

Anorectal Malformation (ARM)

What is it?

Anorectal Malformation is where your child's anus is absent, very tiny or in the wrong place. Anorectal Malformation (ARM) occurs in 1 in 4,360 live births.¹

Variations

There are several variations of the conditions and the severity depends upon where the large bowel ends within the body. ARM can be divided into two groups.

1. Low ARM

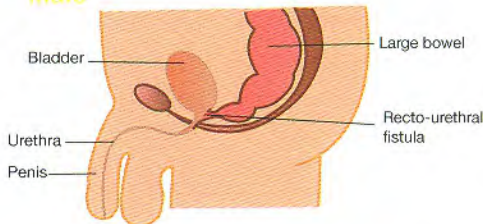
This is where the bowel stops slightly short of where the anus should be, or the anus is present but small or in the wrong place. Treatment involves opening or moving the anus, thus making a connection between the bowel and anus. The operation is known as an anoplasty or "cut back" and can be performed soon after birth.

2. High ARM

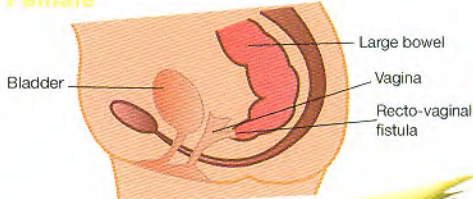
A high imperforate anus may be more complex. The bowel ends with no opening (blind end) or there may be an abnormal tract (fistula) between the bowel and another part of the body. If a fistula is present, it is usually between the bowel and vagina in girls and between the bowel and urethra in boys.

Diagrams to show the blind end of the bowel and the position of the possible abnormal tracts

Male



Female



Reference:

1. EUROCAT (the European Surveillance System for Congenital Anomalies) <http://www.eurocat-network.eu/> @ 31.08.2010. Period covered 2000 - 2008 inclusive.

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Treatment of a high ARM

Correction of a high ARM is done in three stages:

- ▶ **Stage One** – at birth, your baby will need to have a colostomy and mucous fistula formed.
- ▶ **Stage Two** – once your baby is growing and putting on weight (approximately 3-6 months old), a new anus will be made and the bowel pulled down and connected to the anus.
- ▶ **Stage Three** – the colostomy and mucous fistula will be closed.

Investigations

40-50% of babies with ARM have one or more associated problems which will require further investigations such as:

- ▶ genitourinary (renal tract)
- ▶ vertebral (spine)
- ▶ alimentary tract (gut)
- ▶ cardiac (heart)
- ▶ neural abnormalities, affecting the nerves to the bowel and bladder
- ▶ x-ray of baby's tummy
- ▶ x-ray of the spine
- ▶ ultrasound of the kidneys & bladder
- ▶ echocardiogram of the heart

Operation to create a new anus and to pull the bowel down to the anus

1 The surgeon will locate the end of the bowel and the abnormal tract (fistula) if present. The tract is usually between the bowel and vagina in girls, and bowel and urethra in boys. The tract is then closed with several stitches.

2 A small cut will be made where the new anus is to be. The end of the bowel is then pulled down and through the small cut on the bottom.

3 The blind end of the bowel is cut to make an opening and the edges are stitched to the skin to form a new anus.

4 Once the baby's new anus has had a chance to heal the doctor may ask for the anus to be dilated (stretched) to increase its size to enable your child to pass poo easily. Doctors may ask you to dilate your child's anus on a regular basis. You will be taught how to do this by your nurse (see separate leaflet). The stoma can then be closed.

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How is the colostomy and mucous fistula closed?

The surgeon will make a small cut on your child's tummy, often he/she is able to use the old scar.

The surgeon will then join the colostomy to the mucous fistula. The two pieces are joined using several stitches.

The tummy is then stitched to close the wound. Usually dissolvable stitches are used so that they do not need to be removed.

Diagram to show the colostomy and mucous fistula before the closure

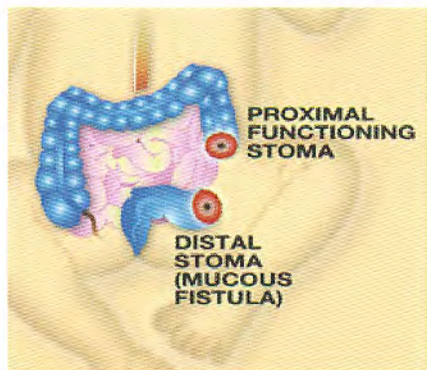
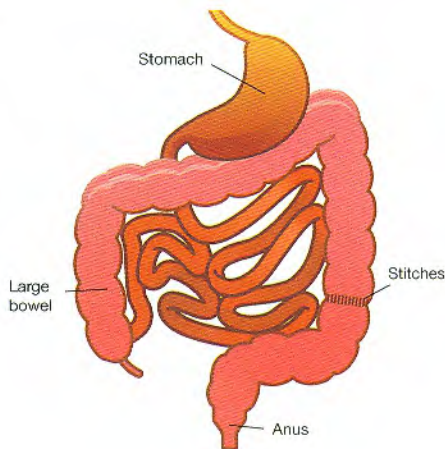


Diagram showing the large bowel after the closure



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Possible problems after the colostomy is closed

Loose poo

Initially the poo will be loose and very frequent, this is quite normal. It may take several days or weeks before the bowel settles down and the poo becomes less frequent and more formed.

Sore bottom

As your child has not used their anus before, the skin around the anus will be very delicate and very likely to get sore. You may be prescribed creams to help prevent the bottom getting sore and to help heal it if it does become sore.

Stricture (stenosis)

This is where an area of the bowel becomes narrow, making it difficult for the baby to pass a formed stool. This is treated by further dilatations.

Constipation

Your baby might have a tendency to be constipated one day and have very loose poo the next. It is important that your child poos everyday to prevent constipation. Plenty of fluids and a high fibre diet will help.

Slow to potty train

To bowel train your child may take longer than most children and will require persistence and patience.

Future considerations

Girls who have had ARM should discuss their past medical history with their doctor when planning a family. A caesarian section at the time of delivery in order to protect the original surgery may be suggested.