PAN MERSEY APC

PAN MERSEY AREA PRESCRIBING COMMITTEE
SAFETY STATEMENT
REF: S2 FINAL
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NHS Pan Mersey Area Prescribing Committee

CODEINE: USE IN CHILDREN

Codeine is contraindicated in all children aged 0-18 years who undergo tonsillectomy or adenoidectomy (or both) for obstructive sleep apnoea. Codeine is restricted to children over 12 years of age and only if the benefit outweighs the risks.

The use of codeine for analgesia in children and adolescents under 18 years of age has been restricted after a European safety review.(1) The review was triggered by case reports of children who received codeine for pain control after tonsillectomy or adenoidectomy (or both) for obstructive sleep apnoea and who developed rare, but life-threatening adverse events, including death.

Codeine is converted to morphine in the liver by the CYP2D6 enzyme. There are many genetic variations of CYP2D6, which affect the extent of this conversion in individuals. Different plasma morphine concentrations in patients' blood leads not only to different levels of pain relief but also to a variable and unpredictable risk of side effects due to morphine's action on the brain and respiratory centre.

THE MHRA HAVE ISSUED THE FOLLOWING ADVICE FOR HEALTHCARE PROFESSIONALS

- Codeine is now contraindicated in:
  - All children age 0–18 years who undergo tonsillectomy or adenoidectomy (or both) or for obstructive sleep apnoea.
  - All patients of any age known to be CYP2D6 ultra-rapid metabolisers.

- Codeine should only be used to relieve acute moderate pain in children older than 12 years and only if it cannot be relieved by other painkillers such as paracetamol or ibuprofen alone.

- Codeine is not recommended for use in children whose breathing might be compromised, including those with: neuromuscular disorders; severe cardiac or respiratory conditions; upper respiratory or lung infections; multiple trauma; or extensive surgical procedures. Morphine toxicity may be increased in these settings.

- In children aged 12–18 years, the maximum daily dose should not exceed 240 mg. This may be taken in divided doses up to four times a day at intervals of no less than 6 hours. It should be used at the lowest effective dose for the shortest period. Duration of treatment should be limited to 3 days and if no effective pain relief is achieved, treatment should be reviewed by a physician.

- Information should be given to parents and caregivers on how to recognise the signs and symptoms of morphine toxicity, and advice should be given to stop giving the child codeine and to seek medical attention immediately if the child shows these signs or symptoms, which include: reduced levels of consciousness; somnolence; respiratory depression; 'pin-point' pupils; lack of appetite; constipation; or nausea and vomiting. Information for parents can be found at http://www.medicinesforchildren.org.uk

Codeine should not be used by breastfeeding mothers because it can pass to the baby through breast milk and potentially cause harm. (2)

References

1. European Medicines Agency, PRAC recommends restricting the use of codeine when used for pain relief in children.14 June 2013.
2. Drug Safety Update June 2013 vol 6, issue 11: S1