Using paracetamol to prevent and treat fever after MenB vaccination

My baby has just had the MenB vaccine, what should I expect now?
Fever can be expected after any vaccination, but is more common when the MenB vaccine (Bexsero) is given with the other routine vaccines at two and four months. Without paracetamol, more than half of infants will develop a temperature after these vaccines. The fever tends to peak around six hours after vaccination and is nearly always gone completely within two days. The fever shows the baby's immune system is responding to the vaccine, although the level of fever will depend on each child and does not show how well the vaccine will protect your baby.

How can I reduce the risk of fever?
Giving paracetamol soon after vaccination – and not waiting for a fever to develop – will reduce the risk of your child having a fever. With paracetamol, fewer than one in five children will get a fever and nearly all of these are mild (below 39°C). The paracetamol will also reduce the chance of your baby being irritable or suffering discomfort (such as pain at the site of the injection).

Which paracetamol product should I use?
You should use oral infant paracetamol suspension. This kind of paracetamol comes in liquid form for use in babies and young children. It has a strength of 120mg/5ml.

If you have not already got some paracetamol suspension for infants at home, you should get some from your local pharmacy or supermarket so that you can give the first dose of paracetamol within an hour of the vaccination. There are various products to choose from (including bottles and sachets) but the type needed is infant paracetamol suspension 120mg/5ml.

(Note: Junior paracetamol (six plus) is stronger than infant paracetamol (250mg/5ml) and must not be used in babies.)

After which vaccinations should I give my baby paracetamol?
Paracetamol is advised for your baby following the MenB vaccinations. The MenB vaccine is usually given at your baby’s first and third immunisation appointments at two months and four months of age.

Paracetamol is not routinely needed after the Men B booster vaccine given at 12 months of age. By this age the baby’s risk of fever is the same as after other vaccines.

How much paracetamol should I give?
A total of three doses of 2.5ml (60mg) of paracetamol are recommended following MenB vaccination. You should give the first dose at the time of vaccination or as soon as possible afterwards. You should then give the second dose of paracetamol around four to six hours later and a third dose four to six hours after that (see table). The 2.5ml dose should be measured and given either using a syringe or with a 2.5ml spoon (this is usually the small end of the spoon that comes in the pack).

For very premature babies (born before 32 weeks gestation), paracetamol should be prescribed by your doctor according to the infant’s weight at the time of vaccination. You should check with your doctor and follow the instructions on the prescription.

Dosage and timing of infant paracetamol suspension (120mg/5ml) for use after primary MenB vaccinations (usually at two and four months of age)

<table>
<thead>
<tr>
<th>Age of baby</th>
<th>Up to 6 months (usually at 2 and 4 months)</th>
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</thead>
<tbody>
<tr>
<td>Dose 1</td>
<td>One 2.5ml (60mg) dose as soon as possible after vaccination</td>
</tr>
<tr>
<td>Dose 2</td>
<td>One 2.5ml (60mg) dose 4-6 hours after first dose</td>
</tr>
<tr>
<td>Dose 3</td>
<td>One 2.5ml (60mg) dose 4-6 hours after second dose</td>
</tr>
</tbody>
</table>
What if my baby still has a fever after having had the three doses of paracetamol?
Some babies may still develop fever after vaccination, even after having three doses of paracetamol. In the 48 hours after vaccination, if your baby still has a fever but is otherwise well, you can continue to give your baby the same 2.5 ml dose (60mg) of infant paracetamol (120mg/5ml) suspension.

• You should always leave at least four hours between doses and never give more than four doses in any 24 hour period.

You should also keep your baby cool by making sure they don’t have too many layers of clothes or blankets, and give them lots of fluids. If your baby is breast-fed, the best fluid to give is breast milk.

• If you are concerned about your baby’s health at any time, then trust your instincts and speak to your GP or call NHS 111 in England and 0845 46 47 in Wales for advice.

• If your baby still has a fever more than 48 hours after vaccination you should speak to your GP or call NHS 111 in England and 0845 46 47 in Wales for advice.

Is it OK for small babies to have paracetamol?
Paracetamol is approved for managing fever in children from the age of two months. The patient information leaflet that comes with the pack may say that children aged two to three months should only be given two doses before talking to a doctor or pharmacist.

Although paracetamol is safe in very young children, the advice on the packaging is there to avoid parents giving paracetamol to a child with an unexplained fever. Such a fever could be a sign of a serious infection and treating this for too long may delay a parent seeking medical help.

As fever after vaccination is common, however, experts have advised that it is OK to give paracetamol for up to 48 hours after the MenB vaccine without seeking medical advice.

Fever in this time period is much more likely to be caused by the vaccine than by an infection. The paracetamol will also make your child feel better, and there is no risk of an over-dose provided you give no more than four 2.5ml doses in any 24 hour period.

Why does the manufacturer’s patient information leaflet (PIL) contain different information?
You will find a patient information leaflet (PIL) in the supply of paracetamol you purchase. The PIL with the infant paracetamol suspension 120mg/5ml may provide different dosing instructions from the experts’ recommendations for use following MenB vaccination. Here, in this leaflet, we give the details of the specific recommendations for the use of paracetamol following a MenB vaccination. For full information about the paracetamol product, please see the manufacturers PIL.

Does my baby need paracetamol with the booster vaccinations at 12 months?
By the age of 12 months your baby’s risk of fever after MenB vaccine is the same as with the other vaccines. So, your baby does not need to take three doses of paracetamol with their routine 12 month vaccinations. However, if your baby does get fever at home or appears to be in discomfort, you can give your baby infant paracetamol using the dosing schedule for a child of that age as outlined on the instructions in the packet.

The advice to give more than two doses of paracetamol to babies aged two to three months only applies after the baby has had the MenB vaccine. If your baby has a fever at any other time, you should follow the instructions and dose advice on the product packaging and patient information leaflet.