### What is a Supernumerary limb?

A supernumerary limb is a rare birth defect in which an affected individual has more than the usual number of limbs. It means having more than 4 limbs. The extra limb is generally shrunken or deformed. Based on the site of its attachment they can be classified as:

- Cephalomelia Extra limb attached to the head
- Thoracomelia Extra limb attached to the thorax
- Notomelia Extra limb attached to the backbone
- Pyromelia Extra limb attached to the pelvis

### What causes supernumerary limbs?

Supernumerary limbs can be caused by several factors:

**Genetic/ Chromosomal factors** – Abnormalities in one's chromosomes or genes can cause structural abnormalities. One or more genes may undergo a change termed as "mutation". These mutations can affect the process of organ development leading to improper cell division or proliferation and thus the formation of a supernumerary limb.

**Environmental factors** – External factors such as exposure to infectious agents, chemicals, or other environmental toxins during pregnancy can also influence the gene expression leading to altered cellular functions, again resulting in a supernumerary limb.

**Parasitic twin** – These anomalies are typical of multifetal pregnancy where the normal process of development is affected and instead of two normal fetuses, one partially developed fetus is seen. This "extra limb" may present as a rudimentary part of a parasitic twin.

# How can a Supernumerary limb be diagnosed?

A supernumerary limb can be diagnosed during your pregnancy on routine ultrasonography. In addition to the normal number of limbs, if the fetus is found to have extra appendages, this condition is suspected. Detailed imaging will help delineate the exact anatomical variation and multiplanar imaging or in some cases, a fetal MRI can also be helpful.



## If my baby is detected to be having a supernumerary limb, what does it mean?

If you are told that your baby is having an "extra" or "Supernumerary" limb, then it means that in addition to the normal limbs there is an additional structure attached to the baby's body that looks like a limb. Usually, this is a rudimentary structure and may have an unusual appearance, including partial bony structures. This is usually a correctable birth defect and can be resolved by appropriate surgery.

If your baby is detected to be having a supernumerary limb on ultrasonography, you can visit a fetal medicine specialist who will be able to give you detailed information regarding this issue. If there are no other associated abnormalities seen on ultrasonography, the pregnancy can be followed up expectantly till delivery and treatment can be planned after birth. If a modification of birth plan is needed, your Obstetrician will discuss this with you. You can also consult with a paediatric surgeon before birth to plan for correction after delivery.

## What do we have to do after the baby is born?

Your doctor will help plan your delivery in the appropriate hospital along with a multidisciplinary care team. After the delivery of the baby and the initial stabilization of vitals and normal newborn care, the supernumerary limb will be carefully wrapped with a soft towel or dressing. Based on the location of the supernumerary limb, the baby will be placed in a comfortable position. Your team of doctors will discuss the surgery plan for the removal of the supernumerary limb.

### Will it happen again?

As such, supernumerary limbs are very rare birth defects and are highly unlikely to recur in subsequent pregnancies unless there is a definite genetic reason determined. Your doctors will discuss the exact nature of your case with you and advise you specifically.

### What other questions should I ask?

- Does this look like a correctable condition?
- Will my baby be able to walk and run normally after birth?
- How often will I have ultrasound examinations done?
- Is surgery during the pregnancy available?
- Where should I deliver?
- Will there be any problems during my delivery due to this extra mass?
- Where will the baby receive the best care after it is born?
- Can I meet the team of doctors that will be treating my baby when it is born in advance?

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