total score, injuries were treated by ‘Fix and close’ protocol; ‘Fix, Bone Graft and Close’ protocol, ‘Fix and Flap’ protocol or ‘Stabilise, Watch, Assess and Reconstruct’ protocol. The score was thus found to be useful clinically not only to assess salvage but also to provide guidelines in reconstruction.

8

Raja Sabapathy S, Venkatramani H, Ravindra Bharathi R, Dheenadhayalan J, Ravindra Bhat V, Rajasekaran S. Technical considerations and functional outcome of 22 major replantations. (The BSSH Douglas Lamb Lecture, 2005).

Journal of Hand Surgery (Brit & European Vol) 2007;32E:488-501.

Abstract : Twenty-two consecutive major replantations carried out over a 5-year period were assessed with a minimum follow-up of 2 years. Only two patients suffered guillotine amputations. The remainders were either crush, or crush avulsion amputation. Replantation was successful in 20 cases. When analysed by Chen’s criteria, there were three Grade I, nine Grade II, six Grade III and two Grade IV results. Most patients with successful replants put the hand to greater use with time and replantation greatly added to the overall well-being of the patient. We consider major replantation as a worthwhile procedure. Radical debridement, bone shortening and well laid out protocols to reduce the ischaemia time are important for success. The technical details which we believe to be important for success are outlined. With decreasing numbers of such injuries in most countries, this paper may help surgeons faced with an occasional patient with a major amputation to make the right decisions.



(A, B) The proximal and distal parts after a crush avulsion injury. (C) The extent of bone shortening done.
 (D) The extent of debridement done in the distal part, leaving the tendons bare.
 (E) Pre and postoperative X-rays. (F) Intraoperative status after bone fixation and prior to vessel and nerve repair.
 (G) Postoperative result at 2 years.

The Unit has a vast experience in replantation and critical revascularisations which formed the basis of the Douglas Lamb lecture delivered by Dr S Raja Sabapathy at the British Society for Surgery of the Hand at the Royal College of Surgeons, London in Nov 2005. The protocol followed by the Unit is used as a guideline in the management of such injuries in many parts of the world.

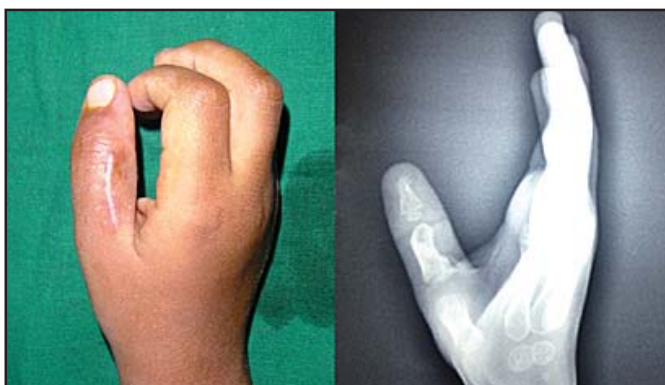
Guidelines followed during Major Replantations

Level of amputation	Injury - Arrival at hospital time	Technical guideline
Proximal to mid arm level	(i) Up to 3 hours	Debride, fix bone, do artery, vein, nerve repair and then release clamps (Regular sequence)
	(ii) 3 to 4 hours	Debride, fix bone, do artery first, release artery clamp to perfuse for 5 to 10 mins, clamp artery, repair other structures and then release arterial clamp only initially (venous clamp released after 5 mins)
	(iii) 4 to 5 hours	Use preliminary arterial shunting on arrival and then do the sequence as in (ii). If any delay occurs during procedure the artery clamp can be released once every 30 mins for 5 mins
	(iv) 5 to 6 hours	Grey zone for replanting. Replant only if fingers are freely passively mobile / replant and do a proximal below elbow amputation to gain length for prosthesis fitting.
	(v) Beyond 6 hours	Do not replant
Lower third arm and proximal forearm	(i) Up to 4 hours	Regular sequence. Preserve elbow by shortening on non-joint side forearm
	(ii) 4 to 6 hours	Elbow arthrodesis - enables more muscle debridement. Do artery first after bone fixation, release clamp for perfusion for 5 to 10 mins, clamp artery and, then, repair other structures. Then release arterial clamp only initially (venous clamp released after 5 mins)
	(iii) 6 to 7 hours	Consider preliminary arterial shunting. Do replant only if the thumb is passively mobile and follow sequence as in (ii)
	(iv) Beyond 7 hours	Do not replant
Mid forearm to wrist level	(i) Up to 6 hours	Regular sequence. Ensure excision of muscles attached to tendons in the amputated part
	(ii) 6 to 8 hours	Debride, fix bone, do artery first, release clamp, allow perfusion for 5 to 10 mins, clamp artery and then repair other structures
	(iii) Beyond 8 hours	Replant if thumb is freely passively mobile

Abstract : Rhabdomyosarcoma is a rare malignant tumour occurring in the hand. Though the prognosis for this tumour is poor, when it occurs in the hand early diagnosis is possible since the swelling becomes clinically obvious. Radical surgical excision even at the cost of significant functional loss is recommended with possible reconstruction once the disease is under control. Advances in chemotherapy protocols and radiotherapy in selected cases has improved the prognosis.

Rhabdomyosarcoma arising in the thumb of a four year old child is presented. He was treated by amputation of the thumb at the carpometacarpal joint level followed by chemotherapy. When he was disease free at 18 months, thumb was reconstructed by pollicization of the index finger. The child has remained recurrence free at 30 months from diagnosis. The patient details are presented with review of relevant literature.

A

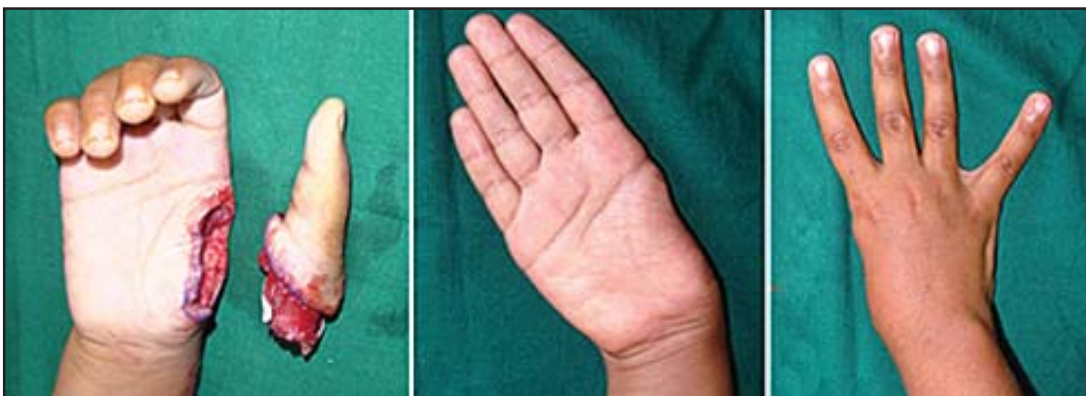


A - Preoperative picture after the biopsy

B - Total amputation of the thumb as part of management

C - Picture after pollicisation at 30 months following diagnosis

B



C



Publications - 2006 & 2007

Books

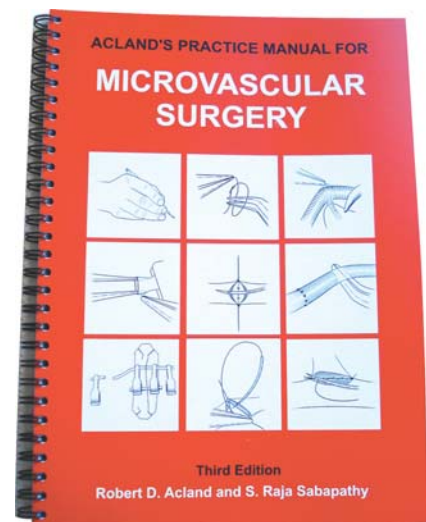
Acland's Practice Manual for Microvascular Surgery - 3rd Edition (2008)

Robert D Acland & S Raja Sabapathy

Dr Acland assigned the copyright of this practice manual to the Indian Society for Surgery of the Hand in 2005. This manual is considered as the Bible by all trainees of Microvascular Surgery. A reprint of the 2nd edition was published by Dr Raja Sabapathy on behalf of the Indian Society for Surgery of the Hand. Dr Acland & Dr Sabapathy have collaborated for the 3rd Edition. For this edition, almost all the illustrations have been redrawn for greater clarity, and a number of new ones have been added. Though much of the text remains the same, many sections have been revised and updated. An important addition is Dr Sabapathy's chapter on the transition from the laboratory to the markedly different world of clinical microsurgery. We consider it a honour to have had this opportunity to participate in this educational endeavour.



Dr. Raja Sabapathy and Dr. Acland discussing and editing the contents of the 3rd edition at Cleveland, USA, September 2007



The 3rd edition

Invitation to write Chapters in Books (2006 & 2007)

- 1** 'Text Book of Orthopaedics and Trauma'. 2nd Edition, Volume 2 edited by G S Kulkarni published by the Indian Orthopaedic Association.
Chapter 159 – 'Soft Tissue Coverage for Lower Extremity'. Page 1306 - 1311.

- 2** 'Thumb Reconstruction' edited by Prof BB Joshi
Section IX, - 'Microsurgical Reconstruction'. Page 105 - 123.

- 3** In the book, 'Functional Hand Following Trauma', edited by Prof R Venkataswami.
Chapter 10 – 'Refinements of Pedicle Flaps for Soft Tissue Cover in the Upper Limb'
Chapter 12 – 'Management of Complex Injuries of the Upper Extremity Proximal to the Wrist'
Chapter 39 – 'Organization of a Microsurgery Service'

4

In the book, '**Atlas of Flaps and Microsurgical Techniques**', edited by **Fu-Chan Wei and Samir Mardini**. Publisher Elsevier.

Chapter 9 – 'Vessels'

5

In the multi volume text book, '**Plastic Surgery**', edited by Guyuron, Persing, Eriksson, Gosain, Chung, Rubin and Disa. Publisher Elsevier.

Chapter 94 – 'Amputations & Replantations'

6

In the book '**Mercer's Textbook of Orthopaedics**' – Hand section edited by **Edward T. Mah**

Chapter 86 – 'Tendon Injuries'

Chapter 90 – 'Vessel Injury, Compartment Syndrome & Soft tissue cover'

Further Publications.....2008

1

Sabapathy SR, Venkatramani H, Giesen T, Ullah SA. Primary bone grafting with pedicled flap cover for dorsal combined injuries of the digits.

Journal of Hand Surgery (European Vol), 2008 : 33 E : 65 - 70

2

Sabapathy SR, Bhardwaj.P. Skin Cover in Hand Injuries.

Current Orthopaedics, 2008 ; 22 : 1 - 8.

3

Venkatramani H, Bhardwaj P, Faruquee SR, Sabapathy SR. Functional Outcome Of Nerve Transfer For Restoration Of Shoulder And Elbow Function In Upper Brachial Plexus Injury.

Journal of Brachial Plexus and Peripheral Nerve Injury. 2008; 3:15

4

Sabapathy SR, CME- Acute finger injuries. Physicians Digest 2008;17: 30-35

5

Venkatramani H, Sabapathy SR., An useful technique to maintain the position of hand following abdominal flap. Indian Journal of Plastic Surgery 2008; 41: 100-101

6

Sabapathy SR, Venkatramani H. Technical Considerations and Outcome in Replantation and Revascularisation of Trans Metacarpal Crush Amputations. Accepted for publication in Journal of Hand Surgery (Brit & European Vol).

7

Sabapathy SR. Invited commentary to the article – Temporary catheter perfusion and artery last sequence of repair in Macro Replantation. Journal of Plastic, Reconstructive and Aesthetic Surgery.

Editorial Responsibilities

Associate Editor - Review / Technique

Journal of Hand Surgery (American)

Editorial Board Member

Journal of Plastic, Reconstructive and Aesthetic Surgery
(Formerly British Journal of Plastic Surgery)

Journal of Brachial Plexus and Peripheral Nerve Injury (USA)

Techniques in Hand and Upper Extremity Surgery (USA)

Reviewer

Indian Journal of Plastic Surgery

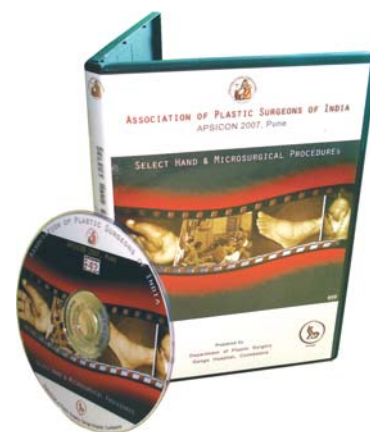
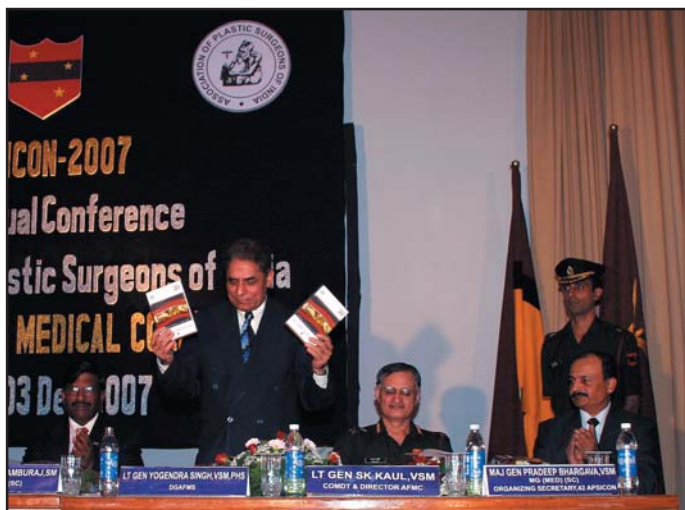
Clinical Anatomy

Journal of Hand Surgery (European)

British Medical Journal

Creation of the DVD of Select Hand and Microsurgical Procedures.

At the invitation of the Organizers of the 42nd Annual conference of the Association of Plastic Surgeons of India the department made a DVD of 11 select hand and microsurgical procedures for distribution to the delegates. The DVD which plays for 150 minutes was released during the inauguration of the conference at the Armed Forces Medical College, Pune on 29th Nov 2007 by Lt Gen Y Singh, VSM, PHS, Director General of Armed Forces Medical Services.



The contents of the DVD

1. Protocol for Management of Mutilated Upper Limb Injuries
2. Reconstruction of Composite Defects in Multiple Fingers
3. Radical Secondary Thinning of Pedicle Flap.
4. Godina's Approach and LD Flap Cover for Leg Defects
5. Gracilis Free Flap
6. Scalp Replantation Technique
7. Suturing Vessels with Size Discrepancy
8. Tendon Transfer for Radial Nerve Paralysis
9. Posterior Interosseous Flap
10. Finger Tip Cover
 - a. Oblique Triangular Flap
 - b. Straight Triangular Flap with Nailbed Graft
 - c. Cross Finger Flap
11. Microsurgical Excision of Glomus Tumour

Invitation Lectures and Presentations

2006

1. **10th – 12th March , 2006. BOSCON 2006. Bangladesh Orthopaedic Society Annual Meeting, Dhaka, Bangladesh.**

Dr S Raja Sabapathy

Invited Guest Speaker.

- Current Trends in the Management of Brachial Plexus injuries
- Management of Peripheral Nerve Injuries
- Microsurgery in Hand Injury

Promoted and encouraged the formation of the Bangladesh Society for Surgery of the Hand.

2. **23rd to 26th March – 2006. Inauguration of the International Federation of Brachial Plexus and Peripheral Nerve Injury and Launch of the Journal of Brachial Plexus and Peripheral Nerve Injury – Houston, Texas, USA.**

Dr S Raja Sabapathy,

Founding Member of the Federation & member of the Editorial Board of the Journal

- **Talk :** Experience of Setting up of a Brachial Plexus and Peripheral Nerve Surgery Clinic in India.
-

3. **26th – 28th May 2006, 10th Congress of the Turkish Society for Surgery of the Hand and Upper Extremity – Antalya, Turkey.**

Dr S Raja Sabapathy

- **Invited Faculty :** Principles of Management of Hand Burns
-

4. **29th May 2006, Post Congress Symposium on Microsurgery, American Hospital, Istanbul, Turkey.**

Dr S Raja Sabapathy

- Technical Aspects of Scalp Replantations
-

5. **28th – 30th June 06, Federation of the European Societies for Surgery of the Hand (FESSH) 2006, Glasgow, Scotland. IFSSH Council Meeting – Delegate for India – Made the preliminary bid for the IFSSH 2013 on behalf of India.**

Dr S Raja Sabapathy

- **Chairman** – Symposium on Soft Tissue Cover.
-

6. **5th to 14th July 2006, International Fellow, Department of Hand & Reconstructive Micro Surgery, National University Hospital, Singapore.**

Dr Hari Venkatramani

- Pedicle Flap Cover for Upper Limb Defects
 - Lower Limb Reconstruction - Ganga Hospital Experience
-

7. **2nd to 4th Aug 2006. Annual Meeting of the College of Surgeons of Sri Lanka – Colombo, Sri Lanka.**

Dr S Raja Sabapathy

- **Invited Guest Faculty: Workshop on Burns: 'Principles in the Management of Hand burns'**

- **Plenary Session Speaker:** ‘How to get good functional outcome following Hand Injuries?’
 - **Symposium on Brachial Plexus injuries** - ‘Management of Adult Brachial Plexus injuries’
-

8. 7th to 9th Sept. 2006, Annual Meeting of the American Society for Surgery of the Hand Washington DC, USA.

Dr S Raja Sabapathy

- **Free Paper :** Technical Considerations and Functional Outcome of 22 major replantations
-

9. 11th Sept 2006, Invited Lecture at Kleinert – Kutz and Associates Hand Care Center, Louisville, KY , USA.

Dr S Raja Sabapathy

- **Invited Lecture :** Lessons learnt in the salvage of major mutilated limb injuries at Ganga Hospital in the last 15 years
-

10. 13th - 14th Sept 2006, Visiting Professor – Plastic Surgery Department, Yale University, USA.

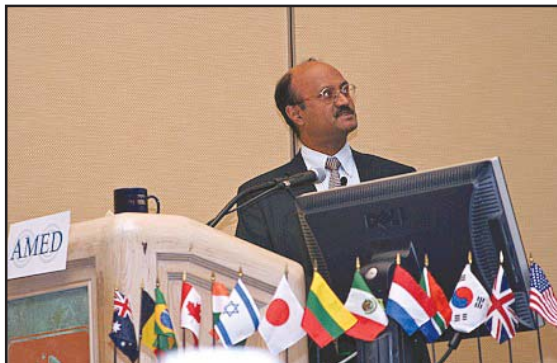
Dr S Raja Sabapathy

- **Flap Dissection Demonstration in Cadavers:**
Posterior Interosseous Flap, Lateral Arm Flap, Anterolateral Thigh Flap, Gracilis Flap.
 - **Lectures:**
Management of Major Injuries of the Leg
The Salvage of Major Mutilated Limb Injuries – The Ganga Hospital Experience.
-

11. Nov 2nd to 4th 2006. Presidential Guest Speaker – Academy of Microscope Enhanced Dentistry, Annual and Scientific Meeting, Tucson, Arizona, USA. Conferred the Honorary Membership of the Academy.

Dr S Raja Sabapathy

- **Title of the Oration** - *Pushing the Boundaries of Care with Microsurgery*



Delivering the President's Guest Lecture, Tucson, Arizona, USA

12. 15th – 18th November, 2006. 6th Congress of APFSSH, Bangkok, Thailand. APFSSH Council Meeting – Delegate of India.

Dr S Raja Sabapathy

- The Treatment and Outcome of Complex Forearm Injuries
- Functional Outcome of Emergency Proximal Row Carpectomy in Replantation and Revascularisation at the Level of the Wrist.
- Anatomical Basis, Technical Considerations and Outcome in Replantation and Revascularization of Trans Metacarpal Crush Amputations

2007

1. **13th to 16th Jan 2007. American Society for Reconstructive Microsurgery
Puerto Rico, USA Silver Jubilee of ASRM - International Reception**

Dr S Raja Sabapathy

Invitational Speech – What does Microsurgery mean to you and to your country?.

2. **9th to 10th March 2007. 7th World Symposium on Congenital Malformations of the Hand
and Upper Limb, Sydney, Australia.**

Dr S Raja Sabapathy

Free Paper : A technique of free nail grafting in reconstruction of macrodactyly.

Moderator : Session on Syndactyly

3. **11th - 15th March 2007. 10th Triennial Congress of the International Federation of Societies
for Surgery of the Hand (IFSSH), Sydney, Australia.**

**Delivered the Bid Talk in the IFSSH council on behalf of India and won the bid for
conducting the 2013 International Congress in New Delhi.**

Dr S Raja Sabapathy

- **Invited Speaker : Symposium : Reconstructive Microsurgery**

Secondary Management of mutilating upper limb injuries – Soft tissues.

IFSSH Scientific Committee Reports : Developing Countries Projects. Report on our service projects, 'Save the Working Hand' and 'Help for the Hands in Need'

- **Free Paper:** Functional Outcome of Emergency Proximal Row Carpectomy (PRC) in replantation and revascularization at the level of the wrist.

Dr Hari Venkatramani

- **Free Paper:** Technical consideration and functional outcome of Replantation and Revascularization of transmetacarpal crush amputation

Mr S Balaji

- ECRL Tendon transfer for restoration of finger flexion in patients with flexor muscle loss after direct trauma
 - Functional Out-Come of Major Upper Limb Replantation
-

4. **24th - 26th June 2007. 5th Congress of the World Society for Reconstructive Microsurgery
Athens, Greece.**

Dr S Raja Sabapathy

5. **26th - 29th Sep 2007. 62nd Annual Meeting of the American Society for Surgery of the Hand,
Seattle, USA.**

Dr S Raja Sabapathy - **Invited faculty for Instructional Course Lectures**

- **Instructional Course** (Faculty - Jesse Jupiter, Neil F. Jones & Raja Sabapathy)
Title : 'Mutilating Hand Injuries'
- **Instructional Course** (Faculty - Scott L. Levin, Gunther Germann & Raja Sabapathy)
Title : 'Local Flaps to the Hand'
- **Free paper** : Technical Considerations and Outcome in the management of Complex injuries of the Forearm

6. **30th Sep - 2nd Oct 2007. Visiting Professor to Dept of Plastic Surgery and Hand Surgery, Mayo Clinic, Rochester, USA.**

Dr S Raja Sabapathy

Grand Rounds – One Hour Lectures

- Upper Limb Trauma Reconstruction – Ganga Hospital Experience
 - Lower Limb Trauma Reconstruction – Ganga Hospital Experience
-

7. **16th - 17th Nov 2007. 2nd National Conference of the Bangladesh Society for Surgery of the Hand, Dhaka, Bangladesh.**

Dr S Raja Sabapathy

Chief Faculty for the Instructional Course

Lectures Delivered

- Functional Anatomy of the Hand
- Basic Surgical Principles in Hand Surgery
- Principles in the Management of the Congenital Hand Anomalies
- Finger Tip Injuries
- Hand Fractures
- Flexor Tendon Injury
- Nerve Injury Management
- Steps of Salvage of a Major Mutilating Injury
- Pushing the Boundaries of Care with Microsurgery

Conducted an interactive Question and Answer Session on common problems in Hand Surgery



**With IFSSH President Dr. James Urbaniak
and Immediate Past President
Dr. Arlindo Pardini at Sydney, March, 2007.**

At the 10th Triennial Congress of the IFSSH at Sydney Dr. S. Raja Sabapathy was given the responsibility of being the Webmaster of the Federation

A new website was designed inhouse with the address www.ifssh.info and is being maintained by the department.

2006

1. 7th- 8th Jan 2006, Tamil Nadu & Pondicherry Association of Plastic Surgeons (TANPAPS 2006), Trichy.

Dr S Raja Sabapathy

- Lessons Learnt in Lower Limb Salvage in the last 15 years
- Is Advertisement for Plastic Surgery Necessary ?

Dr R Ravindra Bharathi

- Osteomyelitis Zygoma – A Case Report
 - VAC – Easy Solution for Difficult Problems.
-

2. 10th – 12th Feb 2006, 8th Biennial Meeting of the Indian Society for Reconstructive Microsurgery, Coimbatore. Dr. S. Raja Sabapathy - Organizing Chairman of the Congress.

Dr S Raja Sabapathy

- Microsurgical Reconstruction of Proximal Upper Limb Injuries
- **Video Presentation** - Scalp Replantation – How we do it ?

Dr Hari Venkatramani

- Management of Combined Soft Tissue and Bone Loss in Lower Limb Injuries
 - Presentation of Good & Bad Results
-

3. 5th Aug 2006. CME on Plastic Surgery: ‘In Pursuit of Excellence’, Armed Forces Medical College, Pune.

Dr S Raja Sabapathy

- **Guest Speaker:** ‘Replantation Surgery’
-

4. 25th Aug 2006. CME for General Practitioners, Coimbatore.

Dr S Raja Sabapathy

- **Invited Talk :** Peripheral Nerve Surgery.
-

5. 1st - 3rd Sept 2006. 30th Annual Meeting of the Indian Society for Surgery of the Hand. Chandigarh.

Dr S Raja Sabapathy

- Management of Complex Forearm Injuries.

Dr Hari Venkatramani

- Functional outcome of One Bone forearm reconstruction
-

6. 10th-15th Nov, 2006. Annual Meeting of Association of Plastic Surgeons of India (APSICON), Hyderabad

Dr S Raja Sabapathy

- **Invited Talk :** Protocol for the Management of Upper Limb Injuries

Dr Hari Venkatramani

- Critical Revascularization in Upper Limb Injuries

2007

1. **5th Jan 2007. National Burns Association of India – Annual Conference NABICON 2007, Mumbai.**

Dr S Raja Sabapathy

- **Invited Talk :** Management of Electrical Burns of the Hand
-

2. **27th - 28th Jan 2007. Tamilnadu and Pondicherry Association of Plastic Surgeons- Annual Conference, TANPAPS 2007, Coimbatore.**

Dr S Raja Sabapathy

Invited Lectures

- Secondary Management of Electrical Burns of the Hand
- Pushing the Boundaries of Care with Microsurgery

Dr R Ravindra Bharathi

- Management of Condylar Fractures of Mandible.

Dr Hari Venkatramani

- Restoration of Shoulder and Elbow Function Following C5&6 Injuries of Brachial Plexus.

Dr Sanjai Ramkumar

- Long Cross Finger Flaps

Ganga Hospital was chosen as the Permanent Head Quarters for the TANPAPS and Dr Raja Sabapathy as the Head Quarters Co-ordinator. Dr. Hari Venkatramani was elected as the Secretary of the Association.

3. **3rd Feb 2007. 7th Instructional Course of the Kerala Plastic Surgery Association on “Upper Limb Trauma”, Calicut.**

Dr S Raja Sabapathy

Guest Faculty:

- Anatomy of the Neck and Upper Arm
 - Secondary Reconstruction of Tendon Injuries
 - Radial Nerve Injury and Tendon Transfers.
-

4. **9th – 10th Feb 2007. 2nd Biennial Congress of the Brachial Plexus Surgery Group of India, Mumbai**

Dr S Raja Sabapathy

- Neurotisation in Brachial Plexus – The Ganga Hospital Experience

Dr Hari Venkatramani

- Functional outcome of Mod Quad Surgery for Post OBPP Secondary Deformity
-

5. **25th Feb 2007. Indian Dental Association. Pondicherry.**

Dr Kannan Balaraman

- **Invited speaker :** Medical Emergencies in the Dental Office

6. **27th- 29th Apr 2007. Ganga Hospital Instructional Course on Shoulder and Elbow Surgery. Coimbatore.**

Dr S Raja Sabapathy

- **Invited Lecture:** Shoulder in Brachial Plexus injury.
-

7. **12th May 2007. Orthotics and Prosthetics Society of India, Southern Chapter, 10th Continuing Rehabilitation Educational Programme, Coimbatore.**

Dr S Raja Sabapathy

- **Guest Lecture:** Advances in Lower Extremity Reconstruction
-

8. **25th - 27th May 2007. 1st National Live Operative Workshop on Burns Surgery, OSBURN 2007. National Burns Centre, Airoli, Navi Mumbai.**

Dr S Raja Sabapathy

- **Faculty :** Live Operative Demonstrations
 - **Guest Lecture :** 'Burn Deformities of the Hands'
-

9. **15th - 16th June, 2007. 4th Rapid Free Flap Harvest Workshop, Nizam's Institute of Medical Sciences, Hyderabad.**

Dr S Raja Sabapathy

- **Invited Lecture:** Team Work

Dr S Raja Sabapathy & Dr Hari Venkatramani

- **Operative Demonstration:** Free Gracilis Flap
-

10. **July 2007. Ethicon Course in Orthognathic Surgery held at the Department of Plastic Surgery, Stanley Medical College, Chennai.**

Dr R Ravindra Bharathi

11. **7th - 8th July 2007, First Instructional Course in Plastic Surgery of the Tamil Nadu and Pondicherry Association of Plastic Surgeons. Ganga Hospital, Coimbatore
Theme: Lower Limb Reconstruction**

Dr S Raja Sabapathy

- Anatomical and Pathophysiological aspects of Lower Limb Trauma.
- Debridement
- When will you say 'NO' to salvage?

Dr R Ravindra Bharathi

- Cross Leg Flaps

Dr Hari Venkatramani

- Foot and Ankle Reconstruction
- Free Muscle Flap in Lower Limb Reconstruction

Dr Sanjai Ramkumar

- Waltzing Flap

Dr Anuradha J Patil

- Vacuum Assisted Closure
-

12. **24th - 26th Aug, 2007, 31st Annual Meeting of the Indian Society for Surgery of the Hand Kodaikanal.**

Dr S Raja Sabapathy

- **Invited Lecture:** Pitfalls in Hand Surgery
- **How I do it Session:** Thinning of a flap

Dr Hari Venkatramani

- Hetrotopic Replanations
- Functional Outcome of Neurotiziation for Restoration of Shoulder and Elbow Function following C5&6 Injuries of Brachial Plexus

Dr Praveen Bhardwaj

- Treatment Options in Congenital Symbrachydactyly
-

13. 7th - 9th Sept 2007, 4th Congress of the International Trauma Anaesthesia and Critical Care Society (Indian Section) ITACCS, Coimbatore.

Dr S Raja Sabapathy

- **Invited lecture:** Outcome Determinants in Open Limb Fractures
-

14. 28th Sep 2007. Tamil Nadu Chapter meeting of the Association of Oral and Maxillofacial Surgeons of India. Chidambaram.

Dr Kannan Balaraman

- **Invited speaker:** Principles of Management of Maxillofacial Injuries
-

15. Oct 2007. Instructional Course in Plastic Surgery on Lymphology and Genital Reconstruction held at Department of Plastic Surgery, Tanjore Medical College, Tanjore.

Dr R Ravindra Bharathi

16. 19th - 21st Oct 2007. Flap course: Sri Sakthi Hospital & Canniesburn Hospital Flap Course, Trinelveli.

Dr S Raja Sabapathy

- Principles of Microsurgery
 - Indications for Flaps in Lower Limb
 - Free Fibular Bone graft
 - **Demonstrated flap dissections in cadavers.**
-

17. 14 - 18th Nov 2007. 18th International Conference of Oral and Maxillo Facial Surgeons. Bangalore.

Dr Kannan Balaraman

- Reconstructive Surgery in Romberg's Disease
-

18. 29th Nov - 3rd Dec 2007. 42nd National Conference of the Association of Plastic Surgeons of India, Pune.

Dr S Raja Sabapathy

Delivered the Inaugural Oration: 'Extending the Frontiers of Limb Salvage'

- **Operative Surgery Workshop : Faculty**
- **How I do it Session :** Giant Congenital Hairy Naevus & Burns Contracture - Dorsum of the Hand
- **Charles Pinto CME :** Obstetrical Brachial Plexus Palsy
- **Video Session :** Management of Dorsal Combined Tissue Loss

Dr R Ravindra Bharathi

- **Moderator : Session on Eyelid Reconstruction** Upper Eyelid Reconstruction

Dr Sanjai Ramkumar

- Free Fibular Graft for Congenital pseudarthrosis of Tibia

Awards & Recognitions



“A real award for good work is getting more opportunities to work”

- Justice Shivaraj V. Patil

2006

Appointment as Hon Consultant Advisor to the Armed Forces Medical Services.

The Government on 16th May 2006 appointed Dr S Raja Sabapathy as Hon Consultant / Advisor to the Armed Forces Medical Services. We consider this as a great honour and reaffirm our commitment to place our services and facilities for the growth of the specialty in the Armed Forces.



Air Marshal H S Garkal handing over the copy of the order at a felicitation function organized at the Air Force Administrative College, Coimbatore. Air Cmde Dayalu looks on

We are pleased to have had the following Plastic Surgeons from the Armed Forces spend some time in the Department and in the Ganga Microsurgery Training Institute.

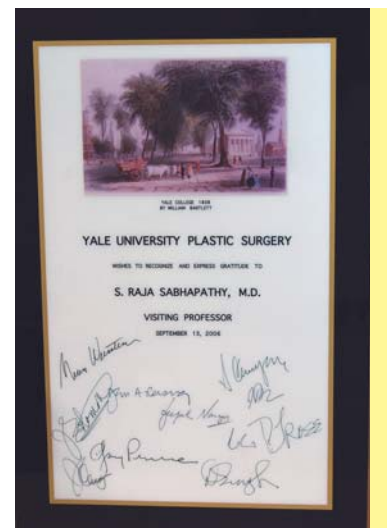
Surgeon Captain G. Vishwanath, Lt. Col. R. Ravishankar, Lt. Col. P S Bhandari, Lt. Col. Surajit Basu, Lt Col Tejinder Bhatti, Lt Col Vijay Langer, Wg Cdr Pauline Babu.



Invited Presidential Guest Lecturer

*American Academy of Microscope Enhanced Dentistry. Was conferred **Honorary Membership** of the Academy in their Annual Meeting in Tucson Arizona, USA, 2nd to 4th Nov, 2006.*

3. **Visiting Professor** to the Plastic Surgery Department,
Yale University, USA, 13th Sept. 2006.



4. **Visiting Lecturer** Kleinert and Kutz Hand Care Centre, Louisville, USA, 11th Sept 2006



5. **Invited Guest Faculty** – Annual meeting of the
College of Surgeons of Sri Lanka,
Colombo, 2nd to 4th Aug 2006

6. **The Peet Prize** of APSI was awarded
to Dr. Hari Venkatramani for the paper
'Replantation and Revascularization of
transmetacarpal crush amputations'.

Dr N.H.Antia presenting the Award at
the APSICON 2006, Hyderabad.



2007

1. **Brig. Rasamay Ganguly Memorial Orator** of the Association of Surgeons of India, ASICON-2007, Bhubaneswar, 28th Dec 2007
Topic : Trauma Reconstructive Surgery – Its Need, Availability and Future in India



2. **Dr NH Antia Prize** of Association of Plastic Surgeons of India for the Best Paper published by its member in an indexed international journal in the year 2006.

3. **IPRAS - International Traveling Fellowship - 2006** of APSI was awarded to Dr Hari Venkatramani



4. **'Inaugural Oration'** at the 42nd National Conference of the Association of Plastic Surgeons of India, Armed Forces Medical College, Pune, 29th Nov to 3rd Dec 2007

Topic : Extending the Frontiers in Limb Salvage Following Trauma

5. **BDSSH Award** - Bangladesh Society for Surgery of the Hand Award – for contribution towards the spread of Hand Surgery in Bangladesh. Award was presented during the second annual conference of the BDSSH from 16th to 17th Nov 2007. Senior Professor Golam Rasul presented the award and Professor Sirajul Islam, Director, NITOR and Professor S.H. Khondhoker, President, Plastic Surgery Association are in the picture.



Dr Sabapathy visited Bangladesh as a Guest Speaker of the Bangladesh Orthopaedic Association in 10th – 12th March, 2006. Understanding the necessity for advanced training in Hand and Reconstructive Microsurgery, Ganga Hospital Plastic Surgery department offered to train one candidate every year. The candidate chosen by senior professors, Prof Kairy and Prof Kalam spends one year in the department. The training and stay are sponsored by Ganga Hospital. Two candidates have completed the training so far and the third joined us in June 2008.

Yet another opportunity to Push the Boundaries of Care.

6. Visiting Professor

Plastic Surgery Department and
Orthopaedic Surgery Department,
Mayo Clinic USA. 30th Sep to 2nd Oct 2007.



7. **Tamil Nadu Scientist Award** (TANSA Award) 2007. This award under the category of Medical Sciences was awarded by the Tamil Nadu State Council for Science and Technology for the Contribution to and Development of Plastic Surgery, Hand and Microsurgery in the country

8. Dr. S. Raja Sabapathy has been chosen to deliver the **Dr. Murari Mukherjee Oration** of the Association of Plastic Surgeons of India at APSICON 2008.

9. Dr. S. Raja Sabapathy has been invited as the **Guest Professor** of the Royal Australasian College of Surgeons and the Australian Hand Surgery Society for their annual congress in Brisbane, May 2009.

Teaching & Training



The best way to push the boundaries of care is to train more people

Pushing the Boundaries of Care with Teaching & Training

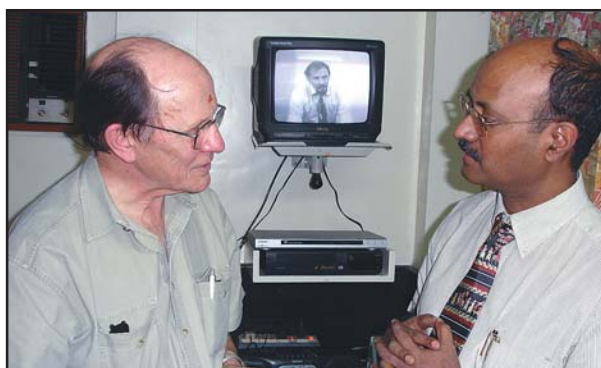
We realise that one of the most efficient ways of pushing the boundaries of care is to train more people in the philosophy of patient care as practiced in our hospital. Over the years, the Unit has become a favourite destination for trainees from all around the world. We are privileged to play host to many of them and they in turn have enriched us with their experience.

Ganga Microsurgery Training Institute

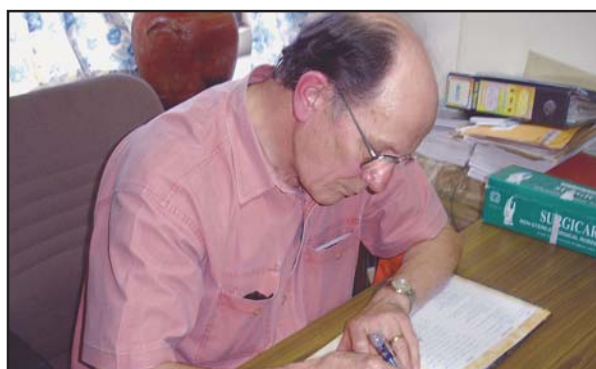
It is 6 years since we started the microsurgery training laboratory and we passed the milestone of 100 courses on 25th Jan 2008. We followed the sage advice of Dr Acland that the ‘beginner needs the best’ and tried providing it. It has been a rewarding and satisfying experience. So far 206 surgeons have been trained in the lab and they hail from 21 countries and 50 cities in India. Our aim is to ‘Reach out to patients who need Microsurgery’, and we realized that it is best done by training more surgeons. In the years 2006 & 07, 53 trainees undertook the course.

Dr Acland Visits the Lab

9th Feb 2006 was a red letter day in the history of Ganga Hospital when Dr Robert Acland from Louisville visited the hospital and the lab. Dr Raja Sabapathy was trained in the lab set up by Dr Acland at Louisville in 1989. Dr Acland has been the source of inspiration for setting up the lab. His visit has further motivated us to do better.



Dr Raja Sabapathy explaining to Dr Acland the functioning of the lab. In the background is the original microsurgery training video tape made by Dr Acland in the 80's to explain the techniques.



Later Dr Acland pens down his impressions.

“I am so happy to be here, in your new United Nations of Microsurgical Progress and education. This feels the same, in terms of energy and excitement, as Louisville in the ‘70s, or Ljubujana in the ‘80s. My best wishes for your long continued success’.

- Dr Robert D Acland

The Microsurgery Lab moves to the new premises



We shifted the microsurgery lab to the new hospital premises on 1st Nov 2007 with Mrs and Dr J.G. Shanmuganathan lighting the lamp to mark the occasion. Dr Raja Sabapathy delivered a talk to the trainees and the staff on the genesis of the lab and what it stands for. The lab is now more spacious and we have added two more Zeiss microscopes.

The Micro Surgery course at Ganga Hospital gets coverage in British Medical Journal Careers



Microsurgery in India

Philip Yong travelled to India to learn microsurgery

Coimbatore is the second largest city in the state of Tamil Nadu, with a population of two million. It is not a major tourist destination. Ganga Hospital, Coimbatore, is a specialist trauma, orthopaedic, and plastic surgery centre in south India with 400 beds. A five day course in microsurgery is offered by the plastic surgery department.

Life's a beach
Attending a microsurgery course is a requirement for plastic surgery trainees. However, the skills and techniques, especially knot tying and tissue handling, are useful in all surgical specialties. No previous experience is required, and the course is recognised in the United Kingdom. It could be combined with a holiday on the beaches of Kerala in the south west (120 miles) or the nearby hill station of Ooty (50 miles). I spent five days in an air conditioned microsurgical training institute. Each day comprised eight hours of teaching. The course is a clone of Robert Acland's course taught at the Kleinert Institute in Louisville, with only two students at any time. His microsurgery training manual was available for £350, complementing the week's activities. We were supervised by an experienced nurse specialist, who helped as and when needed, and we had regular

input from consultants. Zeiss floor mounted microscopes were used, as in theatre, adding a touch of realism.

Rats, veins, and videotape
The complexity of the course increased gradually, with regular breaks every few hours. Each day started with a video of Acland taking and demonstrating, followed by practice on an anaesthetised laboratory rat. On the first day, we watched an introductory video about microscope use and basic operative technique; we then practised by suturing a rubber glove with 10-0 nylon and attempting to anastomose a chicken leg artery. In the next few days, we tried to clamp, sever, and anastomose numerous rat

Starting with little knowledge in this field, I finished confident in various microsurgical principles and practices, having acquired useful skills which I could use at home

femoral arteries and veins. It was satisfying to release the clamps and have a flowing vessel. On the last day, vein grafts and end-to-side anastomoses were attempted. The rat vessels used are around 1 mm in diameter, smaller than most vessels likely to be encountered clinically. I practised on seven live arteries and three veins in total, with mixed results

OVERSEAS TRAINING

FURTHER INFORMATION
• Contact Raja S Sabapathy, lead plastic and reconstructive surgeon, Ganga Hospital, Coimbatore, India raja@gangahospital.com

but noticeable improvement over the course. Starting with little knowledge in this field, I finished confident in various microsurgical principles and practices, having acquired useful skills which I could use at home.

Flights and food
I booked flights after emailing the hospital to confirm an available week. Arriving in Coimbatore by plane one Sunday evening, I was taken to my hotel by a driver from the hospital. The Sri Lakshmi Hotel was a inexpensive £15 a night and a 10 minute walk from Ganga Hospital. The room was comfortable, with noisy air conditioning and reliable hot water. I had cable television with CNN, BBC World, and live Premiership football as well as local broadcasting. Food was not provided in the hotel, but an adjacent restaurant served excellent south Indian food, with a two course meal for £1.50. Other meals are in the canteen and cheap hospital canteen. A medical bookshop close by, books were considerably cheaper than in the UK – the Oxford Handbook of Clinical Medicine cost £2.50.

Why India?
Studying in India has several advantages. The course fees were £300. Even taking into account the price of a return flight to Bangalore (£400), connecting flights to Coimbatore (£30), and cost of food and lodging, I still saved money compared with a course in the UK. Each week long course has only two trainees, so supervision is close and thorough. I organised my trip around annual leave as the course dates are flexible. Furthermore, when time allows, you can go to theatre and watch real life microsurgery to consolidate the principles learnt on the course. Coimbatore is hot and local food may not be to everyone's taste. Western food was not available in the hospital canteen, but there were no other downsides.

I also had a chance to meet local surgical trainees. I was amazed to learn that they worked seven days a week from 7 am to 10 pm, with two days off a month. This certainly put the working time directive into perspective. Philip Yong, SHO in plastic surgery, Queen Victoria Hospital, East Grinstead blintan@doctors.org.uk

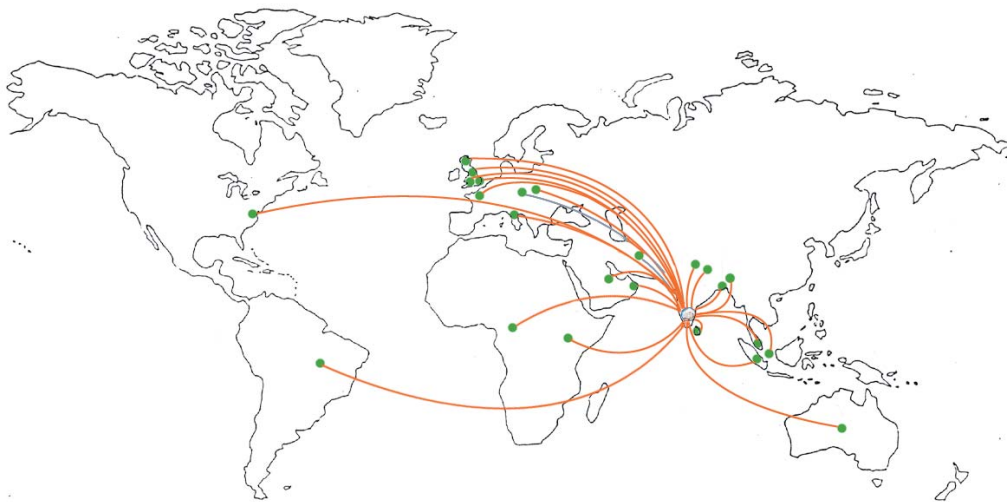
BMJ careers
bmjcareers.com



Dr Philip Yong, came from London, UK in May 2007. *'I came for the week long microsurgery course and wished I had stayed longer'*. He wrote that in our visitors book, but also cared to write a page in the British Medical Journal – Careers (Sept 1, 2007 issue) on the quality of training in the lab and the visit to India. The article increased the awareness of the lab to the trainees of the west and it has become a popular destination. In the words of another trainee, 'good to experience a combination of a great micro course, fantastic clinical exposure and excellent Indian hospitality'.

Location of Trainees of the Microsurgery Course

International

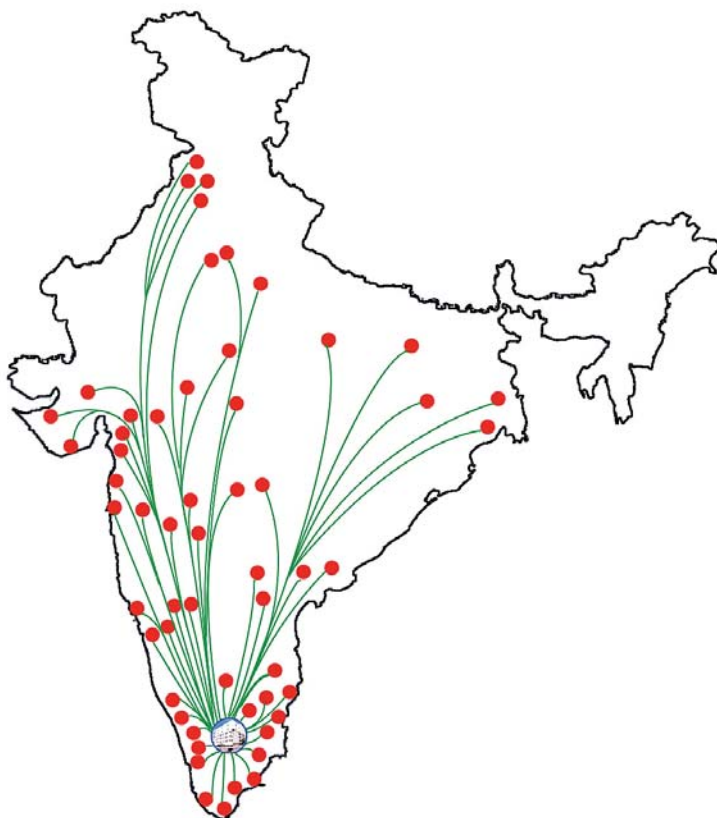


21 Countries

Australia	Germany	Nigeria	Sri Lanka
Bangladesh	Italy	Pakistan	Tanzania
Belgium	Malaysia	Poland	Turkey
Brazil	Muscat	Qatar	United Kingdom
Czech Republic	Nepal	Singapore	United States of America
			Vietnam

National

50 Cities



Ahmedabad	Madurai
Ahmednagar	Mangalore
Aligarh	Manipal
Amritsar	Mumbai
Bangalore	Nagercoil
Baroda	Nagpur
Belgaum	Nashik
Bhopal	New Delhi
Calicut	Patna
Chennai	Pondicherry
Coimbatore	Pune
Delhi	Punjab
Goa	Ranchi
Gujarat	Salem
Gulbarga	Surat
Guntur	Thanjavur
Hubli	Thrissur
Jagadhri	Tirunelveli
Jamnagar	Tirupathi
Kannur	Tirupur
Kochi	Trichy
Kolkata	Trivandrum
Koppal	Vapi
Kottayam	Vellore
Kozhikode	Vishakapatnam

Post Graduate Training Programmes of National Board of Examinations, New Delhi

DNB - Plastic Surgery



*Dr Sanjai Ramkumar, Dr Anuradha Patil
and Dr Madhu Periyasamy*

The Unit offers superspeciality DNB
course in Plastic Surgery
(2 Candidates per year)

FNB - Hand and Micro Surgery



Dr Praveen Bhardwaj and Dr Terrence Jerome

The Unit offers postdoctoral Fellowship in Hand and
Microsurgery (2 Candidates per year) Previous FNB
Candidates Dr Saranjeet Singh & Dr Ashwath Acharya
completed the course successfully in the years 2006
and 2007 respectively. Dr Saranjeet is now in
Ahmedabad and Dr Ashwath is in Manipal.

Bruce Bailey Fellowship

This is an educational initiative of the Department enabling a Plastic Surgical trainee from the United Kingdom to spend 6 – 8 weeks in November – December of every year in the department. The fellow is also sponsored to attend the National Conferences in Plastic Surgery and Hand Surgery if they are held during the period of their stay. In this way they are not only exposed to the standards of practice at Ganga Hospital but also obtain a broad national perspective.



2007

Mr Peter Russell

Specialist Registrar, Plastic Surgery, Dundee,
UK

"What an amazing time I have had here. I came here because I have an interest in hand surgery & trauma reconstruction. I have learnt so much that I can take back to the UK. I also enjoyed the whole philosophy of the Unit - The "Can do" attitude rather than the negative attitude when it comes to trauma. The microcourse is also a very worthwhile endeavour. Thank you for all your kindness."

Previous Bruce Bailey Fellows

- 2002 - **Mr Roderic Dunn**
6th Year Specialist Registrar in
Plastic Surgery, Canniesburn Hospital,
Glasgow, UK.
- 2003 - **Mr Bert Oelbrandt**
Registrar, Plastic & Reconstructive Surgery,
St. Andrews Centre for Plastic Surgery,
Chelmsford, United Kingdom.
- 2004 - **Mr Raj Ragoowansi**
Specialist Registrar, Queen Victoria Hospital,
London, UK
- 2005 - **Mr Patrick Gillespie**
Specialist Registrar, Plastic Surgery,
Addenbrookes Hospital, Cambridge, UK

Ganga Hospital – Johnson & Johnson Visiting Professor

This is an educational initiative set up in collaboration with Johnson & Johnson to invite a world authority in reconstructive surgery to the unit in Ganga Hospital. The programme has been a great success in helping us to deliver better patient care. Started in the year 2005, the first Visiting Professor was Prof Lam Chuan Teoh, of Singapore. The scheme builds relationships between units, societies and nations and also helps to show case India's advancement in this field to the world.

2006



Prof Michael Tonkin

Head, Department of Hand Surgery & Peripheral Nerve Surgery
Royal North Shore Hospital
Sydney, Australia

'...I wish all at Ganga Hospital the very best during this year and with your transfer to the new Ganga Hospital in 2007. I have seen a dedication and enthusiasm which is admirable and enviable, the secret of which is leadership and team work. Thank you to all doctors, nurses, physiotherapists, administrative staff and drivers! I look forward to returning to Coimbatore and Ooty and the magnificent Nilgiris...'



Delivering 'marathon' lectures



Sharing technical expertise



Teaching finer points to the trainees



A date with Indian elephants at Bandhipur

Prof Michael Tonkin visited the unit from 13th to 21st May 2006. As on the inaugural occasion, on the Sunday the 14th May, he held an open house, from 9 am to 1.30 pm lecturing and interacting with Plastic Surgeons and Hand Surgeons of the region. During his stay he delivered 10 lectures, participated and discussed the treatment of patients in the outpatients. His skillful demonstration of surgical correction of complex congenital hand anomalies was a treat to watch and provided a wonderful opportunity to learn.

2007



Prof Steven L. Moran, M.D.

Associate Professor of Orthopaedics
Associate Professor of Plastic Surgery
Mayo Clinic
USA.

'...An amazing experience one which I never will forget. This has changed the way of my thoughts about hand trauma. Thank you for your great generosity...'



Discussing complex hand problems



Providing skillful solutions



Explaining Mayo's Philosophy



Dr Pranesh presenting the Award

The highlight of Dr Moran's visit was his talk on the Mayo Hospital's culture of work and the three cornerstones on which the institution is built – Patient Care, Medical Education and Research. He brilliantly explained the current Microsurgical procedures practiced at the Mayo.

2008



Prof. Chih-Hung Lin

Vice Chairman, Plastic and Reconstructive Surgery
Past Chairman, Trauma, Plastic and Reconstructive Surgery,
Chang Gung Memorial Hospital
Taiwan.

Prof. Chih-Hung Lin will be the Ganga Hospital -
Johnson & Johnson Visiting Professor in 2008.

Ganga Hospital – Johnson & Johnson Fellowship in Hand and Reconstructive Microsurgery

This educational initiative started in the year 2002 is very popular and enables two promising young surgeons to spend two months in the unit. They participate in all the clinical and academic activities of the department and on return serve as wonderful ambassadors of the unit. All of them have found the experience gained during their stay useful in their day to day practice.

2006



Dr. Akif Muhtar Ozturk MD

Clinical Associate,
Specialist of Orthopaedics and Traumatology
Chief Assistant, 5th Orthopaedic & Traumatology Clinic
Ankara Numune Research & Training Hospital
Ankara, Turkey

'...When I finished my orthopaedics training I decided to specialise, so that I could be differentiated from other orthopaedic surgeons. I found out that Hand Surgery would be the best option for me. When I got an opportunity to train at Singapore General Hospital I also wanted to visit the clinic about which I heard many wonderful things - Ganga Hospital. But after coming here I have learnt more than I had expected. Definitely my self confidence in microsurgical skills increased after completing the course here....'



Dr M Markandeyulu Mantrala

Plastic Surgeon
Arundelpet
Guntur

'...I had my best hands on course training in microsurgery here. The exposure and experience I gained here both in microsurgery and hand surgery are really profoundly educative and informative. The discipline and dedication here are really impressive. I enjoyed every minute of my time here thoroughly...'



Prof. Tonkin with fellows of the unit

2007

Dr Stuart Enoch

Speciality Registrar in Burns & Plastic Surgery
University Hospitals of South Manchester and
Manchester University Children's Hospitals
Manchester, United Kingdom



During my fellowship, I was exposed to a wide spectrum of plastic surgical conditions and gained invaluable experience in managing such cases. All staff, both trainees and trainers, are enthusiastic, motivated, knowledgeable and friendly. Their work ethic is admirable; patient care humane; clinical practice evidence-based and excellent; operating facilities state-of-the-art, and quality of academic teaching exceptional. Ganga hospital is clearly a cut above the rest when it comes to training in microsurgery and reconstructive plastic surgery. I would highly recommend this fellowship to any plastic surgical trainee in the world, and am certainly privileged to have been given the opportunity to undertake this fellowship. Thanks a lot to each and every one at Ganga Hospital!'

Dr. Roshan Kumar Bhandari

Hand Surgeon
Bangalore



'...I have been here for 6 weeks and the experience has been spectacular. The hard work and the team work of the Plastic Surgery unit was incredible. The microsurgery course was excellent. The amount of work done here is tremendous. It has changed my thoughts and the way to work...'



*On the day of the Fellowship award ceremony with
Prof. Dr. M. B. Pranesh & Prof Dr. M. V. Daniel*

Ganga Hospital – Carl Zeiss Fellowship in Hand and Reconstructive Microsurgery

Established in the year 2003 this carries a fellowship grant of Rs 50000. Every year two selected fellows spend the months of Jan and Feb in the unit. Through them we reach out to patients far beyond, *pushing the boundaries of care.*



Dr. Rodrigo Tanus
Plastic Surgeon
Dept of Plastic Surgery
Vila Penteado's General Hospital
Brazil

'...Our practice in Brazil is approximately 80% Aesthetic Plastic Surgery and here in Ganga Hospital I have learnt a lot of tips and tricks in reconstructive microsurgery. The lab course was really great. Congratulations to the great work you have done...'



Dr. Sumita Shankar
Consultant Plastic Surgeon
Amaravathi Institute of Medical Sciences
Guntur, Andhra Pradesh

'...I have learnt 3Ds as a carry home message - Dedication, Documentation and Discipline. Hospitality offered by each and every one has been remarkable...'



On the day of the Fellowship Ceremony with Mr Thulasiraj, Executive Director, Aravind Institute of Community Ophthalmology & Mr. Rajamani, National Sales Manager, Carl Zeiss

2007



Lt. Col.(Dr) Tejinder S Bhatti

Associate Professor
Dept of Plastic Surgery,
AFMC, Pune

I am grateful to the faculty of this awesome hospital for allowing me the opportunity to see their work. Your approach to life in general and the well being of the patient is inspiring. I came to Ganga Hospital to imbibe certain nuances in the techniques of reconstructive microsurgery, but I return back enriched by a philosophy so unique to this centre.



Dr Thomas Giesen MD

Registrar
Istituto Policlinico
San Donato, San Donato Milanese Milano, Italy

I had really a great time. I expected a surprise from this hospital but not such a big surprise.Just one complaint - 2 months is not enough.!



*On the day of the Fellowship Ceremony with Dr Ravindran,
Aravind Eye Hospitals & Mr Rajamani, Carl Zeiss*

Ganga Hospital Fellowship for Bangladesh Hand surgeons



A one year Fellowship sponsored by Plastic Hand and Microsurgery Department enables a young surgeon from Bangladesh to spend one year in the Department

*Dr Sajedur Reza Faruquee
June 2006 to May 2007*



*Dr Mohammad Asadullah
June 2007 to May 2008*

Conferences Conducted

8th Biennial Meeting of the Indian Society for Reconstructive Microsurgery, 10th to 12th Feb, 2006.

We played host to this conference and it was hailed by many who participated as one of the best conferences held in terms of organization, scientific content and social events. The event was inaugurated by Padma Bhushan Shri K Parasaran, Former Attorney General of India in the presence of Prof R Venkataswami, the founder of the Association. Dr Acland delivered the Godina Oration which was the highlight of the meeting.

A total of 170 delegates attended the meeting and it had 10 overseas faculty. It also received good reports from the media which helped to spread the message of the capabilities of reconstructive microsurgery to the masses.



*Padma Bhushan Sri K Parasaran,
Dr S Raja Sabapathy & Prof R. Venkataswami
during the inauguration of the conference.*

First Instructional Course in Plastic Surgery of the Tamil Nadu and Pondicherry Association of Plastic Surgeons.

The department conducted the first educational activity of the association on 7th & 8th July 2007 at the newly constructed auditorium of Ganga Hospital. A total of 91 delegates attended the meeting.

The theme of the meeting was, '**Lower Limb Reconstruction**'. Apart from senior faculty from the state, Dr Rakesh Khazanchi from Delhi, Dr V Bhattacharya, President Elect of APSI were the invited faculty. This successful meeting was a good launching pad for the educational activities of the association to make it a regular event.



The course in progress at the auditorium



*L-R : Dr Devasenan, Dr Hari Venkatramani,
Dr K Sridhar, Dr V Bhattacharya,
Dr V Ramasamy (President , TANPAPS)
Prof Sam C Bose, Dr S Raja Sabapathy,
Dr Rakesh Khazanchi*

ITACCS - 2007

11th National Conference of International Trauma Anaesthesia and Critical Care Society (Indian Chapter), 7th - 9th Sep, 2007.

Ganga Hospital hosted the 11th National ITACCS Conference between 7th & 9th September. The preconference course held on September 5th & 6th involved hands on training on airway maintenance and emergency airway access in animal models. Dr. S.Raja Sabapathy & Dr. S.Rajasekaran were the Organising Chairmen, Dr. Bala Venkat was the Organising Secretary and Dr. Ravindra Bhat was the Chairman of the Scientific Committee. About 400 delegates, both national and overseas attended the conference which was widely appreciated as one of the best organised conferences in the recent years. *Dr Raja Sabapathy was elected as President Elect of the Association at the end of the conference.*



Forthcoming meetings

1. 12th International Perforator Flap Course - 10 to 13th Sept 2008.

Ganga Hospital is proud to host the 12th International Perforator Flap Course with eminent international faculty.

www.perforatorflapcourse2008.com

International Faculty

Dr Robert Allen, Charleston, USA
Dr Claudio Angrigiani, Buenos Aires, Argentina
Dr Sühan Ayhan, Ankara, Turkey
Dr Phillip Blondeel, Gent, Belgium
Dr Geoff Hallock, Allentown, USA
Dr Isao Koshima, Tokyo, Japan
Dr Jaume Masia, Barcelona, Spain
Dr Steven F Morris, Canada
Dr Niri Niranjana, United Kingdom
Dr Venkat Ramakrishnan, United Kingdom
Dr Koenraad Van Landuyt, Gent, Belgium

Course Highlights

Great Faculty
Good Course Content
Attractive Delegate Fee
A Good Venue
Great Indian Hospitality

2. Third Biennial Congress of the Brachial Plexus Surgery Group of India (BPSGI) 20 to 22nd Feb 2009 - Ganga Hospital

The congress will have live demonstration with eminent national and international faculty to discuss the current trends and advances in the management of brachial plexus and peripheral nerve injuries.

Participation and Bid for the 12th Triennial Congress of the International Federation of Societies for Surgeries of the Hand and the 9th Congress of the International Federation of Societies of Hand Therapists, 2013.

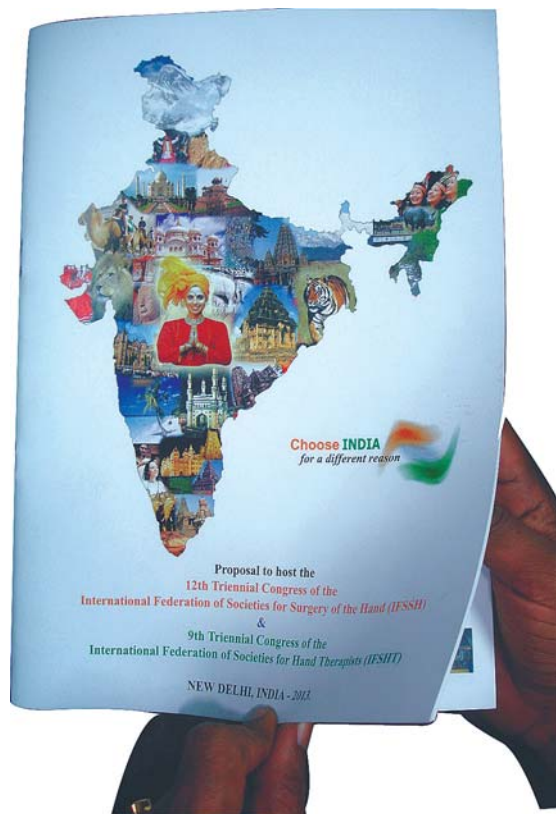
Sydney, March 2007

The Indian Society for Surgery of the Hand appointed Dr S Raja Sabapathy as the Chairman of the Committee to prepare the bid for the conducting of the Triennial Congress in New Delhi in 2013. A detailed bid was prepared after many on site visits to New Delhi and discussions with involved people. A bid document was prepared in the department. Dr Raja Sabapathy presented the bid on 11th March 2007 at the Council meeting of the International Federation of Societies for Surgery of the Hand in Sydney and the India's bid was chosen by the delegates over other competitors.

This will be a historic meeting for the Indian Society for Surgery of the Hand and we feel privileged to have played a significant part in the process of winning the bid to host the Congress.

Choose INDIA
for a different reason

The 25 pages bid document



Dr. Hari Venkatramani & Dr. Raja Sabapathy with Dr. H. Srinivasan who was recognized as a 'Pioneer in Hand Surgery', during the inaugural function.

The Department signs up an MOU with the Orthopaedic Department of Washington University at St Louis, USA.



Dr Martin Boyer discussing with the fellows



The visit of Dr Martin Boyer, Associate Professor, Orthopaedic Surgery, Washington University as the Sterling Bunnell Fellow of American Society for Surgery of the Hand stimulated further co-operation between the two units. An MOU was signed in 2006 to facilitate short period of training of Hand Fellows of the Washington University in the Plastic, Hand and Microsurgery Department at Ganga Hospital. Dr S Raja Sabapathy and Mr Larry J Shapiro, Executive Vice Chancellor of Medical Affairs and Dean, Washington University, signed the document.

The selected fellow typically spends a week in the Ganga Microsurgery Laboratory doing the Microsurgery course and in the next week is exposed to the clinical activities of the unit. This has been mutually beneficial and helps greatly spread the philosophy of management of major hand trauma in a different setting.

Hand fellows from Washington University who visited to unit



Dr. Clint Walker & Dr. Christine Cheng



Dr. Megan Patterson

Visitors



“ Visitors - A great strength of our department ”

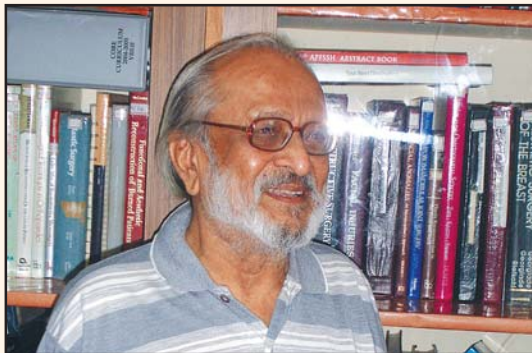
Important Visitors



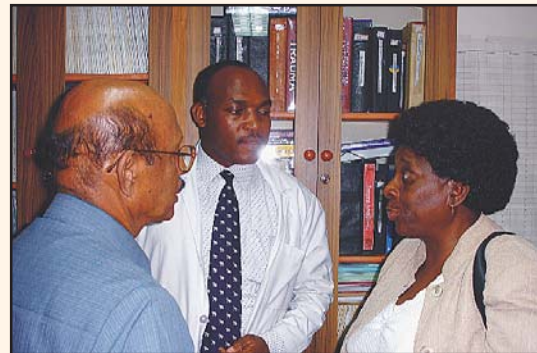
Hon. Justice Dr. Shivaraj V. Patil & Dr. B.A. Anantharam



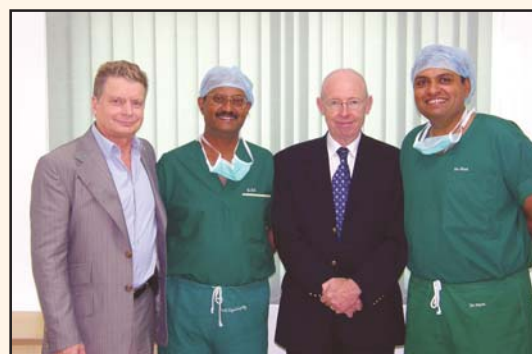
Mr. David Elliot



Padmashri Dr. H. Srinivasan



Her Excellency Eva L Nzaro



Dr. Warren Breidenbach & Prof. McGrouther



Brig Dr. Mubarak Obbad Al Abdulla, Qatar



Dr. Riemer Hoffman



Dr. Martin Boyer, Sterling Bunnell Fellow of ASSH



Dr. Robert Acland



*Dr Eftal Gudimez (Second from left)
Dr Mahmut Komurcu (Fourth from left)
Faculty, Annual Meeting of ISRM - 2006*



*Dr. Aymeric Lim, Dr. David Tan with
Chairman, Ganga Hospital, during ISRM - 2006*

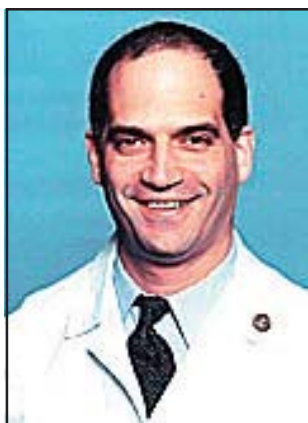
Dr Martin Boyer - Sterling Bunnell Fellow

Associate Professor, Orthopaedic Surgery, Washington University in St. Louis, USA

American Society for Surgery of the Hand (ASSH).

Sterling Bunnell Fellowship is considered to be one of the highest honors that the American Society for Surgery of the Hand (ASSH) could bestow on its member. The Fellow selects a theme and visits centres of excellence and submits a report to the society. Dr Boyer's interest was in the field of Microvascular reconstruction and he chose to *visit the units of Dr Simo Vilki in Finland, Dr Marko Innocenti in Italy and the Hand and Microsurgery unit of Ganga Hospital, Coimbatore.*

Dr Boyer demonstrated techniques in wrist surgery and has proposed to conduct a workshop on Surgery of the wrist in the near future.



Dr Martin Boyer



‘ Thank you for a stimulating, educational, enjoyable and invigorating week at Ganga Hospital. I appreciate your friendship, value you as a colleague and admire what you have already done, what you are currently doing and what you hope to accomplish at your new facility in the future’

Mr David Bell - Pulvertaft Fellow

British Society for Surgery of the Hand (BSSH)

Mr David Bell, Specialist Registrar Plastic Surgery, Wythenshawe Hospital, Manchester, UK, who was awarded the Pulvertaft Fellowship of the British Society for Surgery of the Hand chose our unit to spend 6 months. It was a mutually beneficial experience, the fellow bringing in the current concepts practiced in the UK and he is exposed to the techniques of providing high quality care in a high volume setting at affordable costs.



Mr David Bell

David also played an important part in the preparation of a DVD of 11 major surgical procedures done in the unit. It was done on behalf of the organizers of the 2007 Annual conference of the Association of Plastic Surgeons of India and was released during the inauguration of the conference by Director General of Armed Forces Medical Services, Lt Gen Yogendra Singh, VSM, PHS.

David studied the outcome of the reconstruction of long segment defects of flexor tendons and major nerves following electrical burns. The study will be submitted for publication.

'I have had a memorable time in India! I have just about got to grips with the Ganga philosophy of trauma management and learnt a few valuable maxims : "If you get the wound primarily healed without infection , you've won" is probably my favourite! I have seen more here in 6 months than in several years at home, such is the intensity of the work.....'

- Mr David Bell

Dr Torbjorn Vedung - Senior Traveling Fellow Federation of European Societies for Surgery of the Hand (FESSH)

The purpose of the fellowship is to sponsor a young hand surgeon from Europe in the development of international relationships, which contribute to higher learning, and which fosters the principles of scholarship of the FESSH. The fellow has to develop a fellowship theme that clearly defines an area of specific interest in hand surgery. The ambition is to visit and learn from those individuals in national or international centres who would best fulfill the theme. The fellow acts as an ambassador of the FESSH and is encouraged to give talks or lectures at each centre, so the flow of information work both ways. Dr Torbjorn Vedung, Stockholm, Sweden was selected as the first Senior Traveling Fellow of the FESSH.

Dr Vedung's fellowship theme was focused on congenital malformations and reconstructive microsurgery, with special attention on microvascular surgery. The fellowship travels took him to 5 centres of excellence in 3 countries. *He chose to spend 3 weeks at the Mayo Clinic, Rochester, USA, 3 weeks at the Plastic Surgery Department, Ganga Hospital, India and a week each at University Hospital, Tokyo, Ogorii Daichii General Hospital (ODGH), Yamaguchi and at the Nara Medical University, Kashihara in Japan.*



Dr Torbjorn Vedung



'I truly have enjoyed the experience in visiting Ganga hospital. I have really been enlightened regarding management of major hand trauma. I have also picked up many pearls and tricks not only regarding microsurgery but also life itself. I am impressed with the effort and dedication you all put into your work. Ganga Hospital was truly the highlight of my fellowship.'

- Dr Torbjorn Vedung

We are proud that we played a part in drawing these talented Hand surgeons representing distinguished Societies to India. They return back to serve as professional and cultural ambassadors of India.

Visitors to the Department 2006 & 2007

S.No.	NAME	DESIGNATION	PLACE	DURATION
01	Dr. Rodrigo Tanus	Plastic Surgeon Vila Penteado's General Hospital	Sao Paulo Brazil	01.01.06-28.02.06
02.	Dr Sumita Shankar	Consultant Plastic Surgeon	Guntur	02.01.06 -27.02.06
03.	Dr Somesh Balakrishnan	SHO, Plastic Surgery, James Cook University Hospital	Middlesbrough, United Kingdom	06.01.06 - 09.01.06
04.	Dr Rajesh R Koshire	Orthopaedic Surgeon	Nashik	09.01.06 -11.01.06\
05.	Mrs Susila Premalatha R.D	Occupational Therapist, National Hospital of Sri Lanka	Colombo, Sri Lanka	21.01.06 - 24.01.06
06.	Mrs Kalyani Hemalatha W.P	Occupational Therapist, National Hospital of Sri Lanka	Colombo, Sri Lanka	21.01.06- 24.01.06
07.	Dr Vishal R Patel	Clinical Assistant, Department of Burns & Plastic Surgery, BJMC	Vapi	09.02.06- 28.02.06
08.	Dr Robert D. Acland	Professor, University of Louisville	Louisville USA	09.02.06- 16.02.06
09.	Dr Chintan K Patel	Plastic Surgeon	Ahmedabad	09.02.06 - 28.02.06
10.	Dr Aftab Ahmad Siddiqui	MCh Plastic Surgery Trainee	Patna	10.02.06- 24.02.06
11.	Dr Sardar Mahipal Singh	MCh Plastic Surgery Trainee	Patna	10.02.06 - 24.02.06
12.	Dr Mahmuda Akther	Medical Officer	Dhaka, Bangladesh	21.03.06- 25.03.06
13.	Her Exc Eva L. Nzaro	High Commissioner of Tanzania to India	New Delhi	22.03.06- 23.03.06
14.	Dr Akif Muhtar Ozturk	Hand Surgeon, Ankara Numune Research and Training Hospital	Ankara Turkey	30.03.06 - 21.05.06
15.	Dr Manjula Devi	Plastic Surgeon, Sankari Hospital	Vellore	31.03.06 - 29.04.06
16.	Dr Markandeyulu M	Asst. Professor, Dept of Plastic Surgery	Guntur	01.04.06- 23.05.06
17.	Dr Martin D Boyer	Associate Professor, Orthopaedic Surgery, Washington University, Sterling Bunnell Fellow of American Society for Surgery of the Hand	St. Louis, USA	16.04.03 - 22.04.06
18.	Dr Chenthil T	Plastic Surgeon, Kanthimadhi Nursing Home	Tirunelveli	01.05.06- 05.05.06
19.	Dr Anna Riemen	Medical Student, University of Dundee	Scotland, UK	07.05.06 - 08.06.06
20.	Dr Sameeh Falhout	Consultant Plastic Surgeon	Al-Saveida, Syria	08.05.06 - 20.05.06
21.	Mr Dilip Kumar Sahoo	OT Technecian	Bhubaneshwar	10.05.06 - 27.05.06
22.	Mr Baikuntha Nath Sahoo	Hand Therapist	Bhubaneshwar	10.05.06- 06.06.06
23.	Prof Michael Tonkin	Head, Dept of Hand Surgery & Peripheral Nerve Surgery, Royal North Shore Hospital	Sydney, Australia	13.05.06 - 21.05.06
24.	Dr Jagannath Kamath B	Consultant Hand Surgeon	Mangalore	14.05.06 - 17.05.06
25.	Dr Jyotsna Murthy	Prof. of Plastic Surgery, Sree Ramachandra Medical College	Chennai	26.05.06 - 27.05.06
26.	Dr Tawkir Chowdury	Plastic Surgeon, Niramoy Medical Centre	Burdwan	05.06.06- 24.06.06

27.	Dr Mruthyunjaya	Associate Professor of Orthopaedics, JSS Medical College	Mysore	05.06.06- 30.06.06
28.	Dr Raghav Mantri	Plastic Surgery Registrar	Gurgaon	06.06.06- 16.06.06
29.	Dr Anand Bijwe	Fellow in Trauma Care, Sion Hospital	Mumbai	11.06.06 - 11.07.06
30.	Dr Parvez Inamdar	Consultant Orthopaedic Surgeon	Pune	11.06.06- 11.07.06
31.	Dr Gurvinder Singh Saini	Plastic Surgeon	Jalandhar	18.06.06- 23.06.06
32.	Dr Ravi Sahdev	Medical Student, University of Leicester	Leicester, UK	19.06.06- 04.08.06
33.	Dr Sajedur Reza Faruquee	Orthopaedic Hand Surgeon, NITOR	Dhaka, Bangladesh	26.06.06- 31.05.07
34.	Dr Friji M.T	M Ch Plastic Surgery Trainee	Trivandrum	01.07.06- 15.07.06
35.	Ms Jill Webb	Specialist Registrar, Plastic Surgery	Birmingham, UK	07.07.06- 15.09.06
36.	Dr Rajshree C J	Plastic Surgeon, Jubilee Mission Hospital	Thrissur	10.07.06 - 15.07.06
37.	Dr Somashekar L Samagandi	Consultant Plastic Surgeon	Koppal	16.07.06 - 29.07.06
38.	Dr John Samuel Rajasingh	Medical Student	Russia	22.07.06 - 11.08.06
39.	Dr Clint Walker	Orthopaedic Surgeon, Washington University	St. Louis, USA	07.08.06 - 11.08.06
40.	Dr Christine Cheng	Plastic Surgeon, Washington University	St. Louis, USA	07.08.06 - 11.08.06
41.	Dr Durga Karki	M Ch Plastic Surgery Trainee, King George Medical College	Lucknow	10.08.06 - 20.08.06
42.	Dr Mahendra Mohan Gupta	M Ch Plastic Surgery Trainee	Varanasi	10.08.06 - 20.08.06
43.	Prof Shaikh M.F	Professor of Plastic Surgery, BJ Medical College, Civil Hospital	Ahmedabad	21.08.06 - 25.08.06
44.	Dr Kiruthika Balasundaram	Medical Student	USA	22.08.06 - 24.08.06
45.	Dr Reimer Hoffman	Plastic and Hand Surgeon	Oldenburg, Germany	28.08.06 - 30.08.06
46.	Dr Shaji Mathew	Consultant Plastic Surgeon	Muscat	18.09.06 - 22.09.06
47.	Dr Olayinka A. Olawaye	Surgeon, Olabisi Onabanjo University	Nigeria	24.09.06 - 22.10.06
48.	Dr Sascha Zachariah	Medical Student	Oldenburg, Germany	25.09.06 - 11.10.06
49.	Ms D.M.Rupika Dissanayake	Physiotherapist, National Hospital of Sri Lanka	Colombo, Sri Lanka	27.09.06 - 12.10.06
50.	Ms Lasanthi Siriwardana	Occupational Therapist, National Hospital of Sri Lanka	Colombo, Sri Lanka	27.09.06 - 12.10.06
51.	Dr Paul S.C Malone	Plastic Surgery Registrar, South Manchester University	Manchester, UK	31.10.06 - 04.11.06
52.	Dr Mark Rahman	Trainee, Royal Marsden Hospital	London, UK	31.10.06 - 04.11.06
53.	Dr Usha Ganesh	Plastic Surgeon	Chennai	06.11.06 - 15.11.06
54.	Dr Manish Jain	M Ch Plastic Surgery Trainee, Civil Hospital	Ahmedabad	30.11.06- 30.12.06
55.	Dr Ketan H Parmar	Asst.Professor Burns and Plastic Surgery Dept, Govt Medical College	Surat	03.12.06 - 27.12.06
56.	Dr Ranjeet Jeevan	Plastic Surgery Trainee	London, UK	10.12.06 - 15.12.06
57.	Dr Torbjorn Vedung	Hand Surgeon, Sodersjukhuset, Senior Traveling Fellow of the Federation of European Societies for Surgery of the Hand (FESSH)	Stockholm, Sweden	12.12.06 - 29.12.06

58.	Dr Hari Singh Bisoniya	Consultant Plastic Surgeon	Bhopal	14.12.05 - 05.01.06
59.	Dr Satish Bhat T	Consultant Plastic Surgeon	Mangalore	14.12.05 - 05.01.06
2007				
60.	Dr Thomas Giesen	Hand Surgeon, Polyclinic of S.donato	Milano, Italy	26.12.06 - 21.02.07
61.	Lt.Col DrTejinder S Bhatti	Associate Professor, Plastic Surgery, AFMC & Command Hospital	Pune	01.01.07 - 28.02.07
62.	Ms Toninn Nessa	Hand Therapist	Stavanger, Norway	04.01.07 - 05.01.07
63.	Dr Suneet Soni	M Ch Plastic Surgery Trainee, B J Medical College & Civil Hospital	Ahmedabad	30.01.07 - 28.02.07
64.	Padmasri Dr Srinivasan H	Former Director, Jalma Institute, Agra	Chennai	08.02.07- 08.02.07
65.	Dr Lakhwani O P	Orthopaedic Surgeon,	Gwalior	19.02.07 - 23.02.07
66.	Dr Archana Deka	Plastic Suregon	Tezpur, Assam	19.03.07- 26.03.07
67.	Dr Sarath T.S	M Ch Plastic Surgery Trainee, Medical College	Trivandrum	20.03.07 - 06.04.07
68.	Dr Vijay Sharma	Assistant Professor, Orthopaedics, All India Institute of Medical Sciences	New Delhi	26.03.07 - 31.03.07
69.	Dr Biplob Mishra	Assistant Professor, Surgery, All India Institute of Medical Sciences	New Delhi	26.03.07-31.03.07
70.	Mr Stuart Enoch	Specialist Registrar	Manchester, UK	01.04.07-10.05.07
71.	Dr Roshan Bhandari	Hand Surgeon	Bangalore	01.04.07-15.05.07
72.	Ms Lily Shapiro	Medical Student	Wisconsin, USA	03.04.07-04.04.07
73.	Dr Aswin Appukuttan	M Ch Plastic Surgery Trainee, Medical College	Kozhikode	09.04.07-02.05.07
74.	Justice Dr Shivaraj V. Patil	Member, Human Rights Commision of India. Former Judge, Supreme Court of India	New Delhi	29.04.07 - 29.04.07
75.	Prof Steven L. Moran	Associate Professor, Plastic Surgery, Mayo Clinic.	Rochester USA	04.05.07- 07.05.07
76.	Dr Philip Yoong	SHO, Plastic Surgery	London, UK	06.05.07 - 11.05.07
77.	Dr Sebin V Thomas	M Ch Plastic Surgery Trainee, Calicut Medical College	Kozhikode	06.05.07- 26.05.07
78.	Dr Suresh Irrinki	Hand Fellow, Trimurthy Hospital	Vijayawada	18.05.07- 02.06.07
79.	Wg Cdr Dr Pauline Babu	M Ch Plastic Surgery Trainee, AFMC	Pune	24.06.07 - 30.06.07
80.	Mr David Bell	Pulvertaft Fellow of British Society for Surgery of the Hand	Manchester, UK	26.06.07 - 11.12.07
81.	Mr Satish Kalra	Regional Director, South Asia, The Smile Train	New Delhi	18.07.07- 18.07.07
82.	Dr Waheed Khalid	Kerbala Hospital for Children	Kerbala, Iraq	03.08.07 - 10.08.07
83.	Dr Agarwal N K	Assistant Professor, Plastic Surgery,, BHU	Varanasi	06.08.07 - 20.08.07
84.	Dr Megan N Patterson	Hand Surgery Resident, Washington University	St. Louis, USA	06.08.07- 10.08.07
85.	Dr Ganesh Kamath	Orthopaedic Resident, Washington University	St. Louis, USA	06.08.07 - 10.08.07
86.	Prof Duncan A McGrourther	Professor of Plastic and Reconstructive Surgery, University of Manchester,	Manchester UK	22.08.07 - 24.08.07
87.	Dr Warren Breidenbach	Kleinert Kutz Hand Care Center	Louisville, USA	22.08.07- 24.08.07

88.	Dr Shirol S.S	Asst. Prof. of Plastic Surgery, JN Medical College	Belgaum	28.08.07- 07.09.07
89.	Dr Arinda Mandal	Consultant Plastic Surgeon, Bokaro, General Hospital	Bokaro Steel City, Jharkhand	01.09.07-15.09.07
90.	Dr Vivek Kumar	Consultant Plastic Surgeon, King George Medical University	Lucknow	09.09.07-24.09.07
91.	Dr Narendra S Mashalkar	M Ch Plastic Surgery Trainee, LG General Hospital	Ahmedabad	18.09.07-03.10.07
92.	Dr Anubhav K Gupta	M Ch Plastic Surgery Trainee, VS General Hospital	Ahmedabad	18.09.07-03.10.07
93.	Dr Sathis Chandra B K	M Ch Plastic Surgery Trainee, JJ Hospital	Mumbai	07.10.07-27.10.07
94.	Dr Gangadhara Sundar	Oculoplastic Surgeon National University Hospital	Singapore	15.10.07-15.10.07
95.	Dr Shamsi Hameed	Assistant Professor Orthopaedics, Kasturba Medical College	Manipal	22.10.07-12.11.07
96.	Brig Dr Mubarak Obbad Al Abdulla	Chief, Qatar Armed Forces Medical Services	Doha, Qatar	05.11.07-23.11.07
97.	Dr Gajanan K	Plastic Surgery Registrar	Manchester, UK	19.11.07-23.11.07
98.	Dr. J K Thiruchelvam	Specialist Registrar in Oral & Maxillofacial Surgery Barts & The London NHS Trust	London, UK	20.11.07 - 20.11.07
99.	Mr Peter Russell	Specialist Registrar, Plastic Surgery Bruce Bailey Fellow	Dundee, UK	02.12.07-28.12.07
100.	Dr Ravi Kumar Mahajan	Consultant, Plastic and Microvascular Surgeon, Amandeep Hospital	Amritsar	03.12.07 - 05.12.07
101.	Dr Paul George	M Ch Plastic Surgery Trainee, Calicut Medical College	Kozhikode	10.12.07 - 31.12.07
102.	Dr Nanak Sarhadi	Consultant Plastic Surgeon	Birmingham, UK	31.12.07- 04.01.08



Dr. Gangadhara Sundar, Oculoplastic Surgeon National University Hospital, Singapore, delivering a lecture.



Dr. Raja Sabapathy interacting with a group of students from Hebron School, Ooty, during their educational visit to Ganga Hospital.

Documentation Department

The unit is well supported by a good documentation department which is headed by Mr R Santhosh Kumar. Over 50, 000 photographs & videos were organized and archived in the two years (2006-07). The department is also involved in preparation of educational videos of important surgical procedures.

The department designed, hosted and maintains the websites of the following National and International Organisations and Conferences.

Organisations

www.gangahospital.com	- Ganga Hospital
www.ifssh.org	- International Federation of Societies for Surgery of the Hand
www.issh.org	- Indian Society for Surgery of the Hand
www.isrm.info	- Indian Society of Reconstructive Microsurgery
www.tanpaps.org	- Tamilnadu & Pondicherry Association of Plastic Surgeons

Conferences

www.itaccsindia2007.com
www.gangashoulderandelbow.com
www.assicon2008.com
www.goac2008.com
www.perforatorflapcourse2008.com



Mr R Santhosh Kumar
Webmaster

Secretaries

The Department is backed up by an efficient and committed secretarial team.



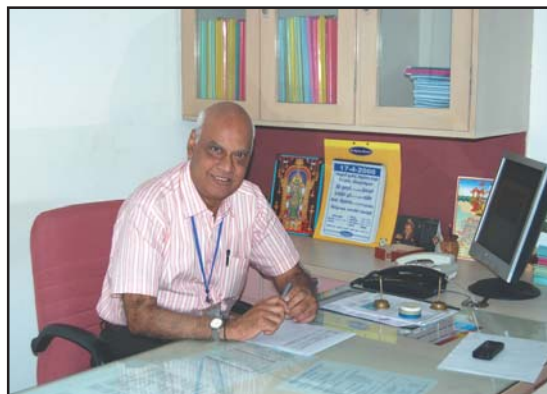
Mr M Sasidharan, Mr H Seshagiri



Mrs. Mahalakshmi

People

Mr P Ramamoorthy, retired General Manager, Canara Bank, joined us as the Chief Administrative Officer and is making valuable contributions towards streamlining the working system.



Registrars

Following registrars significantly contributed towards the progress and work of the department in 2006 & 2007



Dr. P. M. Praveen Kumar



Dr. N. Jithendran



Dr. Ankur Bhatnagar



Dr. Sajedur Reza Faruquee



Dr. Mohammad Asadullah



Dr. Rohan Habbu



Dr. M. Sasi Kumar



Dr. Udhay Shankar

Theatre Staff



Consultants Department of Plastic Surgery



Dr Kannan Balaraman, Dr Hari Venkatramani, Dr S Raja Sabapathy
Dr V Ravindra Bhat, Dr R Ravindra Bharathi.

*Strengthened by Skills
Powered by Team Work
Driven by Values....*



Ganga Medical Centre and Hospitals (P) Ltd.
Shanmuganathan Kanakavalli Speciality Centre for Trauma,
Orthopaedics, Plastic Surgery, Hand and Reconstructive Microsurgery.

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