

# Parent and carer briefing



## Information

18 August 2005

### Understanding NPSA advice

Community nurse or  
health professional  
contact details:

### Information for parents and carers of babies with nasogastric feeding tubes under the care of neonatal units

Nasogastric tubes are small tubes that pass through the nose, down the back of the throat and into the stomach. They are often used to allow newborn babies, infants and children, as well as adults, who have difficulty swallowing or feeding, to receive nutrition by passing food through the tube into the stomach.

#### Why it is important to check the nasogastric tube position?

You need to be sure that food is going directly into the stomach and not into the lungs. The position of the tube must be checked when the tube is first put down and before giving food or medicine. It should also be checked after a coughing fit or vomiting.

#### How to check the nasogastric tube position

The contents of your baby's stomach are normally acidic. The most reliable way of being sure that the tube is in the stomach is by carrying out a pH test on the fluid retrieved from the tube. If the tube is in the stomach, the fluid will normally have a pH of 5.5 or below. See the guide below for how to do this.

#### Step-by-step guide to measuring the acidity of stomach fluid

- 1 You will need to have your pH strip or paper to hand. They are supplied in boxes with a colour chart.
- 2 Wash your hands before and after checking the tube.
- 3 If your baby already has a tube in place, check that the tube's position has not changed. Look for the following:
  - the amount of visible tube – is it the same length as before?
  - any loose tape;
  - any kinking of the tube at the back of the mouth.
 Re-pass or replace the tube if necessary.
- 4 Remove the cap or plug from the tube and attach syringe to the tube.
- 5 Draw back the syringe plunger to get some fluid. This is called aspirating.
- 6 Place a few drops of the fluid onto a pH strip.
- 7 Match the colour change on the strip to the colour chart on the box and identify the pH level.

A pH reading of 5.5 or below indicates that the tube is correctly positioned in the stomach. You can now start feeding.

Do not feed if you are unsure of the reading between pH 5 and 6.

**REMEMBER:** It is important to keep pH strips or paper clean and dry by storing them in a sealed container.



### What to do if you cannot obtain any fluid

- 1 Turn the baby onto its side and try aspirating again.
- 2 If you still cannot get any fluid, inject 1 to 2 ml of air into the tube using a syringe. If the tip of the tube is stuck to the stomach lining this will help move it.
- 3 Try aspirating again.

If you are putting in a new tube or re-passing a tube and you cannot get any fluid, try advancing the tube 1 to 2cm. It may be that the tube is too high and has not reached the stomach. Stop immediately if you feel any resistance.

Try aspirating again. **If you still cannot get any fluid contact your community nurse, dietician or nutrition nurse, or hospital professionals. See page 1 for details .**

### What if I get a pH reading of 6 or above?

This may mean the tube has moved out of the stomach. Do not feed. Re-pass or replace the tube if necessary. Wait and test again in 15 to 30 minutes.

If the pH is still 6 or above, contact your community nurse, dietician or nutrition nurse, or another hospital professional. See page 1 for details.

It may be that your baby is on medication that is affecting the acidity of the stomach. Ask your nurse or doctor for advice before taking your baby home.

### More information

Thousands of these procedures are carried out safely every day, and it is a vital part of care particularly for babies who have difficulty swallowing or feeding.

There is a very small risk that if the tube is not correctly inserted, it can accidentally be placed into the lungs instead of the stomach. This can happen without you realising it. Your baby may not show any signs that there is a problem. If the feed does go into the lungs, instead of the stomach, it can cause pneumonia, a serious chest infection, or death.

You can call NHS Direct, a 24-hour nurse advice service, on 0845 4647 or visit [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk) for England or [www.nhsdirect.wales.nhs.uk](http://www.nhsdirect.wales.nhs.uk) for Wales.

### The NPSA

This information has been developed by the National Patient Safety Agency, doctors and nurses. Whilst methods for testing the position of nasogastric tubes are not totally reliable, this information will help you reduce the very small risk of accidentally putting food or medicine through a misplaced nasogastric feeding tube.

The NPSA was set up by the government to improve patient safety in the NHS in England and Wales. For more information visit [www.npsa.nhs.uk](http://www.npsa.nhs.uk)

This briefing is written in the following context:

It represents the view of the National Patient Safety Agency, which was arrived at after consideration of the evidence available. This does not, however, override the individual's responsibility to make decisions appropriate to local circumstances, the needs of patient and to take appropriate professional advice where necessary.