LITTLE HANDS

GANGA MEDICAL CENTRE & HOSPITALS PVT LTD

GANGA LITTLE HANDS

An Initiative of Plastic & Hand Surgery Department

Monthly Bulletin | Issue 12 | July 2025

First Anniversary Issue

12 Months, 1 Mission

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

LITTLE HANDS

GANGA MEDICAL CENTRE & HOSPITALS PVT LTD

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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 and the 'Clinician's corner' might be interesting to all the readers.

Scan Me

To read all the issues of Little Hands

TABLE OF CONTENTS

Editorial

What do we do? We contribute to 'Nation Building'.

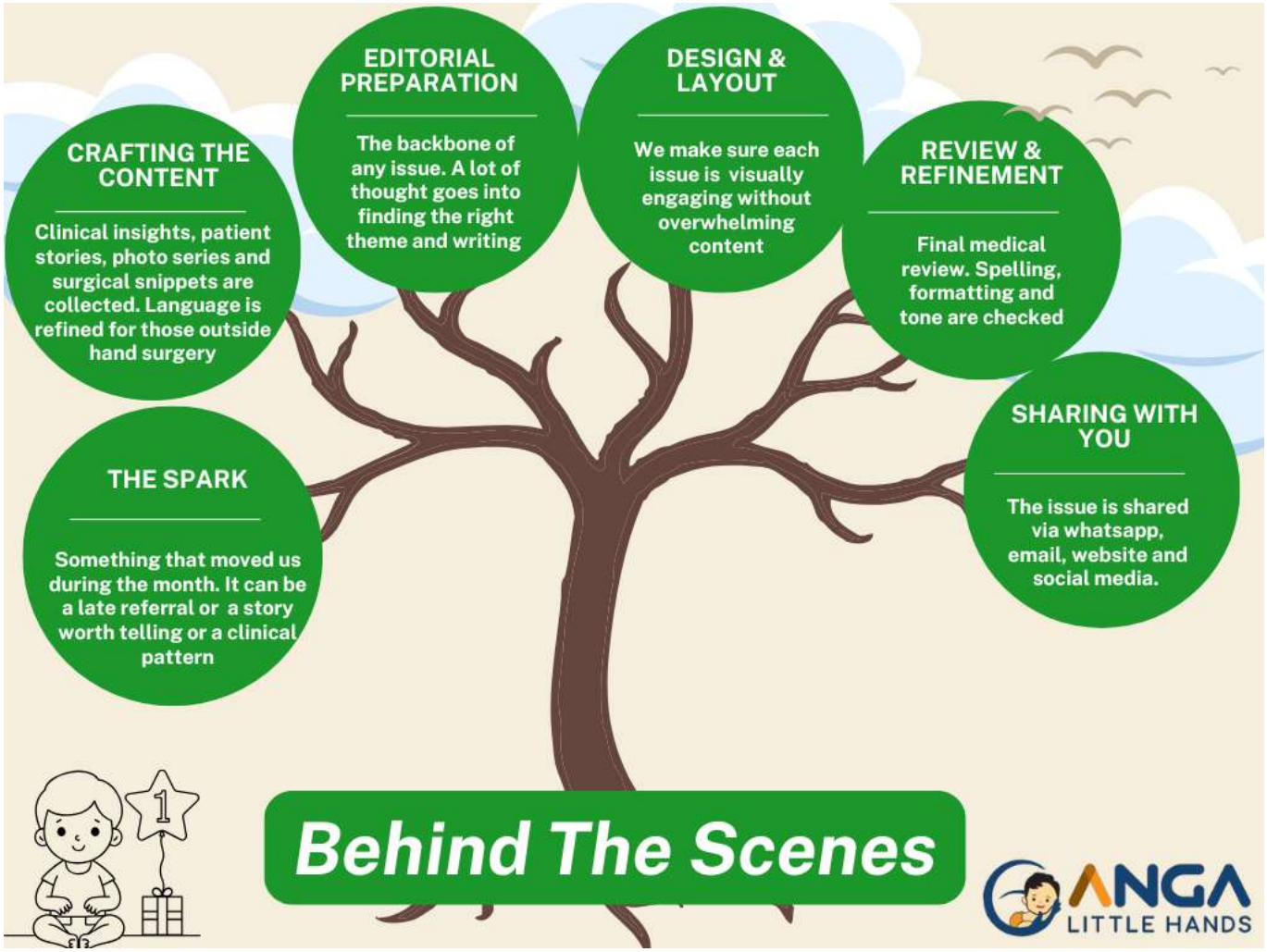
In 1962, during his first visit to NASA, President John F Kennedy saw a janitor and asked him what he did. The janitor famously replied 'Mr President, I am helping put a man on the moon'. It showed the shared vision of everyone in the place to achieve a common goal and it did happen. On July 20, 1969, as millions sat with their eyes glued to the TV screens, man first set his foot on the moon. What President Kennedy envisioned in 1961 'to put a man on the moon and bring him back safely to the earth before the decade is over' came true.

Similarly, if someone should ask any of us performing reconstructive surgery as to what we did, the answer perhaps would be 'We contribute to Nation building'. True. Every time we make a thumb for a child who has been born without one or correct a badly deformed hand due to burns and restore function, it is just not the child that we treat. We make the family breathe better, reduce the dependence in the society, and by making them productive useful citizens we contribute to Nation building.

It has been a great year publishing this monthly bulletin of what happens in the unit. It helped us to truly reflect on what we do. In this we have been greatly enthused by the response of the parents and the accomplishments of the children. They prove that they are the real heroes.

Dr S Raja Sabapathy
Dr Monusha Mohan
(Editors)

Idea to Distribution



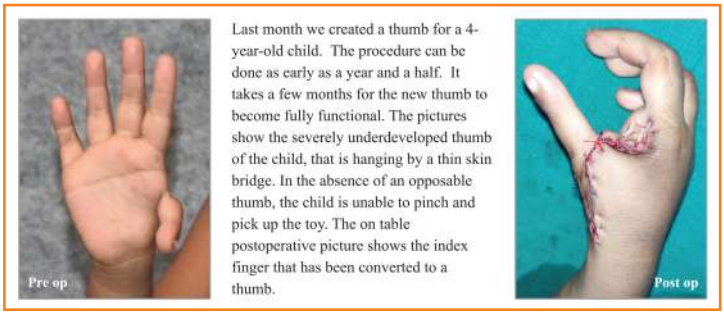
Every issue of Ganga Little Hands is a labour of love. The bulletin is powered by a passion to educate, connect and care. The core idea for each issue starts with a 'spark'. It can be a baby operated years ago, visiting us now for a long- term review or a late referral. The content for the issue including the clinical details, operation notes and follow-up data are collected. The photos are selected from the archives. Once a draft is made, the topic for the Editorial is finalized and drafted. The content is reviewed for language. The design and layout come next. Final review is done before finalizing the issue. Once the issue is ready, it is circulated via WhatsApp mainly and sometimes through mails.

On the occasion of the first anniversary of 'Little Hands', we thank you all for reading, sharing and believing in the cause of early referral and awareness for congenital hand differences.

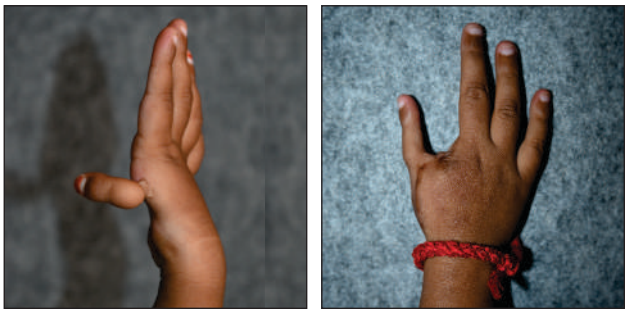
One Year, Many Little Hands: Where Are They Now?

A year ago, we began sharing the stories behind the 'little hands' that touched our hearts. These were stories of surgeries, small victories and big dreams. In this anniversary issue, let's pause to look back. Where are the hands now? How have their lives changed? A year later their stories still speak of strength, growth and possibilities

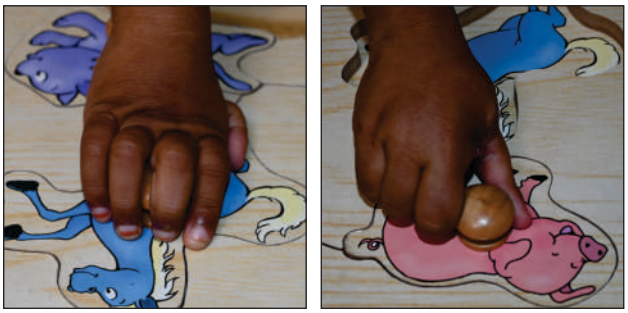
Time Flies



This child was one of the patients featured in our opening issue of Little Hands. She underwent Pollicization for the floating thumb. At one year, she is seen using the hand well.



Before and After Surgery



Before and After Surgery

Since she has recovered from surgery, parents are going to send her to school next year.

Back to School as Promised!

This month we received a child from Jamshedpur with very severe post burn deformities in ***both hands***. The deformities were so crippling that he was entirely dependant on his father for all his activities (his mother died in the same accident). It is just not the schooling that stopped. The family almost came to a standstill. Reconstructive surgery will give him a second chance in life. We have done the first steps this month.

One day he will be back to School

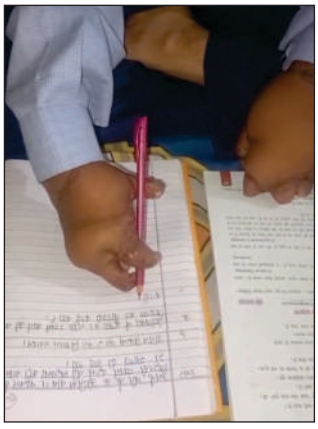
This 12 year-old boy who sustained extensive burns while trying to save his mother from a fire accident, was brought to us with post burn scar contractures affecting both his upper limbs, particularly the hands. His story was shared with you in the September issue of Little Hands.

He underwent four surgeries for deformity correction in the past one year. The father and siblings are satisfied with the prompt surgical care provided and the results.

Left Hand

Right Hand

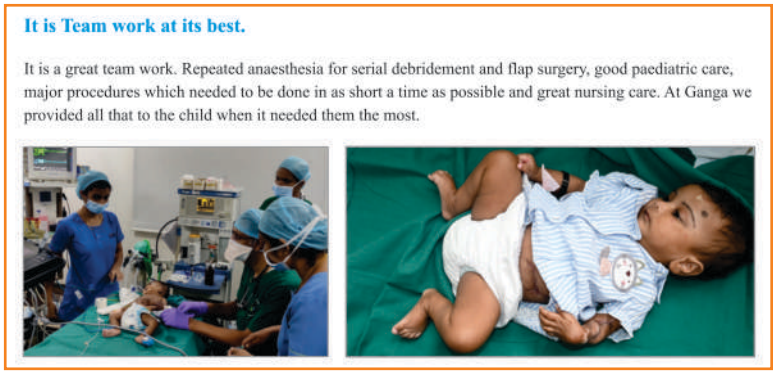
The contractures were released and abdominal flaps and split thickness skin grafts were used



He is gearing up to join school this July. His father happily shared a photo of his son in his new school uniform!

Many First Birthdays

In the past one year, many newborn babies who have been brought to us have celebrated or are gearing up to celebrate their first birthdays! We are truly happy to witness their major developmental milestones as they grow.

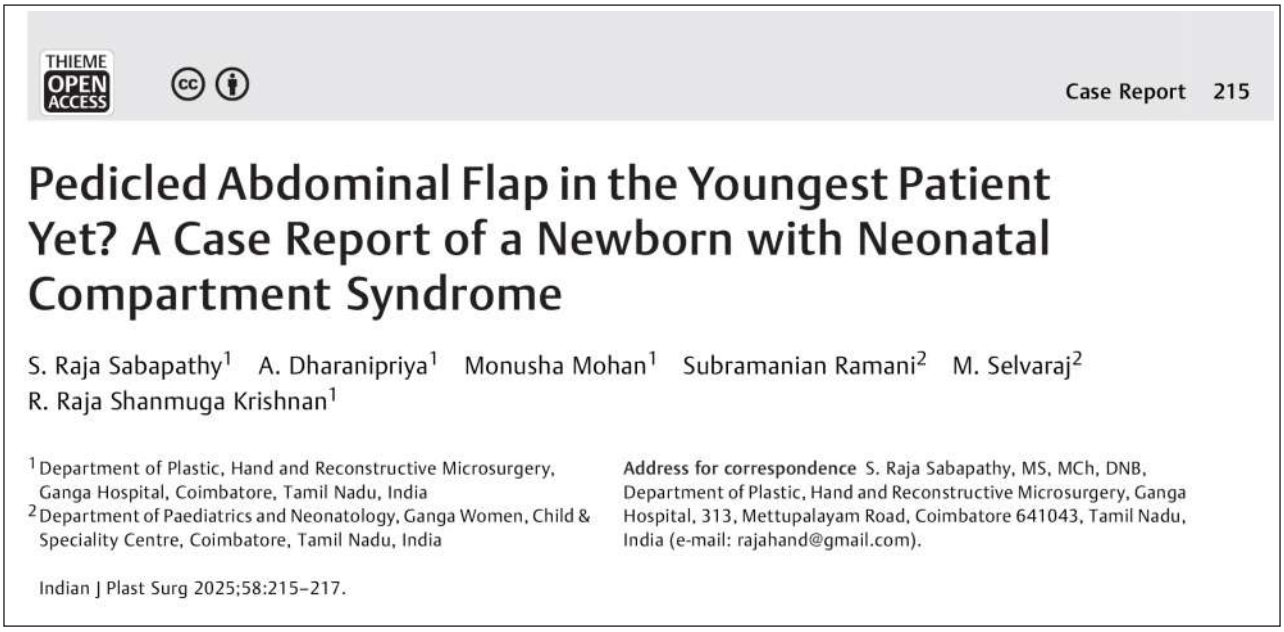

It is Team work at its best.

It is a great team work. Repeated anaesthesia for serial debridement and flap surgery, good paediatric care, major procedures which needed to be done in as short a time as possible and great nursing care. At Ganga we provided all that to the child when it needed them the most.

The world's youngest recipient of a pedicled abdominal flap is perhaps our patient with Neonatal compartment syndrome. We shared her story in the September issue of Little Hands.

When the baby was admitted at Ganga, she spent 3 months in hospital for multidisciplinary care including paediatric, dietary and surgical care. She was just 42 days old when we performed the pedicled abdominal flap for the limb. Her left upper limb could be salvaged. She will need reconstructive surgeries to restore the hand function later.

The case report got published recently in Volume 58, Number 03 of the peer reviewed open access journal, The Indian Journal of Plastic Surgery.


THIEME OPEN ACCESS

Case Report 215

Pedicled Abdominal Flap in the Youngest Patient Yet? A Case Report of a Newborn with Neonatal Compartment Syndrome

S. Raja Sabapathy[1] A. Dharanipriya[1] Monusha Mohan[1] Subramanian Ramani[2] M. Selvaraj[2] R. Raja Shanmuga Krishnan[1]

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[2] Department of Paediatrics and Neonatology, Ganga Women, Child & Speciality Centre, Coimbatore, Tamil Nadu, India

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Indian J Plast Surg 2025;58:215–217.

We are very happy that she celebrated her first birthday in April. She uses the limb as a helping hand and stands without support.

Real Life Stories: Stories that Matter

We started the section, 'Real Life Stories' in association with the 'World Birth defects day' celebrated worldwide on March 3rd. We share not only the milestones achieved but the emotions and reflections they have shared with us along the way. Their heartfelt testimonials remind us why every step we take matters.

Champions Are Made

We are happy that we could be a part of the life journey of Ms. Mehak Kaur, who is a National Table Tennis champion now. She was born with bilateral radial longitudinal deficiency (radial dysplasia) with no thumb on the right side.

In 2008, we created a thumb by pollicization of her index finger. The left wrist deformity was corrected with radialization.

One evening, 17 years later, we received a phone call from her father who shared the news that she had won the Khelo India Para Games-Table Tennis championship. Our hearts are full of pride.

Ganga family wishes her all the very best for the World Paralympics.

Clinician's corner: A Year of Syndromes

At Ganga, we spend a good amount of time with our little patients and their parents, in our outpatient department. Making the right diagnosis is not only important in planning the treatment. A correct diagnosis gives the condition a name and parents are often happy to know what their child has. It helps them understand it better. Though we cannot always pinpoint the aetiology in congenital hand conditions, we can ease the parental feelings of guilt or blame.

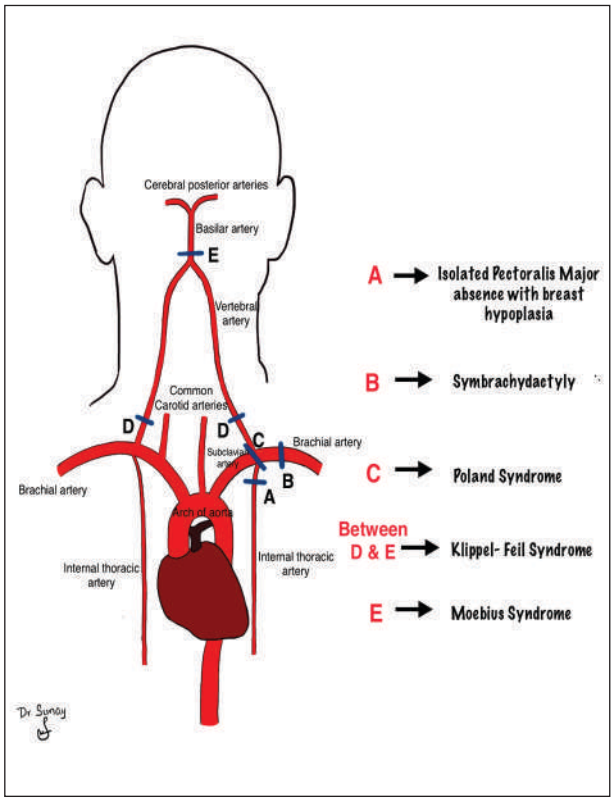
As hand surgeons, we have a great opportunity to gather the clinical clues and identify the syndrome. Making a correct diagnosis involves putting the puzzle pieces (signs) together to make the final picture (The syndrome). In our clinics, we have picked up undescended testis, haemophilia, congenital heart conditions etc that needed more attention than the hand anomaly.

Every issue provides the editors an amazing opportunity to dive deeper into the world of congenital hand deformities and the relevant embryology and share the knowledge with our readers. For every 'Clinician's corner' section of Little Hands, we select a syndrome and try to explain it in simple terms, to make it attractive to those outside Hand surgery too.

Revisiting the SASDS Hypothesis

Subclavian artery supply disruption sequence (SASDS) is a hypothesis that attempts to explain the embryological basis of symbrachydactyly. We saw all the main three phenotypes associated with this hypothesis, this past year. A disruption of the subclavian arterial system in the form of hypoplasia or thrombosis during embryogenesis leads to short fingers with webbing. Though chest hypoplasia is a common association (Poland Syndrome) seen in our clinical setup, associated cranial nerve palsies (Moebius Syndrome) are uncommon. We have written about this in the January and May Issues of Little Hands.

The theory was put forth byBavinck JN and Weaver DD of the Indiana University. In their article, they hypothesise the various symptoms seen in children to be due to the level of interruption in the upper limb arterial system. When the subclavian artery is involved, depending upon the exact level of interruption, the limb hypoplasia can be with or without chest hypoplasia. As the level of involvement is more proximal, vertebral or basilar arteries are also affected leading to Klippel Feil (cervical vertebral fusion) and Moebius (6th and 7th cranial nerve palsies) syndromes.



The figure shows the proposed level of involvement according to the signs.

Poland Syndrome may be due to Hypoplasia of the Subclavian Artery or its branches

Sir Alfred Poland, after whom the syndrome of deficiency of the pectoral muscle with ipsilateral symbrachydactyly, is named after, was a student-demonstrator in anatomy. He described the 'deficiency of the pectoral muscles" after the cadaveric dissection of a convict with the chest and hand anomalies. This was published in the Guy's hospital Gazette in 1841. Later, Poland was appointed as a surgeon in Guy's hospital. It is recorded that the convict, George Elt could not bring his left arm across his chest. When the clinician requested his left hand to check his pulse from the right side, he would turn around instead. It was Sir Patrick Clarkson, a British Plastic Surgeon, who termed the condition after Poland, in his report of three cases.

A snippet from the January issue

Symbrachydactyly

Poland Syndrome

Moebius Syndrome

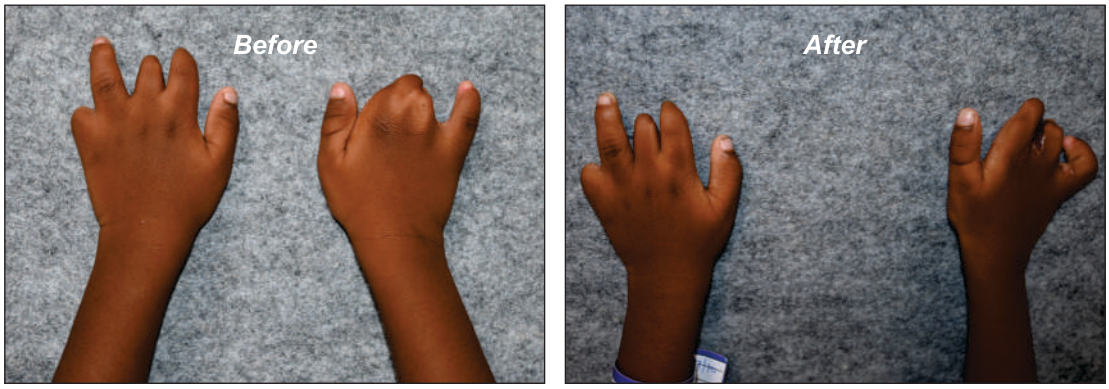
Pattern Recognition: A Clinical Skill

Recognising patterns in clinics is an essential skill that demands diagnostic acumen. It involves gathering functional and visual clues and finding an instant association with clinical entities, drawn from prior experience. In congenital hand clinics, even subtle morphological cues can point towards a particular syndrome or genetic condition. This intuitive process is strengthened by clinical volumes and experience. Developing this 'pattern recognition' skill is highly helpful in making the right diagnosis, in preoperative counselling, and for effective surgical planning. Pictures of the previous patient often help us to see the whole management pathway and the final results.

Our clinical volume helps us to develop a structured pattern recognition skill. Good documentation and our Photo archives play a great role. Here, we share a few examples that we observed in the past one year.

Constriction Ring Syndrome - A Multi-limb Birth Anomaly

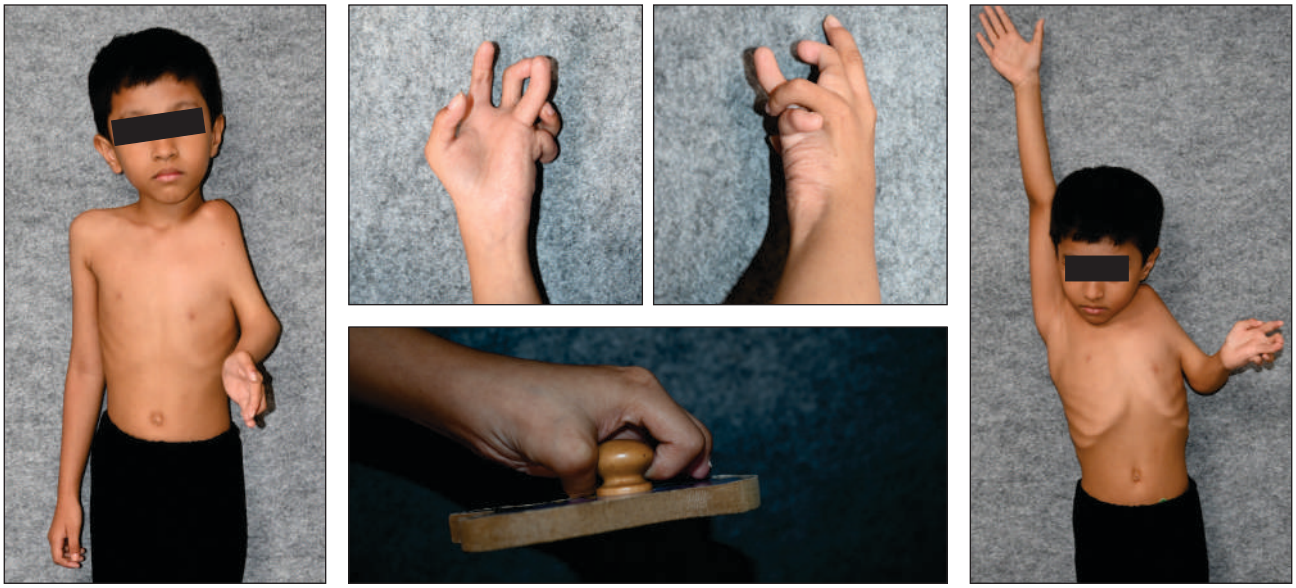
Child 1 : This boy with constriction ring syndrome, was brought to us by his father. Constriction ring syndrome is one of the common hand anomalies encountered in our hand clinics. We have treated another child with similar clinical features and retrieving the clinical details and photos helped us to counsel the father.



Pre and Postoperative pictures

Child 2 : The boy uses the operated right hand with separated fingers to hold a pen and write. He is happy with the lower limb prosthesis.

Multiple Pterygium Syndrome with Polydactyly - An Uncommon Anomaly

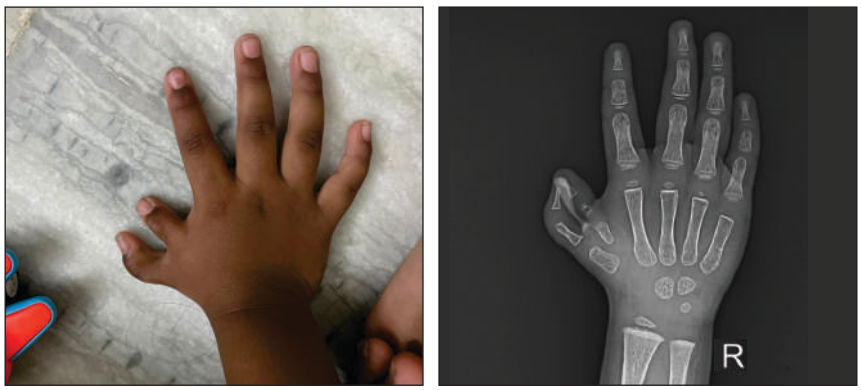


Child 1 : This girl from Bangladesh was brought to us by her parents for management of the axillary pterygium as well as the hand deformity. We have treated another child with this rare anomaly and it helped us in preoperative counselling and surgical planning. The previous child required two surgeries - one for the hand and another for his wrist. These details and images were helpful for the overseas patient and her parents.

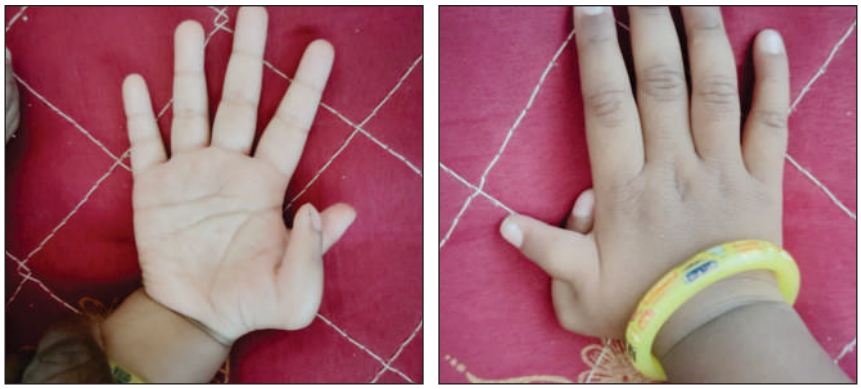
Child 2 : The extra digits were removed and the wrist deformity was corrected in two stages. The wrist surgery was done recently and the wrist is immobilised in a splint now. We will do surgery for the axillary pterygium next.

Thumb Hypoplasia - A Non-classifiable Variant

Child 1 : The clinical details of this child and her testimonial were shared in the April issue. We performed an "On-top" plasty using the distal part of the ulnar component (without a proper metacarpal)and transposed it to the hypoplastic radial component after removing itsdistal part.



Child 2



Child 3

Child 2 & 3 : The clinical data of the first child helped us in explaining the proposed surgical technique to parents of the other two children, who had this rather uncommon type of thumb duplication. Long term follow-up images and functional outcomes were a good aid for the preoperative discussion with the family.

Hands at Art

We are grateful for the artistic contributions from our children and hospital staff. Through art they have expressed their insights about congenital hand conditions. This exercise has made them search and read more about this field of hand surgery, which in fact has paved way to create awareness among them!

"The sooner we act, the sooner they fly - Early treatment unlocks their wings."

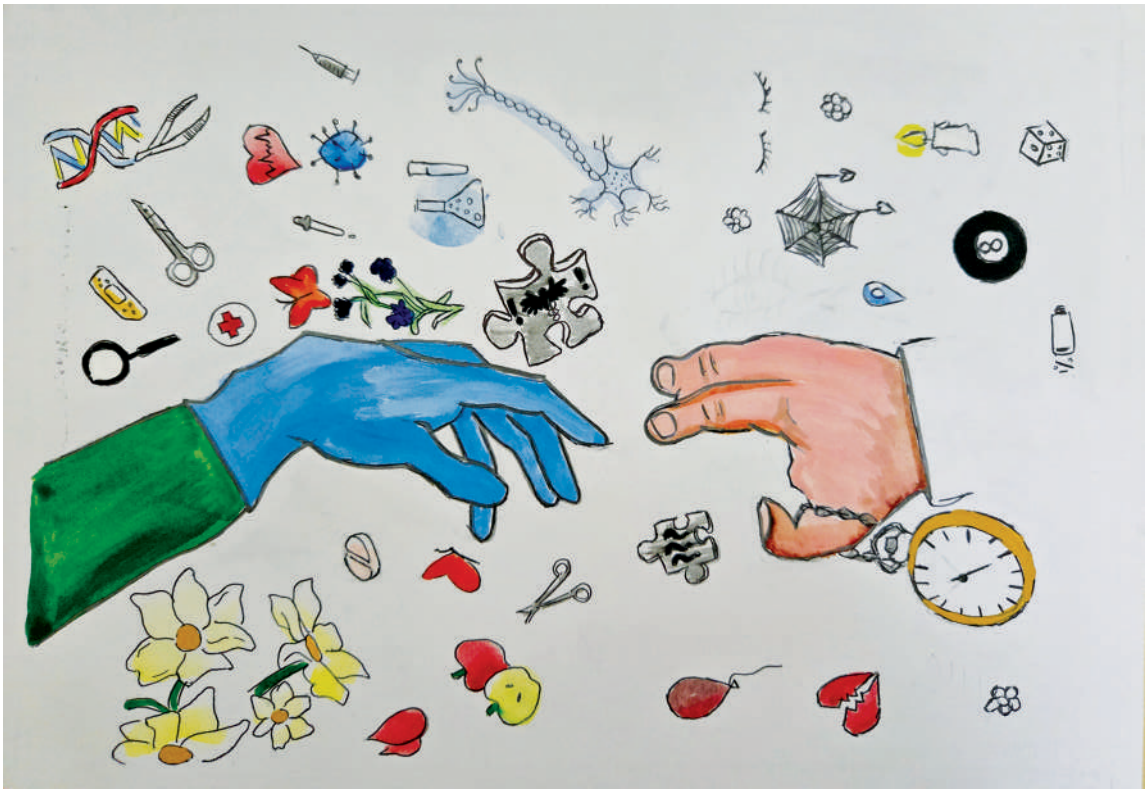
Ananya Radhakrishnan, our Little Artist with central synpolydactyly

"Endless Possibilities"

Dr Sunay Gugri Manjunatha, FNB Hand Surgery Fellow, Ganga Hospital

"Putting it all Together"

Illustration - Ms Gayathri, Concept - Ms Manikkavalli, Mr Gowdham & Ms Jesyrani, Plastic Surgery Department OT Nursing Staff



"The Healing Hand"

Illustration-Mr Nithish, Microsurgery Postoperative Ward,Concept - Ms Manikkavalli, Mr Gowdham & Ms Jesyrani, Plastic Surgery Department OT Nursing Staff

Statistics

Surgeries & Publications

From July 2024 till June 2025, we have performed 114 surgeries for congenital hand/foot deformities. The surgeries were done for syndactyly, polydactyly, macrodactyly, arthrogryposis, radial dysplasia, thumb hypoplasia, symbrachydactyly, constriction ring syndrome, cleft hand etc. We have done 8 pollicizations in the past one year; that means we have created a new thumb for 8 children in the past 12 months.

On the publication front, we have published 4 articles related to congenital limb deformities, in the last 12 months.

CASE SERIES

Correction of Congenital Hallux Varus Deformity Using Modified Farmer's Technique: A Case Series

Shanmuganathan Raja Sabapathy[1], Monusha Mohan[2], Sahithya Bandi[3]

Received on: 18 September 2024; *Accepted on:* 12 December 2024; *Published on:* xxxx

The Journal of Hand Surgery (Asian-Pacific Volume) | Vol. 29, No. 06, pp. 537-546 (2024)

| Review

No Access

Surgical Considerations in the Management of Constriction Ring Syndrome

S. Raja SABAPATHY and Monusha MOHAN

Monusha MOHAN

https://doi.org/10.1142/S2424835524300044 | Cited by: 0 (Source: Crossref)

THIEME OPEN ACCESS

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Indian J Plast Surg 2025;58:215–217.

Article published online: 2024-11-08

S106 Case Report

THIEME OPEN ACCESS

A Case Report on Ellis–van Creveld Syndrome: Clinical, Embryological, Anesthetic, and Surgical Implications

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Indian J Plast Surg 2024;57(Suppl S1):S106–S110.

Hand Vignettes

Hand Modelling as a Career

When we see a graceful hand in a skincare ad, applying a cream, we rarely pause to wonder whose hand it is? These are the hands of models whose career is built around their hands, much like that of surgeons. Hand modelling is a lucrative career in the fashion and marketing industry. These models are professionals who are called Parts models. A good hand model is supposed to have "veinless, poreless, and flawless" limbs. These models shoot almost every day and there is no exclusivity as their faces are not shown. But they do not get the recognition the other models in the industry get. Now-a-days there are Parts Supermodels also.

The hand models have to take care of their hands well. They often wear gloves to avoid blemishes or scars. Some of them have insured their hands! Men and women both model for ads; male models are in high demand for watches, gadgets and luxury cars. Some celebrities use hand models in close-up scenes. It is not about looking good; they have to hold the hands gracefully in different poses for a long period without shaking.

We see them more often than we think. Many in the industry feel that the subtle visibility is powerful. So, the next time, you see an ad, pause and think. When you sit down and notice, it is everywhere !

Project Eklavya - A Joint Initiative of Rotary E Club of Metro Dynamix and Ganga Hospital

Rotary Dist 3206

EKLAVYA

Restoring Hands, Rebuilding Futures

A Joint Initiative of

Rotary E Club of Metro Dynamix

GANGA MEDICAL CENTRE & HOSPITALS PVT LTD

India is witnessing an epidemiological transition from communicable diseases to non-communicable diseases. According to March of Dimes report (2006), 6-7 per 100 new born babies have birth defects. When more focus is on new born survival, we fail to pay attention to the quality of life of these children born with defects. When a child with congenital hand deformities survives and grows up, it is not just their hand function that is affected, their self-esteem and emotional well-being are too deeply impacted.

A Project for children with Congenital Hand Deformities

A child born with a hand defect is dependent on the care givers for their day-to-day activities. The low hand functionality in turn affects their education. The burden on the parents is high emotionally and financially. Besides this a deformed hand draws unwanted attention and can have serious psychosocial effects on the growing child. Most of the existing programmes support birth anomalies of the heart and craniofacial region.

Musculoskeletal defects are the second most common birth defects, however initiatives to help children with hand anomalies are rare. Project Eklavya was launched by the Rotary E club of Metrodynamix in collaboration with Ganga Hospital, Coimbatore, on 06.07.2025. With this initiative, we try to fill the gaps in care and support of these children like, paucity of insurance coverage for children with birth defects, multiple limb involvement, syndromic associations that increase the financial burden, multiple stages of surgeries and post surgical rehabilitation

Project Eklavya provides free or sponsored surgeries for children with congenital hand deformities

For more details, log on to **https://eklavyachildren.com/**

Wishes and Messages

"Little hands is a must read every month! It is expertly curated and distilled down to a bite sized educational piece that I look forward to reading again and again. There is something in it for everyone to learn, whether a pediatrician, physiotherapist, parent or a pediatric hand surgeon. Thank you for your dedication to education!"

- Dr Micah Sinclair,
Paediatric Orthopaedic Surgeon, Medical Director of Pediatric Hand and Upper Extremity Surgery at Shriners Children's Hospital Northern California, USA

"My heartfelt congratulations to the team for this deeply informative and inspiring initiative. Firstly, I want to appreciate how Little Hands has evolved-from a few pages in a PDF to a comprehensive hardcopy handout enriched with meaningful objectives and valuable content. Secondly, for junior doctors like me, it serves as a consolidated source of knowledge—an insightful glimpse into what our seniors have learned and continue to learn through their experience. Thirdly, reading about how parents approach their child's condition with such positivity and unwavering hope is both moving and motivating. Thank you for this incredible effort. It's truly inspiring and a guiding light for many of us."

- Dr V Madhumitha,
Senior Registrar, Dept. of Anaesthesiology, Ganga Hospital

"The concise, well-illustrated, and accessible format of Little Hands makes it a valuable resource not only for healthcare professionals but also for parents and caregivers. Your team's dedication to combining clinical excellence with public education sets a benchmark in our field."

- Dr Anoop S,
Consultant Plastic Surgeon, MOSC Medical College, Kolenchery

"Happy anniversary to Little Hands! And huge congratulations to the team, with Not-So-Little-Hands! Wishing you many more years of growth, success, and making a difference together."

- Ms Yuktha,
Physician Assistant, Lakeshore Hospital, Kochi

"Happy birthday Little Hands"

- Ms Anagha,
Physician Assistant, Baby Memorial Hospital, Calicut

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.

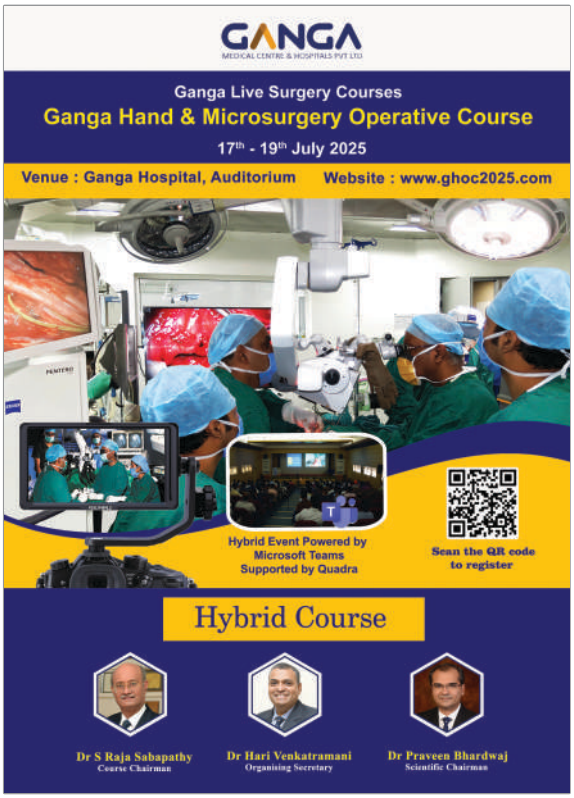
Globally, congenital anomalies or birth defects affect 2-3% of births. In India, 1-3 out of 100 babies born are with birth defects. Though musculoskeletal anomalies are the most common defects seen, rarely we find major initiatives aimed at managing these defects. A lot of regional and international 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.

Ganga Hand Operative Course 2025



World Hand Congenital Symposium

Registration is open now !

Kindly sign up for the meeting at www.wcs2026.com

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.

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