LITTLE HANDS

GANGA MEDICAL CENTRE & HOSPITALS PVT LTD

GANGA LITTLE HANDS

An Initiative of Plastic & Hand Surgery Department

Monthly Bulletin | Issue 22 | May 2026

Little Hands, Big Art

Dedicated to Increasing Awareness, Understanding, and Early Action in Congenital Hand Conditions

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GANGA LITTLE HANDS is an educational initiative by the Department of Plastic, Hand and Reconstructive Microsurgery and Burns of Ganga Hospital, Coimbatore, to share knowledge about Paediatric hand conditions. This is a monthly bulletin and was first started in August 2024.

It has a compilation of various hand conditions treated by us. Little Hands is for anyone and everyone. It is not for surgeons only. The technical tips, 'Did you know?, Picture Gallery, Hand vignettes, Real Life Stories and the 'Clinician's corner' might be interesting to all the readers.

Scan Me

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Editorial

Building Enduring Relationships - Key to Empowering Children with Congenital Hand Deformities

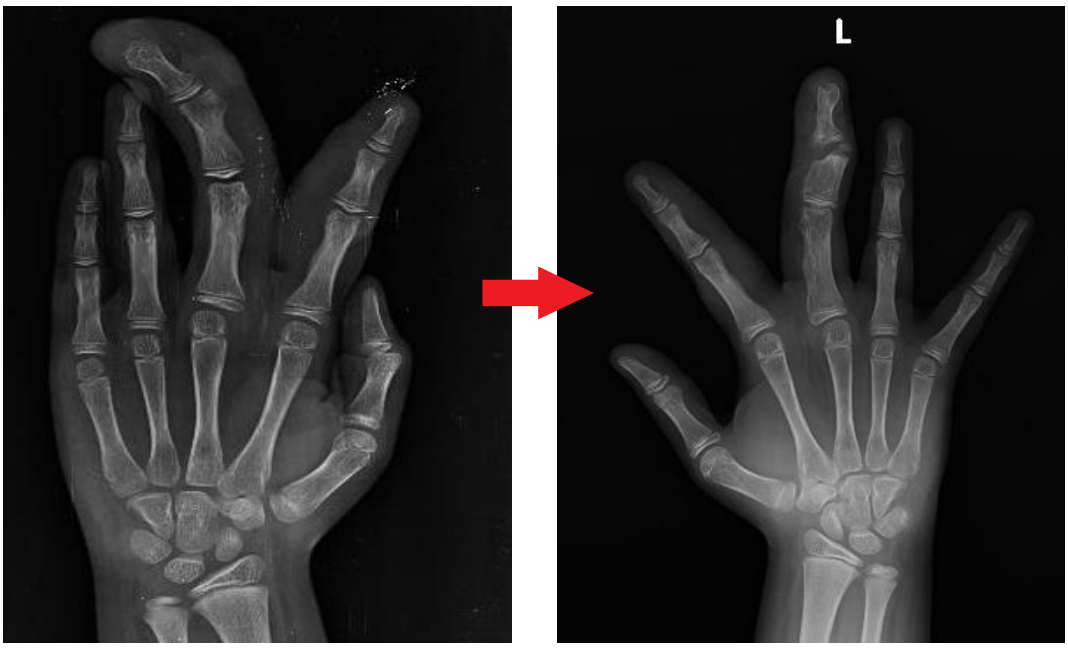
At Ganga, we have been treating children with congenital hand deformities for over three decades. A lesson that we have learnt is that when we help a child with a hand deformity it is never a one-off relationship. It is the beginning of a bond that gets reinforced as the child grows. When we manage these children, we don't limit our work to the correction of the structural deformity. We think of the effect of time and growth. We think of the evolving functional needs. When the child is an infant, support for crawling becomes important, then holding and grasping becomes important, when they go to school ability to play becomes important, and as a teenager being comfortable with gadgets and driving a cycle becomes important. We help the child and the parents through all these stages taking care of the functional adaptation and aesthetic acceptance.



Master Y and his parents visited us for the first time when he was 10 months of age. He had APERT Syndrome. All the fingers of his hands were fused as seen in the images. Separation of these fingers cannot be done in a single stage. He underwent four procedures to achieve hands with separate functional fingers.


For each procedure they travelled 2530 km to see us !

Another child, now a doctor and a Postgraduate resident, was once treated for macrodactyly of the middle finger. Complex bone and soft tissue surgeries were done to correct the bulkiness and the deviation deformity of the left middle finger, preserving the flexion function.



One thing every child has consistently demonstrated is the capacity to efficiently adapt the structural components to functional needs. Their spirit of resilience never ceases to amaze us. What gives the parents comfort is that they have a place to come back to, any time they face an issue with the needs of the child. We tell them that we are just a phone call away.

Enduring relationships … Key to happy children and families. At Ganga, we take every effort to make it happen with every child, every time.

Dr S Raja Sabapathy
Dr Monusha Mohan
(Editors)

Did you know?

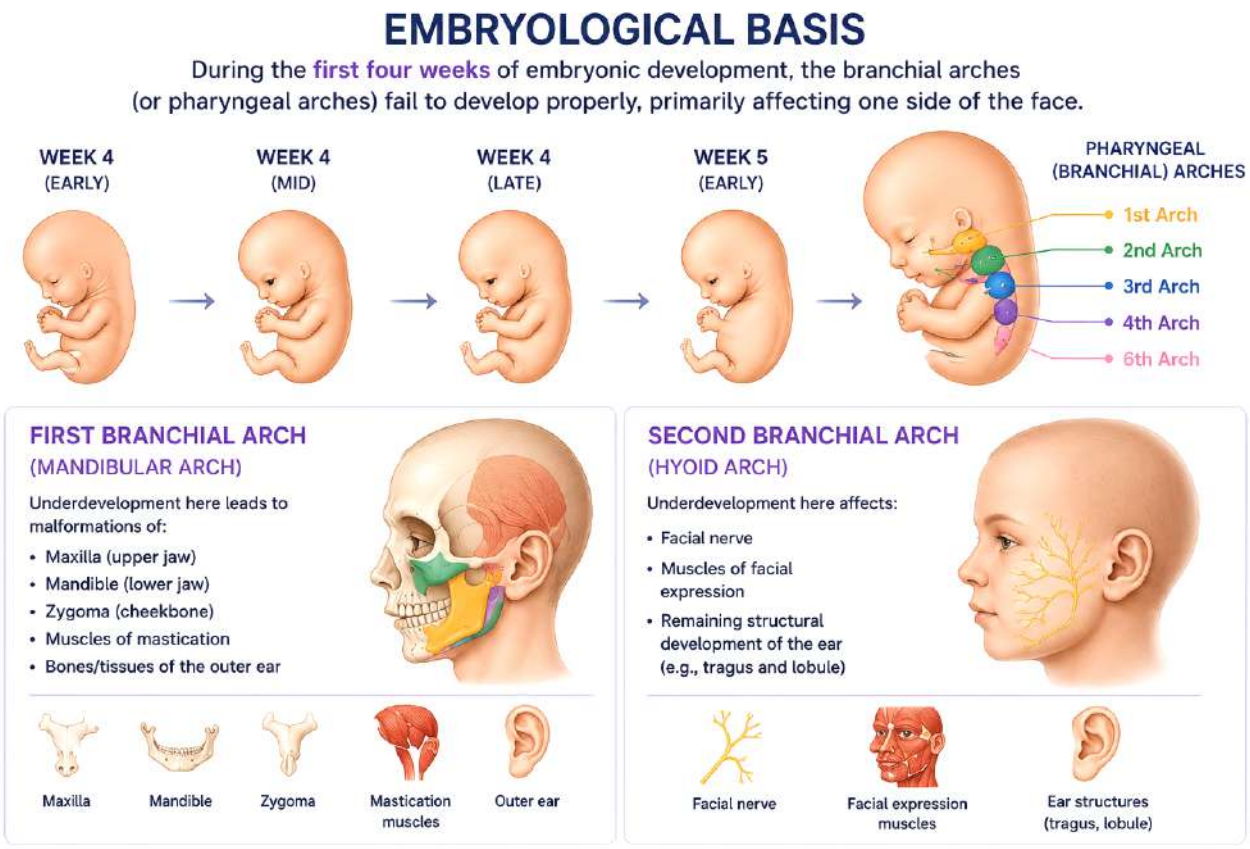
Goldenhar Syndrome
(Oculo-Auriculo-Vertebral dysplasia, OAVS) can be associated with hand anomalies

As I was going through our photo archives for long term outcomes in children born with absent or severely underdeveloped thumb who underwent Pollicization- creation of thumb using index finger, I stumbled upon the photos of a baby with a tiny right eye and ear. The right half of the face looked affected. She was under Pollicization folder as she had no thumb on the right hand and we had performed the surgery in 2009.

Goldenhar Syndrome / Oculo-Auriculo-Vertebral Spectrum (OAVS) can be associated with hand anomalies

The syndromes associated with thumb hypoplasia that we have seen in our OPD are VACTERL / Fanconi anemia / Thrombocytopenia Absent Radius (TAR). Though the features resembled Goldenhar syndrome (OAVS), radial dysplasia/thumb hypoplasia is not a feature that is commonly seen in these children. I was elated thinking I had cracked a new syndrome, only to find later that the association has been reported before. However, Pollicization done for a child with this association was hard to find in literature

The child with improved hand function after Pollicization



Goldenhar syndrome was first reported in 1952 by Maurice Goldenhar, an American ophthalmologist. The condition is mostly sporadic. The embryological basis is given in the image.

The Child Seventeen years after pollicization

Seventeen years after surgery, we contacted her father as she had not been brought for regular follow-up visits. She is currently 20 years old and is attending a Speech Language and Hearing school. She talks a few words only. She has hearing disability and learning disability from an unaddressed hearing loss. Despite these challenges, the reconstructed hand has enabled her to take care of herself.

Clinicians' Corner

Paediatric Hand Therapy - Toddler edition

Keeping the children engaged in physiotherapy is not child's play ! Therapists must develop a good working relationship with the child. Conventional chair and table method of physiotherapy may not work in paediatric patients. The trick is to make them participate in therapy without letting them know it is therapy!

Among paediatric patients, toddlers (18 months to 4 years) are often among the most challenging groups to work with. They are resistant to control and restrictions. This is the most difficult age to splint and teach passive range of motion. Owing to their short attention span, multiple activities will have to be given to the child in a span of 30 minutes, to keep them engaged. These will provide them with a great deal of stimulation to continue working on tasks that are difficult for them. These children often have a desire to please adults. Therapists can utilize this to entice them into doing difficult tasks.

An ideal therapy session for toddlers should include three components: Wake up hands, Strong hands and Smart hands.

— EVERY THERAPY SESSION — SHOULD INCLUDE THESE 3 DOMAINS

1 WAKE UP HANDS

To provide sensory stimulation

- Soft objects – gel filled balls, rubber animals
- Squeezing the objects, rolling them on the table or all over the hands, grabbing them with the thumb and index finger, pulling accordion tubes, manipulating objects of different textures

Helps children become alert, calm and ready to use their hands for learning and play.

2 STRONG HANDS

To improve hand grasp

- Play dough or clay
- Water sprayers
- Geoboards
- Newspapers
- Wringing out sponges or washcloths
- Squeeze toys

Helps build hand strength and improves grasp for daily tasks and independence.

3 SMART HANDS

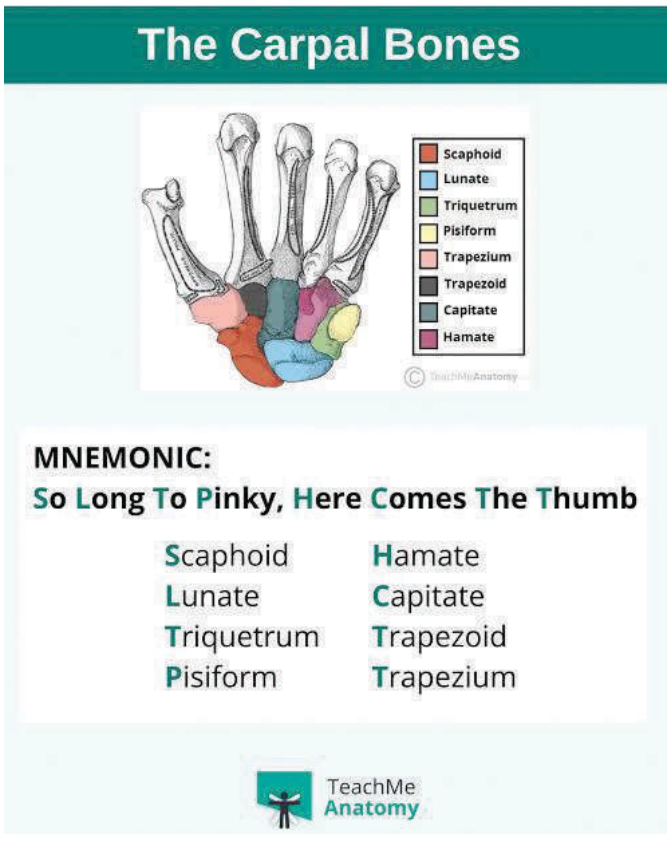
To encourage multiple skills in one activity

- Play Dough
- Stringing or lacing activities
- Finger isolation activities – hopping ants, spinning tops, geoboards, eye droppers, tissue paper pictures, coins/buttons
- Puzzles
- Zoo sticks
- Wind up toys
- Stickers
- Buttoning
- Bristle blocks

Helps develop coordination, focus, problem-solving and fine motor skills through fun activities.

Hand Vignettes

Hand Anatomy Trivia



Here are the classic and commonly used mnemonics for the carpal bones, arranged from lateral (radial/thumb side) to medial (ulnar side).

Order of Carpal Bones

Proximal row

Scaphoid – Lunate – Triquetrum – Pisiform

Distal row

Trapezium – Trapezoid – Capitate – Hamate

"She Looks Too Pretty, Try To Catch Her"

"Sam Likes To Push The Toy Car Hard"

"So Long To Pinky, Here Comes Thumb"

Sally Left The Party To Take Cathy Home"

Legends in Congenital Hand Surgery

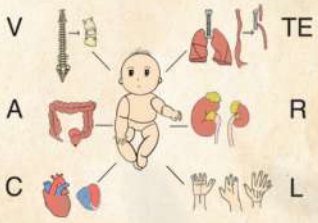
DAVID W. SMITH

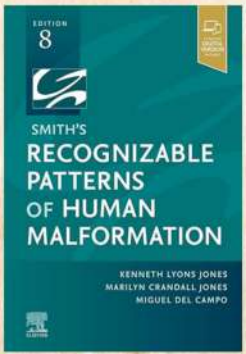
USA / 1926–1981

Landmark Contributions

- Identified clinical patterns that later became the basis for many syndromes and associations. Taught clinicians to look for pattern recognition, not isolated defects
- First introduced the term VATER (later expanded to VACTERL)
- Described trisomy 13, together with Patau and associates
- Published the first report on the Cornelia de Lange syndrome in the English language medical literature
- Encouraged the usage of the term, 'Dysmorphology' over 'Teratology' as the latter means 'study of monsters' in Greek and highlights the environmental causes rather than the genetic causes

"He always put the good of others – his patients, students, fellows, laboratory associates, and other faculty members as well as the Departments of Paediatrics in which he served – above his personal goals and gains." -as reflected by Dr Beverly Morgan





Standard Reference in Paediatrics and Clinical Genetics

Quotes

In controversial meetings he would stand up, hands in his pockets, and make comments such as, 'Why don't we stop all this arguing and just get together and chop wood?'

"Every malformation represents an inborn error in morphogenesis. Just as the study of inborn metabolic errors has extended our understanding of normal biochemistry, so the accumulation of knowledge concerning defects in morphogenesis may assist us in further unravelling the story of structural development."

Help us heal Little Hands | Make a donation

It is difficult to imagine what the parents experience when they find out in the labour room that their newborn baby has a congenital limb defect. The family often feels devastated as their hopes fade. Most of the limb anomalies have a surgical solution that is aimed at making the hand to function in a better way.

Globally, congenital anomalies or birth defects affect 2-3% of births. In India, 1-3 out of 100 babies born are with birth defects. Though musculoskeletal anomalies are the most common defects seen, rarely we find major initiatives aimed at managing these defects. A lot of regional and international proposals are directed at treating and supporting children with congenital heart diseases and orofacial defects like cleft lip/palate. Though isolated congenital limb defects are not life threatening like the cardiac and craniofacial anomalies, they are disabling and lower the quality of life.

You can make a tax-deductible donation today and transform the lives of these kids by giving back their childhood.

To make a donation, please write to rajahand@gmail.com

At Ganga, we have a specialized team of doctors to provide comprehensive care to these children. One of the basic surgical principles of congenital hand surgery is to correct the deformities before the child attains school going age. Often these defects are bilateral and involve multiple fingers, necessitating staged surgical procedures. We have highly experienced Paediatric anesthesia staff to support the surgical team. The associated anomalies are taken care of by our Pediatric orthopedic, spine, maxillofacial and cardiac teams. Ancillary services like physiotherapy, nutrition and speech therapy are also available.

Stay Connected

To get updates about our services for children with hand disorders, to grab the future issues of the monthly bulletin and to know what the department of Plastic, Hand and Reconstructive Microsurgery and Burns offers scan the code.

To make Donations

Account Number	:	1120115000010920
Account Name	:	Ganga Plastic Reconstructive & Microsurgery Trust
Bank Address	:	577, Oppanakara Street, Coimbatore-641001
IFSC Code	:	KVBL0001120
Swift Code	:	KVBLINBBIND

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