**Clinical case scenario for clinicians on using paracetamol and ibuprofen to treat distress in children under 5 with a feverish illness of unknown cause (CG160)**

**CLINICAL CASE – TOM (aged 2 years)**

Tom’s mother takes him to the GP. He’s had a high fever on and off for 3 days and she feels he is getting worse.

Tom is lethargic and not eating well, but is not distressed. The GP finds no cause for the fever. He asks Tom’s mother to collect a urine sample and return it the next day to test for infection.

The GP advises Tom’s mother to give him regular drinks and explains that paracetamol or ibuprofen can be used if Tom becomes distressed but should not be used simply to relieve his fever (recs 1.6.3.2, 1.6.3.3). As a safety net, he advises them to return if Tom’s condition worsens (rec 1.4.2.4).

The next morning, Tom becomes unsettled, crying and needing to be cuddled constantly. His mother gives him ibuprofen and he becomes less distressed. She has not been able to obtain a urine sample yet.

After 2 hours, Tom becomes distressed again. His mother gives him paracetamol and arranges to see the GP later that day, as she is concerned that he is getting worse.

Tom settles after the paracetamol but wakes 4 hours later, distressed and crying. His mother has now managed to obtain a urine sample.

Since Tom has been asleep, his mother encourages him to drink and eat and gives him some more paracetamol. She follows her GP’s advice to give only one of these drugs (paracetamol or ibuprofen) at a time and only to relieve distress.

She returns to the GP who confirms that Tom has a urine infection (recs 1.2.3.8, 1.4.3.2) and treats him in accordance with the NICE guideline on Urinary tract infection in children (CG54).

**SUPPORTING INFORMATION**

Parental perception of a fever should be considered valid and taken seriously by healthcare professionals (recommendation [rec] 1.1.3.1)

Tom is assessed as being in a ‘low risk’ group – green in the traffic light table (recs, 1.2.2.1, 1.2.2.5)

Fever is a normal physiological response to infection

Either ibuprofen or paracetamol can be used in children with a fever who are distressed (rec 1.6.3.1)

Consider changing to the other antipyretic agent if a child’s distress is not alleviated. Since Tom's next dose of ibuprofen is not due for another 4 hours, consider changing to paracetamol (rec 1.6.3.3)

Ibuprofen can be given 6–8 hourly and paracetamol 4–6 hourly (BNFc). If using ibuprofen and paracetamol, the times when they are due to be taken may coincide, but NICE recommends that they are not given simultaneously.

Only consider alternating these agents if the child’s distress persists or recurs before the next dose is due (rec 1.6.3.3).

In most cases, children would need treatment with only one drug (or no drug treatment).

Test yourself