Paracetamol use with Bexsero® in children aged under 2 years

Routine use of paracetamol around immunisation

We do not recommend routinely giving paracetamol before or after immunisation with childhood vaccines just in case a child gets a fever or has injection site pain. This is because a high fever or injection site pain are not very common responses and the use of paracetamol around the time of immunisation reduces the laboratory measured immune system response to vaccines.

However, there is no evidence that the reduced response leaves children with less protection from the diseases they were immunised against. If, after immunisation, your child has a fever or seems to have discomfort or they are miserable or distressed, we do recommend the use of paracetamol. You MUST follow the dosage instructions on the bottle; it is dangerous to give more than the recommended dose.

The recommendation for Bexsero, a purchased vaccine against meningococcal group B disease, is different when given to children aged under 2 years. This is because fever is part of a robust immune system response to Bexsero, usually peaking around 6 hours after immunisation and settling over 24–48 hours.

- A fever over 38°C is more likely to occur in infants and children aged under 2 years after immunisation with Bexsero compared with other routinely used infant vaccines.
- When Bexsero is administered at the same visit as other Immunisation Schedule vaccines, a fever over 38°C or 39°C is almost twice as likely as when the Immunisation Schedule vaccines are given alone.

Similarly, redness, swelling and/or mild–moderate pain around the injection site are also common expected immune responses to Bexsero, peaking on the day of vaccination followed by a significant decrease, settling from around 24 hours after immunisation.

For these reasons, routine use of paracetamol with every dose of Bexsero in children aged under 2 years, whether given alone or with other vaccines, is recommended to reduce the risk of high fever and injection site pain. Some infants will still develop a fever and/or injection site pain even though they have received paracetamol doses.

Recommendations for paracetamol use with Bexsero in children aged under 2 years

Three doses of paracetamol are recommended with 6 hours between each dose, whether your child has a fever or not.

- Give the first dose 30 minutes before Bexsero.
- Give the second paracetamol dose 6 hours after the first dose, then 6 hours later give the third dose.
- If your child is sleeping when the second or third paracetamol dose is due:
  - It is not necessary to wake your child.
  - Give the paracetamol dose when they wake up as long as it is at least 6 hours since the previous dose was given.
- If your child is miserable or distressed because of a fever or injection site pain 6 hours after the third paracetamol dose and is otherwise well:
  - You can continue to administer the paracetamol doses with a minimum of 6 hours between doses until the discomfort resolves or until it is 48 hours after immunisation was given, whichever occurs first.
  - No more than four doses of paracetamol can be given in a 24-hour period.
- If your child is miserable or distressed because of fever or injection site pain 48 hours or more after the immunisation was given, we recommend that they are seen by their doctor.

Other ways to help manage fever

If your child gets hot or has a fever

- Give lots of breastfeeds or fluids
- Undress them to a single layer, for example a singlet and pants
- Make sure the room is not too hot or too cold
- Give lots of cuddles

Other ways to help managing injection site discomfort or pain

If your child has injection site discomfort or pain

- Do not rub the injection site
- Hold a cool damp cloth or an ice pack well wrapped in a dry cloth on the injection site
- Give lots of cuddles

Using paracetamol for infants and children

Liquid paracetamol is available with a prescription from your doctor or as an ‘over the counter’ purchase at a pharmacy.

- Liquid paracetamol is available in two strengths; please ensure you have the correct infant strength of 120mg in 5mLs.
- **Note:** The other paracetamol liquid is more than twice as strong as the infant strength.
- Know the right dose to give, follow the advice of your doctor or the dosage instructions on the bottle.
- Check the dose with your doctor, nurse or pharmacist if you are unsure
- Measure the paracetamol dose using a measuring spoon or syringe.
- No more than four doses of paracetamol can be given in a 24-hour period.
- Too much paracetamol can be dangerous.

If you are concerned about your child after their immunisation, contact your family doctor or nurse. You can also call Healthline on 0800 611 116 day or night.