

SSRI for use in pregnancy. Our case has shown significant hypoventilation in an otherwise healthy infant exposed to maternal fluoxetine in utero with no primary cause identified. This potential correlation should be considered when advising mothers on safe drug use and in the management of neonatal hypoventilation.

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P018

RENAL ADVERSE EVENTS AND GASTROINTESTINAL BLEEDING WITH IBUPROFEN USE IN PRETERM NEONATES WITH PATENT DUCTUS ARTERIOSUS (PDA)

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10.1136/archdischild-2019-nppc.28

Aim To identify all the reported adverse events associated with ibuprofen use in preterm neonates for PDA closure and quantify the risk per 100 patients.

Methods We followed the Cochrane standards for conducting systematic reviews of adverse events.¹ Eight electronic databases [Embase, Medline, BNI, PubMed, Cochrane library, IPA, CINAHL, clinical trials.gov] were searched to identify relevant studies using a predetermined search strategy. Published conference abstracts, grey literature, and reference lists of the retrieved articles were also searched. All studies providing information on adverse events of ibuprofen in preterm neonates with PDA were included. Following quality assessment of the retrieved studies, meta-analysis was performed to pool the results from the RCTs using Rev man 5.3 software. **Results** of the observational studies are descriptively reported and analysed. Protocol registered in PROSPERO (CRD42018067600).

Results The complete adverse events systematic review includes 84 studies (38 RCTs, 10 case reports, 4 case series, 31 cohort studies and 1 case-control study). The majority of adverse events were captured in retrospective cohort studies. Gastrointestinal (GI) bleeding: Pooled results from RCTs that compared ibuprofen to placebo showed significant difference RR [95% CI]: 1.99[1.13, 3.50] favouring placebo. Similarly, compared to paracetamol, ibuprofen was also associated with an increased risk of GI bleeding RR [95% CI]: 7.00[1.91, 25.61]. There was no significant difference in GI bleeding when comparing ibuprofen to indomethacin RR [95% CI]: 0.98[0.48, 2.00]. Renal adverse events: Data from RCTs showed that ibuprofen had a significantly low risk of oliguria compared to indomethacin RR [95% CI]: 0.38[0.25, 0.56]. However, no difference in risk of oliguria was found when comparing ibuprofen to paracetamol RR [95% CI]: 2.16[0.91, 5.11]. Serum creatinine levels after ibuprofen treatment compared to placebo was reported by 4 RCTs with favourable results to

placebo MD [95% CI]; 8.66 [5.17, 12.15]. The risk of adverse events per 100 patients who received ibuprofen from data from prospective studies was 8.9 for GI bleeding, 7.6–7.8 for oliguria, 5.2 for rise in serum creatinine and 2.6 for renal failure. Increase in serum creatinine after treatment was most commonly reported in retrospective cohort studies (460 cases out of 1786 adverse events). Nine cases of GI bleeding led to discontinuation of ibuprofen treatment.

Conclusion Our meta-analysis of the RCT data supported results of previous systematic reviews.^{2 3} Combined results from RCTs and prospective cohort studies in our review show that oliguria is the most commonly reported adverse event among the renal adverse events. However, the high number of rising serum creatinine after treatment from retrospective studies should also be considered when treating preterm neonates with ibuprofen for PDA. Paracetamol might be favoured as it associated with less risk of GI bleeding when compared to ibuprofen.

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P019

TREATING CONJOINED TWINS

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10.1136/archdischild-2019-nppc.29

Situation D and M are conjoined twins born without an antenatal diagnosis and assessed as not suitable for separation. At the time of admission they were 21 months old with a combined weight of 17.1 Kg. D presented unwell with a raised heart rate and respiratory rate. A working diagnosis of sepsis (possibly urinary tract infection) was made. Advice was sought from pharmacy on the doses of ceftriaxone and paracetamol. Peripheral intravenous (IV) access was only available in twin M.

Background The twins are joined side by side from the upper chest to the pelvis. They have separate heads, three arms and 2 legs. They have 2 hearts with a fused aorta, a shared liver, 2 gallbladders, 2 stomachs, 3 kidneys and a single bladder. D has a complex congenital heart condition and a poor prognosis. On admission, D was receiving propranolol, but M was not. The dose was based on the combined weight of the twins divided by 2. Conjoined twins are a rare phenomenon, occurring 1 in 50,000 to 100,000 births.¹ Around 60% of these are stillborn or die shortly after birth. There are many different types of join with differences in shared organs and limbs. Consequently each twin pair is almost unique and consideration must be given as to how medication is dosed according to pharmacokinetic principles.

Outcome Opinion of the multidisciplinary team was that the twins have relatively separate circulations, although some cross-circulation would be expected. On admission, saturations in the right arm (twin D) were 75%. On the left side (twin M) this was 95%. Ceftriaxone is a highly protein bound, hydrophilic antibiotic,² The degree of cross circulation (how