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Diarrhoea in the critically ill – SH*T HAPPENS!

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Altered bowel habit, i.e. constipation and diarrhoea are common in patients that are receiving enteral tube feeding, the causes of which are multifactorial in origin. Bowel protocols that have focused on the prevention of constipation in specific patient groups have been used within the critical care unit at the University Hospital of Wales. The introduction of the invaluable faecal management system (FMS) for the management of diarrhoea and skin integrity, identified there was a significant incidence of diarrhoea, costing £50 K annually (2006–8). As a consequence of this and observation by the dietitian, a formal bowel management protocol was implemented in February 2008, incorporating guidelines for the management of diarrhoea. The aim of this review was to establish the incidence of FMS use, identify factors associated with diarrhoea and establish if the bowel protocol had led to reduction in diarrhoea and FMS use.

All FMS used during a 4-month period (October 2008–January 2009) were identified. Patients notes, feed and medication prescription were retrospectively reviewed, and then proactively reviewed until the FMS removed. Results presented are of 28 FMS used in 25 patients (14 women, 11 men). One patient was excluded due to hospital transfer. There were 30 procedures in total. Twenty two patients had 1 FMS (2 of these patients had same FMS reinserted following displacement) and 3 patients had 2 FMS for separate episodes of diarrhoea.

Documentation was generally poor. The actual insertion procedure was documented in the medical or nursing notes in 9/28 (32%). The presence of the FMS was subsequently documented in the nursing notes but rarely whether the bag was emptied or changed. The volume of diarrhoea was recorded daily for the duration of use in 9/28 (32%). A trial of the cheaper alternative faecal collector (bum bag) prior to the FMS was documented in 16/28 (57%). Forty one stool samples were sent for culture in 23 patients, 33 of which were negative. Negative results were known and available in 9 patients prior to FMS insertion.

Nineteen out of twenty five (76%) patients had been prescribed a laxative as part of the bowel management: 10 senna; 7 lactulose; 2 bisacodyl. Six patients were not prescribed a laxative due to diarrhoea or *C. Difficile* on admission (4), GI bleed (1) and post-surgery (1). Prior to or at the time of insertion of the FMS, diarrhoea was associated with the ongoing prescription and administration of one or more of the following: laxative (15); prokinetic (7); sando k/sando phos (10) and water infusion (6). The FMS were used for a total of 165 days, mean 6 days, range 1–20 days. Twenty FMS were electively removed and 3 patients died with a FMS *in situ*. Incidences included: 3 fell out, 1 pulled out, 1 split, 2 pressure sores and 1 misplaced.

Expenditure on FMS equipment halved during 2008–9 (£25K). However, there is still room for improvement. Improved documentation of procedures and daily monitoring should improve overall quality of patient care. Formalising stool description using the Bristol stool chart should promptly identify the onset of loose stool/diarrhoea. Further education and training of the medical and nursing staff should improve adherence to existing guidelines, and potentially reduce the incidental expenditure on FMS further.