Cleft Hand

What is a cleft hand?
A cleft hand is a congenital hand difference in which the central portion of the hand is underdeveloped or missing. This can look like missing fingers and/or a V-shaped indentation between fingers, along with other differences in the hand. Not all cleft hands look the same. Most of the time, both hands are affected.

What causes cleft hand?
Cleft hand is congenital, meaning babies are born with the condition. The exact cause is unknown, but scientists and doctors are learning more and more about the possible genetic (passed from parent to child) causes.

Most of the time, a cleft hand may be a one-time problem and only the hand is affected. For some patients, having a cleft hand may be part of a related condition that causes other problems.

Some babies may also have cleft lip, cleft feet, deafness and/or other conditions affecting their heart and digestive systems.

How common is cleft hand?
Cleft hand makes up less than five percent of all congenital hand differences, and affects approximately 1 in 50,000 to 1 in 100,000 babies.

How is cleft hand diagnosed?
Cleft hand is diagnosed by your child’s doctor after a careful physical examination. Your child will have an X-ray to look for related problems with the bones of the fingers and hand.

How could surgery help?
There are many kinds of surgical procedures for treating cleft hand. Some require more than 1 surgery. The main goals of surgery are to "close" the cleft and help the hand function better by improving the space between the thumb and fingers.

The first procedure is usually done when (or after) a child is 1 year old.

In general, the goals of surgery are to create a good working space between the thumb and index (first) finger to allow your child to be able to pinch. This also helps with fine motor function (making small movements, like pushing buttons or picking up small things).

Surgery for cleft hand often involves:
- Reorganizing the skin and soft tissue
- Fixing or moving bones in the hand
- Fixing any deformities (parts that did not grow normally) of the fingers or thumb

Not all cleft hands look the same. Cleft hands may exhibit a variety of differences, including missing bones and transverse bones.