Short Communication

An Overview of the Pediatric Peripheral Intravenous Access (PPIVA) Pathway

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DESCRIPTION

Pediatric Peripheral Intravenous Access (PPIVA) is a crucial aspect of pediatric care. It involves the insertion of an IV catheter into a peripheral vein to administer medications, fluids, and blood products. However, PPIVA can be challenging in children due to their small veins, fear and anxiety, and limited cooperation. To overcome these challenges, healthcare providers have developed a PPIVA pathway to standardize the process of PPIVA and improve patient outcomes.

Assessment

The first step in the PPIVA pathway is the assessment of the patient. This involves evaluating the child's medical history, age, weight, and diagnosis. Healthcare providers should also assess the child's veins, including the size, location, and condition of the veins. This information will help determine the appropriate size and type of catheter to use [1-3].

Preparation

The second step in the PPIVA pathway is preparation. This involves preparing the child and the equipment for the procedure. Healthcare providers should explain the procedure to the child and their family in an age-appropriate and reassuring manner. They should also ensure that the child is in a comfortable position and that distractions such as toys or videos are available [4].

Next, healthcare providers should prepare the equipment, including the catheter, sterile gloves, antiseptic solution, and dressings. They should also assemble the necessary supplies, such as saline flushes and tubing.

Insertion

The third step in the PPIVA pathway is the insertion of the catheter. Healthcare providers should use aseptic technique and follow the manufacturer's instructions for catheter insertion. They should also consider using topical anesthetics, distraction techniques, and other comfort measures to reduce pain and anxiety [5-7].

If the initial catheter insertion is unsuccessful, healthcare providers should consider using ultrasound guidance or alternative sites for catheter insertion.

Maintenance

The fourth step in the PPIVA pathway is the maintenance of the catheter. Healthcare providers should monitor the catheter site for signs of infection, infiltration, or other complications. They should also flush the catheter regularly with saline solution to prevent clotting and ensure patency [8].

Removal

The final step in the PPIVA pathway is the removal of the catheter. Healthcare providers should follow the manufacturer's instructions for catheter removal and use aseptic technique. They should also assess the catheter site for any signs of bleeding or infection.

Benefits of the PPIVA Pathway

The PPIVA pathway provides several benefits for pediatric patients and healthcare providers. First, it standardizes the PPIVA process, ensuring that all patients receive consistent and high-quality care. This reduces the risk of complications and improves patient outcomes. Second, the PPIVA pathway reduces the need for multiple IV attempts, which can be stressful and painful for children. It also minimizes the risk of infection and other complications associated with repeated IV insertions. Third, the PPIVA pathway improves the efficiency of the PPIVA process, reducing the time and resources required for IV insertion and maintenance [9,10].

CONCLUSION

Pediatric Peripheral Intravenous Access (PPIVA) is a crucial aspect of pediatric care. However, PPIVA can be challenging in children due to their small veins, fear and anxiety, and limited cooperation. The PPIVA pathway is a standardized approach to PPIVA that improves patient outcomes, reduces the risk of complications, and increases efficiency. By following the steps of

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the PPIVA pathway, healthcare providers can provide highquality, safe, and effective PPIVA care for pediatric patients.

REFERENCES

- 1. Reigart JR, Chamberlain KH, Eldridge D, O'Brien ES, Freeland KD, Larsen P, et al. Peripheral intravenous access in pediatric inpatients. Clin Pediatr (Phila). 2012;51(5):468-472.
- Kim MJ, Park JM, Rhee N, Je SM, Hong SH, Lee YM, et al. Efficacy of VeinViewer in pediatric peripheral intravenous access: A randomized controlled trial. Eur J Pediatr. 2012;171:1121-1215.
- Larsen P, Eldridge D, Brinkley J, Newton D, Goff D, Hartzog T, et al. Pediatric peripheral intravenous access: Does nursing experience and competence really make a difference?. J Infus Nurs. 2010;33(4): 226-235.
- Parker SI, Benzies KM, Hayden KA. A systematic review: Effectiveness of pediatric peripheral intravenous catheterization strategies. J Adv Nurs. 2017;73(7):1570-1582.
- Öntürk ZK, İsabetli S, Bahadır M, Doğru E. The effect of "pediatric peripheral intravenous access (PPIVA) pathway" on the success of vascular access in children. J Pediatr Nurs. 2022.

- Schults J, Rickard C, Kleidon T, Paterson R, Macfarlane F, Ullman A. Difficult peripheral venous access in children: An international survey and critical appraisal of assessment tools and escalation pathways. J Nurs Scholarsh. 2019;51(5):537-546.
- Schults JA, Kleidon TM, Gibson V, Ware RS, Monteagle E, Paterson R, et al. Improving peripheral venous cannula insertion in children: A mixed methods study to develop the DIVA key. BMC Health Serv Res. 2022;22(1):220.
- 8. Costantino TG, Parikh AK, Satz WA, Fojtik JP. Ultrasonographyguided peripheral intravenous access versus traditional approaches in patients with difficult intravenous access. Ann Emerg Med. 2005;46(5):456-461.
- Gonvers E, Spichiger T, Albrecht E, Dami F. Use of peripheral vascular access in the prehospital setting: Is there room for improvement?. BMC Emerg Med. 2020;20:1-7.
- Sá RA, Melo CL, Dantas RB, Delfim LV. Vascular access through the intraosseous route in pediatric emergencies. Rev Bras Ter Intensiva. 2012;24:407-414.