

# Dacryocystocele

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

## **What is a dacryocystocele?**

A dacryocystocele is a condition frequently found in newborns that is caused by a blockage of tear ducts during prenatal development. This blockage disrupts the lacrimal (tear) drainage system, resulting in a fluid-filled sac next to the tear glands that are near the nose. It appears as a bluish-gray swelling in the inner corner of the eye.

## **How does a dacryocystocele develop?**

Dacryocystocele results from a blockage at two sites in the duct that drains tears from the tear glands to the inside of the nose (nasolacrimal system). The lower blockage is at the Hasner valve and upper obstruction at the Rosenmuller valve. The lower obstruction is caused by a structural abnormality. The second is caused by a loss of function caused by the enlargement of the sac that compresses the canal system, causing a trapdoor-type blockage.

## **Do genetic factors cause dacryocystoceles?**

Dacryocystocele is most often an isolated finding in the third trimester although it can be rarely associated with other abnormalities or syndromes. The genetic basis of dacryocystocele is not clearly understood. There are occasional reports of familial cases.

## **Should I have more tests done?**

A dacryocystocele can be diagnosed before birth with an ultrasound, typically in the third trimester. You should ask if a specialised/advanced ultrasound of the baby during the pregnancy can be done to see if the baby has other anomalies and to rule out other diagnoses. It is also important to determine if the dacryocystoceles are blocking the nose passageways. After delivery, the diagnosis can be made by physical examination.

## **What are the things to watch for during pregnancy?**

If there are no other abnormalities, you can have your pregnancy checks as normally planned. If there are other abnormal conditions, changes in your care will depend on what they are and what they mean. If the ultrasound during pregnancy shows a blockage of the nose, a team can be available to take care of the baby after birth and check for any breathing problems that may need immediate treatment.

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## **What does it mean for my baby after it is born?**

Management will depend on whether the condition is on one side or both sides of the nose. When a dacryocystocele is identified on one side, it is important to have a close follow-up with the pediatrician on an outpatient basis because of an increased risk of infection. It can be managed conservatively with massage if there are no signs of respiratory distress. An in-office probing and irrigation may be successful in treating the condition. When dacryocystoceles are present on both sides, there is a significant risk of airway blockage because newborn babies must breathe through the nose. The baby should be monitored closely with a prompt plan for surgical care.

## **Will it happen again?**

It is unlikely to have another child with this condition.

*Updated November 2022*