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Fluid Prescribing Post Laparotomies

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Abstract: Introduction: NICE guidelines have highlighted the consequences of IV fluid mismanagement. The main aim of this study was to audit fluid prescribing post laparotomies to identify if fluids were prescribed in accordance to NICE guidelines. Methodology: Retrospective database search of eight specific laparotomy procedures (colectomy right and left, Hartmann's procedure, small bowel resection, perforated ulcer, abdominal perineal resection, anterior resection, pan proctocolectomy, subtotal colectomy) highlighted 29 laparotomies between April 2019 and May 2019. Two of 29 patients had secondary procedures during the same admission, n=27 (patients). Database case notes were reviewed for date of procedure, length of admission, fluid prescribed and amount, nasal gastric tube output, daily bloods results for electrolytes sodium and potassium and operational losses. Results: n=27 based on 27 identified patients between April 2019 - May 2019, 93% (25/27) received IV fluids, only 19% (5/27) received the correct IV fluids in accordance to NICE guidelines, 93% (25/27) who received IV fluids had the correct electrolytes levels (sodium & potassium), 100% (27/27) patients received blood tests (U&E's) for correct electrolytes levels. 0% (0/27) no documentation on operational losses. IV fluids matched nasogastric tube output in 100% (3/3) of the number of patients that had a nasogastric tube in situ. Conclusion: A PubMed database literature review on barriers to safer IV prescribing highlighted educational interventions focused on prescriber knowledge rather than how to execute the prescribing task. This audit suggests IV fluids post laparotomies are not being prescribed consistently in accordance to NICE guidelines. Surgical management plans should be clearer on IV fluids and electrolytes requirements for the following 24 hours after the plan has been initiated. In addition, further teaching and training around IV prescribing is needed together with frequent surgical audits on IV fluid prescribing post-surgery to evaluate improvements.

Keywords: audit, IV Fluid prescribing, laparotomy, NICE guidelines

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