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INTRAVENOUS ACCESS REQUESTS IN A TERTIARY PAEDIATRIC CENTRE IN THE UK: AN ACTIVITY SURVEY

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Introduction:

Gaining intravenous (IV) access in children can be challenging for the patients themselves, their parents, and the providers. For patients and their parents, anxiety and distress may occur even with the best of efforts; for providers, the urgency and/or number of attempts can be stress-inducing. As a result of a recent departmental discussion about an external court case where a delay in cannulation was attributed to patient death, we decided to survey the nature and volume of IV access requests to the anaesthetic team, investigating common themes and possible areas for improvement. There are other tertiary centres with established vascular access protocols and educational materials for IV access in children – we wondered whether such interventions would be of benefit within our institution.

Aims:

Our survey aimed to identify trends in referrals to the on-call paediatric anaesthetic team for IV access. Secondary aims were to investigate the nature of referrals and what possible interventions would be useful to support the referring teams.

Methods:

Data was prospectively collected by the resident on-call anaesthetist over two separate seven day periods. Data collected was time of request, age of patient, referrer position, referring ward, number of attempts already made, reason for request, and outcome. An online Microsoft forms survey was used.

Results:

We collected data on 19 IV access requests over 2 weeks. 14 requests were made on the day shift; 5 on the night shift. The youngest patient was 7 days old; the oldest patient was 16 years old. Over 50% of requests were made for children aged under 24 months. Most referrals came from inpatient wards. Referrers were mainly ST3+ registrars. The most common number of attempts already made was 1 to 3 times (36%), although 4 to 6 attempts was close in count (31%). Four referrals had 7+ attempts or 'multiple' noted. Reasons for access were most commonly for IV antibiotics. 17 out of 19 times, the resident anaesthetist attended and was successful in gaining IV access.

Discussion:

The results were presented at our local anaesthetic department meeting. The impact on anaesthetist availability within the theatre suite when called away to perform IV access on the wards was not insignificant. It was felt that a multidisciplinary IV access escalation policy with a referral flowchart could be useful, but this would require cross-speciality discussion and agreement. Secondly, an educational package to support more junior staff members with their initial vascular access attempts may be useful, and could take the form of supplementing pre-existing induction sessions via information videos or hands-on sessions. We plan to focus next efforts on the educational packages and will look to re-survey these requests to see if the support has been useful for the referring teams.

References

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