

# Abdominal wall defects: gastroschisis

Information for health professionals

WITHDRAWN April 2020



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## Information for health professionals

The aim of this information sheet is to support staff involved in counselling pregnant women and their partners when a suspected or confirmed diagnosis of gastroschisis has been made, following an ultrasound scan.

All diagnoses of the conditions must be recorded and audited to ensure the effectiveness of the screening programme.

### 1. Definition

Gastroschisis is a type of abdominal wall defect.

Abdominal wall defects occur when a fetus's abdominal wall does not develop fully while in utero. This results in the intestine developing outside the abdomen. Early in development, the intestine develops inside the umbilical cord and then moves inside the abdomen by 12 weeks of pregnancy.

If the intestine is not inside a covering of membrane, this is called a gastroschisis. In this condition the defect in the anterior abdominal wall is just lateral to the umbilical cord, usually to the right. Loops of bowel herniate through the defect in utero and float freely in the amniotic fluid.

Factors such as maternal smoking, recreational drug use and young maternal age are associated with the defect (David et al. 2008).

Gastroschisis is rarely associated with other major abnormalities.

### 2. Prevalence

Gastroschisis occurs in approximately 5 in every 10,000 births (Boyd et al. 2011).

### 3. Screening and diagnosis

Gastroschisis can often be detected at the 18<sup>+0</sup>–20<sup>+6</sup> weeks Fetal Anomaly ultrasound scan.

It can be diagnosed by ultrasound earlier in pregnancy however the condition is not usually diagnosed before 11 weeks. This is due to the physiological herniation of the bowel into the umbilical cord during early fetal development.

## 4. Treatment

The management of gastroschisis can only be finalised after birth and the medical team have assessed the baby.

Once the baby is in a stable condition, the surgical team will decide on one of a number of approaches. If there is only a small amount of extruded bowel, it is most likely that surgery will be performed to return the bowel to the baby's abdomen, and the defect closed. This is called a primary repair.

Sometimes if the gastroschisis is extensive, the bowel very inflamed, or if the abdominal cavity is small, a primary repair is not possible. The surgical team will then decide on the most appropriate treatment.

About 10% of babies with gastroschisis have an associated intestinal atresia. This may be repaired at the time of abdominal wall repair or some weeks later.

## 5. Prognosis

Gastroschisis requires early surgery after birth, often followed by prolonged neonatal care. Babies with this condition are usually born slightly preterm and are often underweight. In gastroschisis, the rate of survival is 90% (David et al. 2008). Morbidity is closely related to complicating factors such as bowel atresia or necrosis.

A small proportion of babies that survive the operation subsequently develop long-term problems such as difficulty feeding or absorbing food but these are not normally severe and often resolve themselves.

## 6. Recurrence

This abnormality occurs sporadically. There is a low risk of recurrence in future pregnancies.

## 7. Prevention

There is no known way to prevent this condition from happening.

## 8. Referral pathway

Following diagnosis of gastroschisis, referral should be made to a specialist in fetal medicine for a second opinion and further information. This will involve careful assessment of the fetus to identify any additional abnormalities.

A termination of pregnancy should be offered following appropriate counselling. Women should be offered the opportunity to discuss the possible implications of continuing or ending their pregnancy.

Some women choose to continue the pregnancy and these parents will need ongoing care and support. Ongoing antenatal care involves ultrasound scans to monitor the fetus due to the increased risk of fetal growth restriction and stillbirth.

Women who elect to continue their pregnancy should also be referred antenatally to the Paediatric team who will care for their baby. This includes referral to a paediatric surgeon to discuss the surgical implications.

The choice of timing, mode and place of delivery will be discussed. There needs to be a balance between the risks of ongoing damage to the bowel and fetal health and the risks associated with preterm delivery. Clear plans should be in place should the woman go into labour prematurely.

## 9. Further information, charities and support organisations

A more extensive list of support organisations is available on the website [www.fetalanomaly.screening.nhs.uk](http://www.fetalanomaly.screening.nhs.uk).

### **Antenatal Results and Choices (ARC)**

Email: [info@arc-uk.org](mailto:info@arc-uk.org)

Helpline: 0845 077 2290

Website: [www.arc-uk.org](http://www.arc-uk.org)

Antenatal Results and Choices (ARC) provides information and support to parents before, during and after antenatal screening and diagnostic tests, especially those parents making difficult decisions about testing, or about continuing or ending a pregnancy after a diagnosis. ARC offers ongoing support whatever decisions are made.

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### **Gastroschisis.co.uk**

[www.gastroschisis.co.uk](http://www.gastroschisis.co.uk)

Gastroschisis.co.uk is dedicated to raising awareness about gastroschisis. It is also a resource for parents who have experienced this condition.

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### **GEEPS**

Email: [geeps@btinternet.com](mailto:geeps@btinternet.com)

Website: [www.geeps.co.uk](http://www.geeps.co.uk)

GEEPS is an international network of families and friends of children born with abdominal wall defects. GEEPS is run by the families and friends of affected children and is a non-profit-making network. The aim of GEEPS is to support families through the shock of diagnosis and beyond in the hope that some of the stress can be relieved by sharing thoughts and fears with other parents who have been in a similar situation.

# References

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This information has been produced on behalf of the NHS Fetal Anomaly Screening Programme for the NHS in England. There may be differences in clinical practice in other UK countries. The leaflets have been developed through consultation with the NHS Fetal Anomaly Screening Programme expert groups.

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