

An Audit of 829 Paediatric Epidurals in a Tertiary Singapore Hospital: Complications and Conundrums

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Abstract

Introduction: The incidence of complications related to epidural analgesia remains less well defined in the paediatric population as compared to adults. A retrospective review of prospectively collected data was performed to review and quantify risks of both adverse events and complications related to epidural analgesia in our Singaporean paediatric population. **Materials and Methods:** Data from the Acute Pain Service (APS) was prospectively collected over 19 years. Details included the age of the patients, level of insertion of the epidural catheter, number of attempts, staff grade of the practitioner, adverse events and complications. **Results:** Collectively, 829 epidurals were performed from 1 June 1997 to 31 May 2016. No deaths or major complications occurred within the 16-year period. There were 5 instances of dural puncture (0.6%). The incidence of minor postoperative complications was 3.1% with the majority of postoperative events comprising catheter-related problems (n = 161, 22.4%). Prolonged use of the catheter beyond 3 days is associated with a statistically significant increase in the frequency of skin infective/inflammatory changes ($P < 0.01$). We highlight common complications and conundrums faced. **Conclusion:** Epidural analgesia has been shown to be associated with a relatively low risk of complications both in the adult and paediatric populations, albeit with a fourfold increased risk in the latter cohort. Adverse events reported are largely related to catheter problems and have minimal impact upon the patient.

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