How frequently is a digital rectal examination performed in cases of suspected gastrointestinal bleeding?

Sharma, S.[1] Dhillon, H.[2] Angelica, B.[2] Beswick, L.[1] Dowling, D.[1]

[1]Department of Gastroenterology. University Hospital Geelong, Geelong, Victoria, Australia.

[2]Department of General Medicine. University Hospital Geelong, Geelong, Victoria, Australia

Barwon Health

INTRODUCTION

In cases of suspected gastrointestinal (GI) bleeding, digital rectal examination (DRE) helps clarify the possible aetiology of bleeding as well as the urgency for intervention. It is a component of repeatedly substantiated GI bleeding scores such as the Glasgow Blatchford Score. There is no available literature analysing the frequency of DRE in Australian hospitals in patients presenting with suspected GI bleeding. We reviewed the occurrence of DREs completed as part of initial assessment in patients with suspected GI bleeding at a tertiary hospital in Geelong, Victoria over a three-month period.

METHODS

Retrospective data for individuals ≥18-years of age was acquired from October – December 2018 using the International Classification of Diseases discharge codes (ICD-10-AM) with a discharge diagnosis suggestive of GI bleeding. Data extracted included patient demographics, history of presenting complaint, examination findings, intervention, and eventual diagnosis. Binary logistic regression method was used to predict the likelihood ratios.

RESULTS

112 patients presented with a suspected acute GI bleed in the three-month with a DRE being performed in 78 (70%) patients (figure 1).

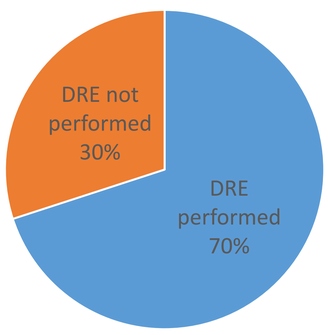

Figure 1: Frequency of DRE performed

64 (57%) were male with mean patient age of 68 years. 47 (42%) were between the ages of 60-79 years. Per-rectal bleeding was the complaint in 63 cases (56%) with dark stools being the second most commonly reported symptom in 21 patients (19%) (figure 2). 16 (14%) patients presented with haemodynamic compromise.

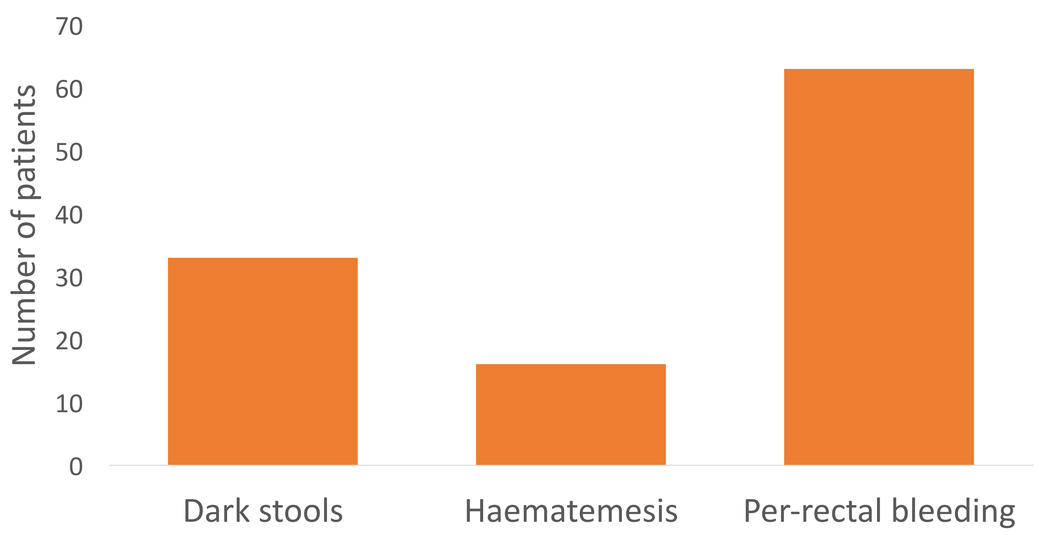

Figure 2: frequency of presenting complaint

62 (55%) had the DRE performed by the emergency clinician with the rest being performed by the specialty clinician. On 8 occasions, this was done >24 hours post admission. It was rarely repeated with only 10 cases of the receiving clinician repeating the DRE.

59 (53%) patients underwent inpatient intervention with 44 (39%) undergoing endoscopy or CT angiogram within 48 hours of admission. 17 (15%) underwent intervention 48 hours' post presentation and 51 (46%) had either no intervention or post discharge intervention.

34 patients (30%) did not have a DRE performed. When omitted, witnessed melena was the stated reason in 6 cases followed by a significant unexplained haemoglobin drop in 5 individuals. Haemodynamic instability was the formally documented reason for omission in one case. The examination was refused by one palliative patient who declined any intervention. In 21 out of the 34 (62%) omitted DREs, no reason was stated.

Absent DRE was not correlated with the age or sex of the patient. The timing of the intervention and length of stay did not vary between those who did and did not have DRE.

Patients who were hemodynamically stable are more likely to have a DRE completed compared to patients who were unstable (OR=6.98, p=0.001, 95% CI=2.20-22.19). Similarly, patients with the presenting complaint of per-rectal bleeding were significantly more likely to have a DRE performed compared to those who presented with hematemesis (OR=8.00, P=0.001, 95% CI 2.292-27.92). Upper gastrointestinal bleeding was the most common eventual diagnosis in the subgroup where DRE was not performed (10 out of 34). This was the diagnosis in only 19 individuals amongst the 78 who did have a DRE at presentation.

CONCLUSION

Despite DRE being an accepted part of the assessment of suspected GI bleeding and an important part of clinical prediction scores, only 70% of the patients presenting to a tertiary centre with suspected GI bleeding had a DRE performed. The main predictors for no DRE was the presence of haemodynamic compromise on arrival and presentation with hematemesis.