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IMPERFORATE ANUS

fact sheet

What is an imperforate anus?

An **imperforate anus** is an abnormality that occurs during the fifth to seventh weeks of fetal development where the anus (opening at the end of the large intestine through which stool passes) and the rectum (area of the large intestine just above the anus) do not develop properly. As a result the normal anal opening from which meconium can pass may be absent or placed incorrectly. With an **imperforate anus**, any of the following may occur:

- The anal passage may be misplaced in front of where it is normally located
- A membrane may be present over the anal opening
- The rectum may not connect to the anus
- The rectum may connect to a section of the urinary tract or the reproductive system though a passage called a fistula, and the normal anal opening is not present

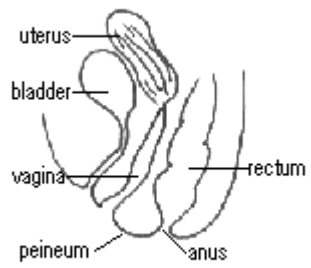
Why does imperforate anus occur?

There is no known reason why in some babies this defect occurs. This condition occurs in 1 in every 5,000 pregnancies, and is slightly more common in male infants. In some circumstances exposure to environmental factors or drug exposure may have an influence, but it is generally unclear as to the cause. Babies with an imperforate anus may also have other congenital conditions including: spinal abnormalities affecting the vertebra, kidney and urinary tract abnormalities, heart defects, limb defects, oesophageal defects, and may also be associated with Down Syndrome.

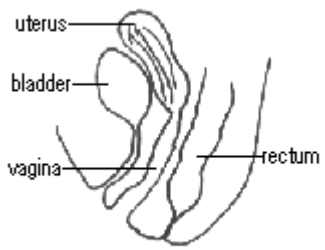
How is an imperforate anus diagnosed?

The majority of infants with an imperforate anus are diagnosed on their newborn examination by a medical officer or midwife. A number of investigations will be performed to look at your baby's spine, kidneys and heart, as well as an abdominal x-ray which may be able to assist in determining how high the abnormality may exist (although it is not always possible to tell prior to surgery).

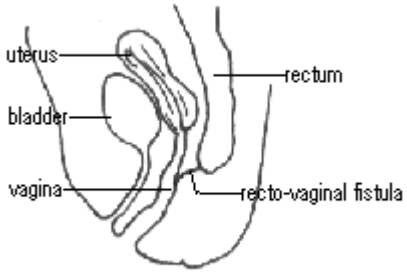
Imperforate anus in the female infant



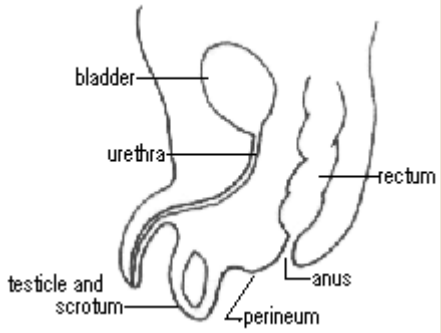
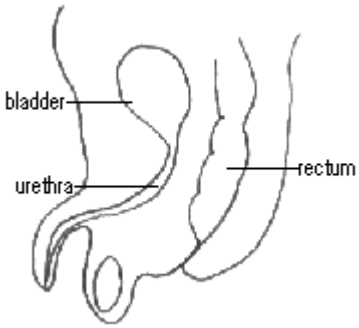
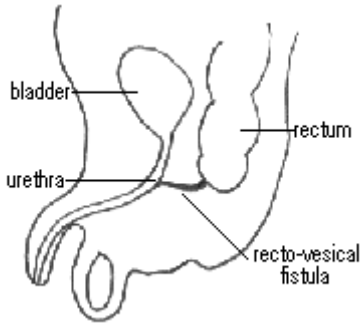
Cross-section of normal female anatomy showing relative positions of bladder, uterus/vagina, and rectum



Imperforate anus, low lesion: the anus did not develop and the rectum is covered by skin



Imperforate anus, high lesion: the rectum ends in a blind pouch, which here connects to the vagina by a fistula (narrow tube-like structure)

Imperforate anus in the male infant		
		
Cross-section of normal male anatomy showing relative positions of bladder, urethra, and rectum	Imperforate anus, low lesion: the anus did not develop and the rectum is covered by skin	Imperforate anus, high lesion: the rectum ends in a blind pouch, which here connects to the urethra by a fistula

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How is an imperforate anus treated?

The treatment for an imperforate anus depends on the severity of the abnormality. Many babies will need to be fed with intravenous fluids until a surgical procedure has been performed. Where the anal opening is narrow and anteriorly placed, gentle dilation of the opening may be all that is required. Where there is a thin membrane covering the opening of the anus, a surgical procedure is required to remove this thin membrane to allow meconium to pass through the anal opening. Where there is an abnormal opening into the urinary tract or reproductive tract, surgery is required to replace this opening. This can occasionally be done in one procedure in the early neonatal period where an anal opening is made in the normal area. Sometimes the condition may require two operations where the first stage requires the formation of a colostomy (where the large intestine is brought out to an opening made in the lower abdominal wall) with an anal opening then formed some time later in the first year of life.

What happens after surgery?

This depends on what surgery your baby has required. If your baby has had a membrane removed from their anal opening they will come back to the nursery without requiring any respiratory support. They will generally be able to start feeding soon after the surgery, and may require some gentle dilatation of the anal opening. If your baby has had to have a more extensive surgical repair or formation of a colostomy, they may require some respiratory support in the initial post-operative period. Your baby will also be fed with intravenous fluids until their bowel is beginning to function following their surgery, at which time they will be able to start some feeds. All babies with an imperforate anus should be able to go home successfully breast feeding.

Are there long-term consequences for my baby?

Some babies may have problems with constipation and may require assistance with laxatives. Where more significant surgery has been required and if there are other associated abnormalities, particularly of the spine, some of these baby's may have difficulty with constipation or continence and may require a daily bowel regimen to assist with passing their stools successfully. Your baby will be cared for by a paediatric surgeon and a paediatrician to help with these ongoing issues.

If you have any further questions please ask the medical and nursing staff.

Approved by Canberra Hospital Neonatal Intensive Care Unit, 2012
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