Short Report on Intravenous Medication

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ABSTRACT

Intravenous medication errors are found to be frequent events. They are connected with considerable harm and damage, however little is thought about their reasons. The goal of the study was to discover the IV medication preparation errors in medical, surgery, paediatric and ICU department of tertiary care teaching hospital.

INTRODUCTION

Now and again patients must get medication quickly. Different times, medicines must be given gradually and slowly yet constantly. In both of these circumstances, intravenous drug organization may be needed. Taking pills or fluids by mouth may not be sufficiently quick to get certain pharmaceuticals into the body. In a crisis setting, pharmaceutical must be retained rapidly. Additionally, chemicals in the stomach may separate certain fragile pharmaceuticals. Accordingly, these must be given specifically into the circulatory system.

Intravenous is a term which means “into the vein”. The administration of intravenous medication occurs when a needle is inserted into a vein and medication is administered along through the needle. In Intravenous medication, the needle is typically put in a vein close to the elbow, the wrist, or on the back of the hand. Distinctive sites can be utilized if essential.

IV administration is the most essential and most normal parenteral administration course. Intravenous treatment is a complex process generally obliging the planning of the drug in the clinical ranges before organization to the patient. There have been reports of deaths and damage taking after solution slips, for example, wrong medication, measurements, diluents, and cross contamination errors with intravenous treatment. The configuration of methodology and execution of the framework for planning and managing intravenous pharmaceuticals was thought liable to be affected by national variables, for example, enactment, medicinal services framework prerequisites, proficient models, college course curricula, and conveyance of instruction and training for health awareness staff.
An intravenous medication lapse is characterized as a deviation in planning of a medication from a specialist's doctor prescription, the clinics intravenous approach, or the manufactures directions.

The vast majority of the writing on MAE's to date has concentrated on oral medications controlled amid consistent medication rounds. A couple of cases of MAE's emerging from IV bolus dosages or discontinuous implantations have been accounted for. In any case, we have not possessed the capacity to discover any data depicting the prevalence of MAE's connected with constant IV imbuements which are typically supplanted by nursing staff, once the substance of past sacks have been imbued. This is not at all like oral/ IV bolus medicates and requires an eyewitness to be available at the purpose of arrangement.

In any hospital center nurses for the most part get ready and regulate intravenous medications recommended by specialists or doctors. Single site studies which carried out in few wards have reported errors in get ready and controlling intravenous medications of 13%-84%, a few studies utilized distinctive definitions and did not evaluate the seriousness of errors.

Despite the fact that the writing reports various studies on recognizing IV prescription mistakes in different clinics abroad, the information accessible on such circumstance in India is restricted.

Medical caretakers were seen by a solitary eyewitness for a greatest number of four times with a specific end goal to incorporate however many as diverse attendants as could be allowed. Amid the procedure of planning and directing IV medications nurses were seen by utilizing the perception list. The medical caretakers are mindful of the perception yet unconscious about genuine reason. The name of medical attendants, the quantity of perception by nurses and period of study were enrolled. Observations occurred on distinctive days of week and diverse times of day and night in every hospital ward. The spectator was available amid a present arrangement of movement, to speak to the variety of nursing hours in nursing practice.

The different types of errors were defined based on the classification by (Allan and Barker) and adapted to the data. Preparation errors included preparation of the wrong drug, the wrong dose, the wrong dosage form, the wrong preparation technique, omission errors and preparation of an unordered drug dose. Preparation error rates were calculated as percentage by dividing the sum of all recorded preparation errors by the sum of the prepared drug doses observed. Data’s were expressed as percentages and kept as 95% confidence interval.

Preparation errors included arrangement of the wrong medication, the wrong measurement, the wrong dose shape, the wrong readiness system, exclusion lapses and readiness of an unordered medication dosage. The error rates in preparation as percentage by dividing the sum of all recorded preparation errors by the sum of the prepared drug doses observed. Information's were communicated as rates and kept as 95% confidence interval.

Blood clumps can form because of IV treatment, and deep vein thrombosis can be extremely unsafe. Clumps get to be stuck in imperative veins and reason tissue harm or passing.

Pharmaceuticals directed intravenously follow up on the body rapidly. Toxicity, symptoms, and unfavorably allergic responses will hence happen quick. A patient on IV prescription ought to be under perception at all times.
Before administration of any IV medications, a health care professional should follow the major six "rights" of medication administration. They are listed as follows:

1. the right patient;
2. the right dose;
3. by the right route;
4. at the right time;
5. with the right medication;
6. Following up with the right documentation.

**Conclusion**

Now and then, an IV medication is given as a "push" or "bolus" dosage with a syringe specifically into the vein. All the more regularly, an IV "line" or peripheral venous catheter (PVC) is embedded for quick and safe access all over the time.

To embed a venous catheter, a needle is embedded into a vein, frequently close to the wrist. A slight thin plastic tube referred a catheter is then pushed over the needle. The needle is uprooted, and the tube remains. Different tubes can be associated with this one with an interfacing "hub" or "tap" that remaining parts outside the body.

At the point when an IV line is embedded an IV "drip" is typically started. A drip is a steady stream of clean fluid from a pack hanging over the patient. The fluid is regularly a saline (salt) arrangement. Different prescriptions can be added to this saline arrangement, and implanted into the blood gradually over the long haul. Infrequently a pump is appended to the IV line and pumps fluid into the catheter in a moderate, steady design.

For patients who are exceptionally sick or who are getting consistent IV treatment for chemotherapy or different reasons, a central line or central venous catheter may be embedded into a vein in the neck or midsection.

In the event that you feel anything bizarre while starting IV treatment, tell the wellbeing proficient treating you. Uneasiness and different sensations may be typical. In any case, they might likewise be an indication of an unfavorably susceptible response, harmfulness, or a muddling of treatment.

**REFERENCES**

13. Ozkan Onal et al. Trendelenburg position does not increase cross-sectional area of the internal jugular vein of the obese patients
15. Sofia Sofroniadou et al. Catheter-related blood stream infections; where are we standing?.
17. Matthew Ellison et al. Regional anesthesia in the parturient with Von willebrand’s disease.
23. Eun Young Han et al. Physical fitness and aerobic capacity of middle-school soccer players in OO Island.
37. Oluwaseyi Bolorunduro et al. Lower Extremity Deep Vein Thrombosis is Associated with Mortality among Patients Hospitalized with Congestive Heart Failure: Results from the Agency for Healthcare Research and Quality’s Nationwide Inpatient Sample. 2013
46. Manuela Stoicescu et al. Diagnosis traps in a rare hematologic disease: Original case report.
49. Tal BurstynCohen et al. New challenges in anticoagulation therapy: Protein S.
53. Ibrahim Natalwala et al. in post-surgical orthopaedic patients process approach. Proceedings of . DVT
54. Friedman N Deborah et al. Randomized Controlled Trial of Short Course Intravenous Therapy for Cellitis and Erysipelas of the Lower Limb . . 2014
56. Malone M et al. Outcomes and cost effectiveness of outpatient parenteral antimicrobial therapy (OPAT) in patients with diabetic foot infection. . OPAT
64. Masakazu Ishii et al. A Cyclooxygenase 2 Gene Polymorphism is a Risk Factor for the Complication of Medication Overuse Headaches in Patients with Migraines. J Neurol Disord . 2015;3: 206
65. Gail Ironson et al. Doctor-Patient Relationship: Active Patient Involvement . . 2015
71. Bouyou Akotet MK et al. Performances of SD Bioline Malaria Ag-P. . 2014


76. Barnett AH et al. Systematic Review and Network Meta-analysis to Compare Dapagliflozin with other Diabetes Medications in Combination with Metformin for Adults with Type 2 Diabetes. Intern Med. 2014;S6: 006


80. Alban Caporossi et al. An Experience Feedback Committee for Improving Medication Process Safety: An Observational Study in a Hospital Pharmacy Department. J Pharma Care Health Sys. 2014;S1:010


82. Inga Joacutena Ingimarsdoacutettir and Gerhard Wikstromlm et al. Life Threatening Acute Heart Failure in Two Young Adults Treated with Antidepressant Medication. J Pharmacovigil. 2014;2:154

83. Edna C. Diacuteaz Sierra et al. Clinical and Behavioral Impact of Pharmaceutical Care Services in Community Pharmacies in Puerto Rico. J Pharma Care Health Sys. 2014;S1:001


102. Sur M Lucia et al. Malignancies Associated with Treatment of Rheumatic Diseases - to be or not to be. J Bioequiv Availab. 2014
106. Badran EF et al. Intravenous Milk Infusion; Rare Medication Error. Pediat Therapeut. 2014;4:201
123. S Mall et al. Using a treatment partner and text messaging to improve adherence to psychotropic medication: a qualitative formative study of service users and caregivers in Cape Town, South Africa. Afr J Psychiatry. 2013
139. Amadeo Pesce et al. Analytical Considerations When Monitoring Pain Medications by LC-MS/MS. J Anal Bioanal Tech, S. 2014;S5: 003
150. Benjamin Boutrel et al. Hypocretin/Orexin Receptor Antagonism and the Promise of Anticraving Medications: Myth or Panacea?. J Addict Res Ther. 2011;S4
