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Caudal anaesthesia safety for hypospadias repair

Kim et al. reported an association between caudal block and postoperative complications following primary hypospadias repair [1, 2]. I have also studied this subject [3], and would like to ask the authors about certain aspects of their methodology.

In this paper, the caudal and non-caudal groups appear to differ [3, 4], with the caudal group containing significantly more proximal hypospadias repairs. Proximal hypospadias is associated with a much higher incidence of all of the complications that were evaluated in this study. When evaluating distal hypospadias alone, the incidence of fistula and all other complications was comparable between the two groups, as noted in the accompanying editorial [2] and found in other papers [3, 5]. The abstracts by Soto-Aviles et al. [6], cited in the accompanying editorial in support of an association between caudal analgesia and fistula following hypospadias repair, have yet to be published in a peer-reviewed journal and must be viewed with caution. Published data support the safety of caudal anaesthesia for distal hypospadias repair.

Secondly, why was a composite outcome used? It is unclear how urethral stricture, diverticulum, wound infection or haematoma could be influenced by caudal anaesthesia. Ayob and Arnold's accompanying editorial suggests that oedema contributes to fistula formation [4], but oedema is not known to be a consequence of epidural or caudal anaesthesia. The author's conclusions focused on the role of caudal anaesthesia, even though their results appeared to confirm previous work associating fistula formation with longer operations and hypospadias location.

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