Necrotising enterocolitis (NEC) is a serious bowel condition. It mainly affects premature babies although it can very rarely occur in full-term babies. About 1 in 40 babies admitted to the neonatal unit develop NEC.

What is the cause of Necrotising Enterocolitis?

Although we are not certain about the exact cause of NEC, there are some factors that mean that a baby has an increased risk of developing NEC. These include:

- Prematurity.
- Septicaemia (blood infection) – quite a common problem in sick babies.
- Problems which affect blood and oxygen supply to the bowel.
- Formula milk feeds. (Breast milk provides some protection).
- Respiratory distress syndrome – a common breathing problem in ill premature newborns.
- Cyanotic congenital heart disease – babies born with heart disease who are “blue”.
- Babies who have not grown well whilst in the womb.

What are the signs of NEC?

NEC can present suddenly or more slowly. We suspect your baby has this condition when the tummy swells up and your baby is unwell. He/she may vomit, or milk will be aspirated (sucked up) up the feeding tube. This milk may be green because of bile. There may also be blood in the stools. Your baby may become quite unwell, needing more intensive support and may need to go on a ventilator. Your baby’s tummy will be X-rayed, as this can help detect NEC.

What happens if my baby develops NEC?

If we think your baby has NEC, treatment is started so your baby’s bowel can rest.

1. Your baby will not be fed milk for at least seven to ten days to allow time for the gut to heal. Instead, your baby will be fed through a drip giving a special mixture of fat, protein and carbohydrate (known as TPN - total parenteral nutrition).
2. We would usually give your baby a combination of three antibiotics for a period of up to ten days.

3. We may need to use blood and other blood products to support your baby's clinical condition.

4. Further X-rays are used to detect or confirm perforation (burst bowel) which can occur with NEC. If a perforation is seen on X-ray, we will ask the advice of the surgeons in case an operation is needed.

If the surgeons decide that your baby needs surgery, they will talk to you about the operation and obtain consent from you.

What is the likely outcome for my baby?

In very severe cases, despite exhaustive treatment, some babies with NEC will, sadly, die, particularly if the condition is severe enough to require an operation. However, most babies with NEC will have a complete recovery.

In some babies, as the gut recovers there is a risk of stricture formation (narrowing of the bowel), which could cause bowel obstruction later. If surgery involves the removal of a lot of damaged gut, milk and food absorption may not be as good, resulting in poor growth. If this affects your baby then this will be discussed with you fully.

Who do I ask for more information?

Please ask to speak to one of the senior doctors if you have any questions.