# Lung cysts

*Patient Information Series – What you should know, what you should ask.*

**What are lung cysts?**

Fluid-filled spaces in the fetal lung are fairly common structural differences detected in fetal life. They can be single (e.g. bronchogenic cyst) or multiple (e.g. CPAM) and the cysts can be large or very small. They usually only involve one fetal lung and not both. The cysts can look dark on ultrasound due to the fluid within them, or if very small and multiple, the surrounding lung tissue may appear very bright on ultrasound due to contrast with the surrounding lung tissue. This cystic appearance on ultrasound is usually due to one or two fetal lung conditions, i.e. a cystic pulmonary malformation (CPAM) or a bronchogenic cyst. The former condition, is discussed in another patient information document (see Echogenic and Cystic lungs). Like CPAM, Bronchogenic cyst can develop from arrested development of normal lung tissue in early fetal life.

**How frequently are these conditions diagnosed?**

CPAM is reported to occur in 1/6,000 births whereas cystic lung conditions in general are detected in about 1/3000 births. Bronchogenic cysts are even more rare. Some of these conditions are only diagnosed after birth or even later in life, if asymptomatic or not diagnosed on prenatal ultrasound. CPAM is, however, the most commonly diagnosed lung abnormality in fetal life.

**Are genetic differences found in association with these conditions?**

Usually not, however if other structural abnormalities are detected, your doctor will offer genetic screening/testing.

**How is my baby followed in the pregnancy once one of these conditions is found?**

Once a cystic lung lesion is found your doctor will use ultrasound techniques to discriminate the type of lesion and measure the lesion. The doctor will serially follow the growth of the cyst(s) to determine whether it is enlarging rapidly and determine whether it is causing other problems, such as too much amniotic fluid volume, or causing the baby to accumulate fluid in the abdomen, under the skin or around the lungs or heart, a condition called fetal hydrops. If this happens a small tube, called a shunt, may be placed under ultrasound guidance into the cyst to drain the cyst into the amniotic cavity.

In some cases, and with smaller lesions, follow-up ultrasound may reveal the cyst to be getting smaller or even “disappear”. If this happens your doctor may request a chest X-ray or other imaging after birth would still be advised to further investigate the condition and the baby will be followed in infancy for any signs of recurrent chest infections. In larger lesions and those with hydrops your doctor may also prescribe steroid injections to you, which have been shown in some reports to decrease the size of the cystic mass. Other interventions such as laser treatment have been used in some cases to interrupt the blood supply feeding some of these lesions, if present.

If the condition is diagnosed late in pregnancy delivery planning with your doctor may include discussion of early delivery.

**What happens to the baby after birth?**

Evaluation of the newborn with imaging and pediatric follow-up is needed. If recurrent lung infections occur in early life surgery may be advised to remove part of the diseased lung.

**Will this condition come back in a future pregnancy?**

These conditions are usually sporadic and recurrence is not common. If there is no genetic association in the fetus, recurrence is less than 1 %.

**What other questions should I ask?**

- Is there any prenatal treatment for this condition?
- Where should my baby be delivered?
- Can I meet the doctors who will be treating my baby after birth?


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