

# Towards Fulfilling the Reconstructive Surgical Needs of Children

An initiative of Ganga Hospital, Coimbatore

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*Editorial*

## Celebrating Teacher's Day: From Classroom to Community



*Born: 5<sup>th</sup> September 1888*

*“Wherever you find  
Something Extraordinary,  
You’ll find the  
Fingerprints of a  
Great Teacher.”*

In India, Teacher's Day is celebrated on September 5<sup>th</sup> every year, commemorating the birth anniversary of Dr. Sarvepalli Radhakrishnan, a distinguished teacher, philosopher, and the second President of India.

Back in our school days, Teacher’s Day was celebrated with great pomp and splendour. The celebrations included speeches, programs, and even mock classes conducted by senior students dressed up as teachers. As we grew older, our classrooms were replaced with lecture halls, and later with outpatient rooms and operation theatres. We progressed from memorizing poems by Bharathiar and Robert Frost to comprehending the complexities of the human body, signifying a big leap in our journey as medical professionals.

Unlike school teachers, medical college teachers - physicians or surgeons - lack formal training in pedagogical skills. Their teaching is rooted in their experiences, and those who dedicate themselves to educating the next generation of doctors do so out of passion rather than obligation.

Justice Shivraj Patil, Retd Judge of the Supreme Court of India said, **‘Parents are our first teachers and Teachers are our second parents’**. A quote with a lot of meaning which points to the responsibility one has as

parents to teach and be an example and the respect that one should have for teachers. Many teachers have gone out of the way to help students to achieve. As reconstructive surgeons we too can have a role in making education possible to some unfortunate children. At Ganga, we are blessed to have the opportunity to do it every day.



***Bad Deformity due to burns  
Right Hand***



***Back to School  
after Reconstructive Surgery***

When a child’s hand is deformed schooling stops. This four-year-old girl developed contracture of her right hand, elbow and knee due to accidental spillage of hot water. The wounds healed but due to the deformed hands, schooling stopped. She underwent multiple reconstructive surgical procedures and she is back to school.

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*

Even such severe injuries which need multiple stages over a protracted period is done free of charge under the project, ‘**Hope after Fire**’. The project which has benefitted 824 patients (1472 surgeries) with a total project value of Rs 11 Crores, is done as a joint initiative of Ganga Hospital and Rotary Club of Coimbatore Metropolis. ***Sending Children Back to School - Reconstructive Surgery contributes to Nation Building.***

**Dr S Raja Sabapathy**  
**Dr Monusha Mohan**  
 (Editors)

## Hand Vignettes



Most of the Disney cartoon characters have four fingers in each hand. Animated cartoons need to have 24 drawings per second of screen time to provide the continuity of image in movement. Hence drawing one finger less saved time and money! The cartoon animators did not also want their characters to be realistic to add fantasy to the animation. According to Walt Disney, the creator of Mickey Mouse “Using five fingers would have made Mickey’s hands look like a bunch of bananas.”

Animation creators are at risk for developing carpal tunnel syndrome (CTS - due to compression of Median nerve at the wrist). For example, Snow White and the Seven Dwarfs required more than 200,000 separate drawings. Walt Disney has been recorded to have had severe hand and wrist pain in his biography. Perhaps he suffered from carpal tunnel syndrome. The repetitive hand and wrist movements, prolonged periods of drawing or using digital tools like tablets and styluses, and maintaining awkward hand positions, can contribute to the development of CTS. Taking breaks, maintaining good posture and doing stretching exercises can help artists prevent CTS.

## Surgery for Syndactyly Why is it important to get it right the first time?



Syndactyly is one of the commonest congenital deformity treated by the reconstructive surgeon. The techniques we have now can provide almost normal looking and functional fingers.

We usually complete the reconstruction before the children go to school.



*Post-operative Aesthetic and Functional Result*

Though it is not a complex surgery, the surgery needs attention to detail. When things go not as planned, deformities may occur which could be functionally crippling. They could be made better, but nothing like getting it right the first time.

### Did you know?



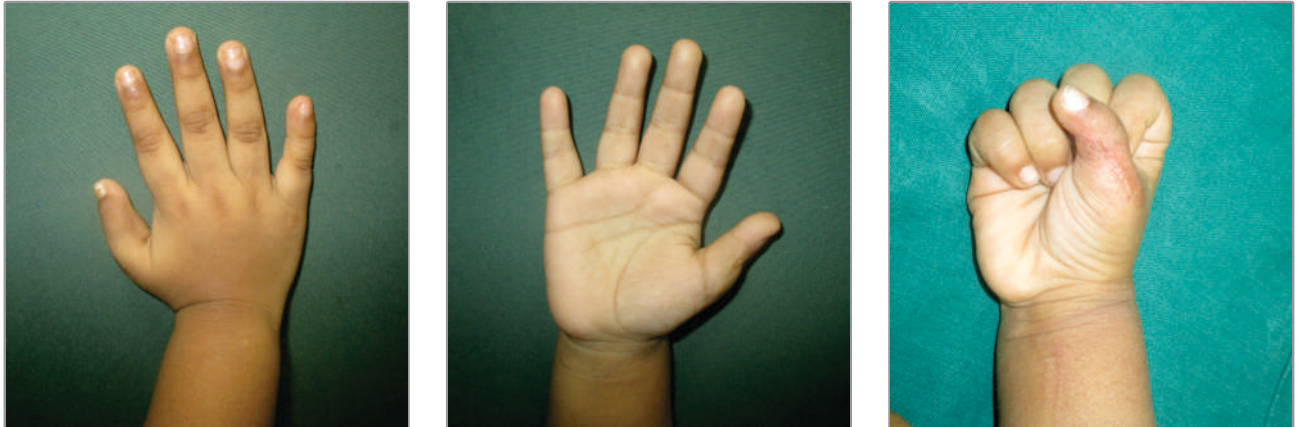
*A child with duplicated right thumb*

Duplicated thumb ( Radial polydactyly) is also termed as 'Split Thumb'. Often parents think that there is an extra thumb and it can just be removed. Actually, the two thumbs may share a common joint and removal of one without reconstructing the joint may leave the retained thumb unstable.

Many parents also may not realise that even though there are two thumbs, both are smaller than a normal thumb. Most of



the time when the smaller thumb is removed tissues may be taken to bolster the strength of the retained thumb. Each child needs individual planning and attention to detail during execution of the surgery to provide a thumb that is aesthetically appealing and functionally adequate. Usually these corrections are completed before the children go to school.



*The inner thumb is retained, but some skin, soft tissues and ligaments are harvested from the to be discarded outer thumb and reconstruction done. Post-operative pictures of the thumb after removal of the outer thumb*

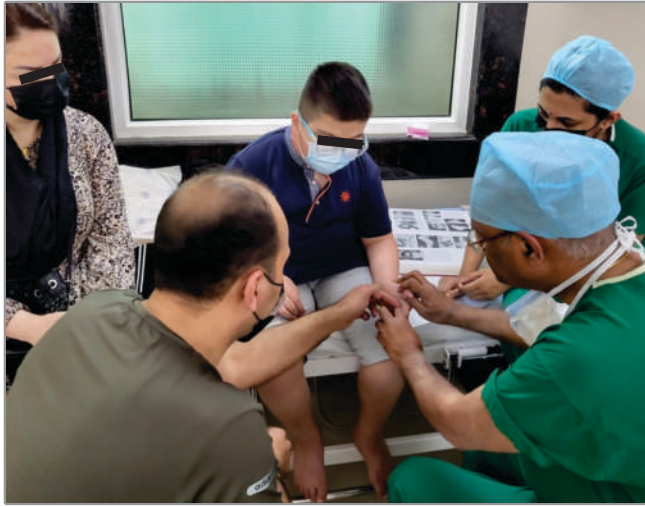
## Clinician’s Corner

### Distal Arthrogryposis

Parents of this nine years old boy from Iraq was brought to us with multiple contracted joints of the hand and other anomalies. Usually the parents keep consulting many facilities and they too had been to clinics in Europe, West Asia and Far East. What they need is the time of the clinician and explaining to them the problem and the possible solutions. We found that he had a type of Distal Arthrogryposis where the wrist and finger joints are stiff, and deviated ulnarwards. Arthrogryposis occurs due to some cause which results in reduced movement of joints in utero. It may be from reduced amount of amniotic fluid to nerves disorders which reduce movement.



## A Destination for Complex Conditions



We patiently examined him and found that he also had cleft palate, strabismus, torticollis, micrognathia, macroglossia, hearing impairment, undescended testes and flat feet. This combination fitted with the diagnosis of Gordon’s Syndrome. Pictures of our prior experience or showing similar cases in the literature convince the parents to undertake the treatment.

The surgery to release the contractures was done and it enhanced function. We are happy that we serve as a destination for the management of complex problems.

## Neonatal Compartment Syndrome - A Rare Experience

Compartment syndrome are functional disasters and a challenge for the reconstructive surgeon. They occur in children after trauma. We had the opportunity of managing a child who exhibited compartment syndrome at birth. The doctors who delivered the child normally, were surprised to find the hand swollen , the skin dark and fingers with compromised circulation. The child was referred to us with a fasciotomy wound, patchy areas of gangrenous skin and with necrosis of all muscles of the forearm 6 days after birth. It is a situation which we were also treating for the first time. It is understandable since it is so rare and only 60 cases have been reported in the literature so far. The cause in a particular case is difficult to ascertain.



*The child’s left upper limb at presentation*



### Pedicle Abdominal Flap - in the youngest child yet ?

Careful debridement was done not to devascularise the hand and finally we had the hand just held by dangling forearm bones and a strip of skin. The child needed a flap to bridge the gap and at 42 days an abdominal flap was done to cover a circumferential defect in the forearm. Perhaps this is the youngest pedicle abdominal flap in the world ever done. We are not able to find this flap done in a younger child.



### 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 infant even had a Regional Block Anaesthesia for pain relief*

We understand that we have a greater challenge now i.e to make the hand functional. But for now, the child still has a hand and we are sure with time we will make it useful.

## World Congenital Hand Symposium

We are happy that Ganga Hospital has been chosen to be the host for the 2026 World Symposium on Congenital Malformations of the Hand and Upper Limb. The once in three years meeting will be held on February 26-28, 2026 at Ganga Hospital.

We are proud to bring the best talent in the world who manage children with congenital hand differences to Coimbatore, India. This will be the first ever time, this meeting will be happening in the developing world.

### 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 below.

1. Please point your phone camera at the code
2. A link or icon will come up, tap it.
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