Short Research Article

Audit on patients admitted with fresh PR bleeding due to non-anal causes.

Abstract –

Aim – To audit the diagnoses, management and outcome of patients presenting with fresh PR bleeding due to non anal causes.
Place and duration – Emergency Surgical ward – National hospital Sri Lanka – 2019 November to 2020 October.
Methodology – All patients admitted with acute fresh PR bleeding was identified from patient records during this time period and based on final diagnosis, patients with anal causes, post-surgical/ polypectomy patients, known cancer patients and traumatic causes were excluded. Comorbidity, drop of haemoglobin, duration of hospital stay, imaging and colonoscopy findings, management and outcome data were collected from the records with patient consent.
Results – 18 patients were included in the study and there were two [11.1%] patients with small bowel causes and 3 with no identified cause for the bleeding. Colitis was the commonest colonic cause of bleeding among the patients. CT and colonoscopy are complementary to each other in diagnosing the cause for bleeding with good diagnostic yield. Overall patients had good outcome with conservative management and majority of patients [66.7%] were managed without blood transfusion. Drop of haemoglobin was the only factor shown significantly associated with hospital stay [P< 0.003], age, comorbidities did not show such association.
Conclusion – Most of the time fresh bleeding due to colonic causes can be managed conservatively and non-colonic causes often need surgical intervention. Drop of haemoglobin is the main factor that determined the hospital stay

Key Words – Fresh per rectal bleeding, haematochezia, colitis, diverticular bleeding, jejunal diverticula.

Introduction -

Per rectal bleeding is a common presentation among the general surgical emergencies and unless an anorectal cause is identified, often difficult to diagnose and treat. This is study on a cohort of patient with excluding patients with anorectal bleeding and bleeding due to known cancer to study the diagnostic yield, management and outcome. Data was collected from the period of one year from emergency general surgical patients admitted to a surgical ward of National Hospital of Sri Lanka Colombo.

Data collection –

Data obtain retrospectively from patient records and none of the patient sensitive data was collected.

Therefore, no bias on the patient investigation or management is related to the study. Basic demographic data, hospital stay, haemoglobin drop in grams, imaging [CT/ CT angiogram], endoscopy [flexible sigmoidoscopy/colonoscopy] data, management and outcome was collected. Irrespective of long-term outcome, if the patient was discharged home after the index admission due to bleeding, considered a good outcome.

Bleeding due to anal cause, already diagnosed colorectal cancer, post-op/polypectomy bleeding, bleeding due to trauma were excluded from the study.

Analysis –

Data of 18 patients were analysed where majority were males accounting for 61.1%. Three patients [16.7%] had left and/or lower abdominal pain where rest of the patients had painless bleeding. Four patients [22.2%] had more excessive bleeding with passage of clots. Half of the patient had one or more comorbidities and 2 of the patients [11.1%] were on Warfarin.

Table 1.Symptom analysis

Symptom analysis	n	%
Painless fresh PR bleeding	11	61.1
Heavy bleeding with clots	4	22.2
Bleeding with pain	3	16.7

Haemoglobin drop was checked in grams based on pre admission records to post admission levels after 24h.

Table 2.Result of Haemoglobin drop

Hb Drop	n	%
15g or less	6	33.3
16g to 30g	5	27.8
31g to 45g	4	22.2
45g or more	3	16.7

Diagnosis based on CT +/- CT angiogram and endoscopy is shown on following table.

Table 3.Diagnosis based on CT +/- CT angiogram and endoscopy

Diagnosis	CT/ CT angiogram diagnosis	Endoscopy diagnosis	Management
Colitis	3	3	Conservative -2 Blood tr -1
Colitis	Diverticulitis - 1	Colitis - 1	Conservative -1
Colitis	Normal -2	Colitis -1 Proctitis - 1	Conservative - 2
Angiodysplasia	1	1	Blood transfusion -1
Caecal tumour	Caecal mass + Mets - 1	Caecal tumour - 1	Palliative care -1
Diverticular bleed	IMA bleed – 1 Normal - 1	Diverticular bleed – 1 Diverticular bleed - 1	IR embolization - 1 Conservative - 1
Polyp	Normal - 2	Colonic polyp - 2	Polypectomy -2
Rectal carcinoma	Rectal ca - 1	Rectal Ca - 1	Non Em Surgery -1
Small Bowel cause	Jejunal Diverticula -1 Small bowel tumour - 1	Not done Not done	Surgical Resection + Blood Tr - 1 Surgical resection + Blood tr -1
No cause found	Normal - 3	Normal - 3	Conservative -2 Blood Tra - 1

Two patients present with fresh PR bleeding noted to have non colonic causes [11.1%] and in three patients, no cause for the bleeding was identified. In this cohort only three patients needed emergency procedure which included angioembolisation in one patient and small bowel resection in two patients. All other patients which had colonic causes were managed conservatively with or without blood transfusion including the three patients where cause was not found. All patients were discharged home from the index admission except for the patient who was provided with palliative care with the diagnosis of advanced colonic cancer. Majority of the patients accounting for 66.7% was managed without blood transfusion.

There was significant positive association of haemoglobin drop and hospital stay [p< 0.003]. Age and comorbidities failed to show significant association with the duration of hospital stay with a p value of p < 0.39 and p < 0.99 respectively.

Discussion –

Haematochezia is a common presentation of variety of colorectal pathologies including diverticular bleeding, colitis, angiodysplasia, colorectal neoplasms[1]. Haemorrhoids and other anorectal causes, iatrogenic causes like post-surgical and post polypectomy bleeding, post traumatic bleeding are other etiologist which were excluded in this study. Non colonic sites which can be gastro duodenal or small bowel causes are the aetiology in many as 15% of cases [1,2] and in this cohort, 2 patients had small bowel site of bleeding.

Most of the patients particularly when the non-colonic causes are excluded, can be managed conservatively as in 80% or more cases bleeding stops spontaneously [3]. This was evident in this cohort as well and even blood transfusions were given in small proportion of cases [1,2].

CT angiogram play an important role in initial evaluation of acute lower gastrointestinal bleeding which has shown to have sensitivity and specificity around 90% [3,4]. In this cohort CT scan/ CT angiogram helped in making the diagnosis in most cases and was able to diagnose important non colonic site of bleeding from small bowel diverticula and a small bowel tumour.

Although, colonoscopy is an important diagnostic and therapeutic tool, practically the use is not productive in many cases due to factors like inability to achieve good vision, patient stability and comorbidity related factors[5]. In this case series colonoscopy helped in achieving diagnosis of colitis in three cases where two had normal CT scan and one was wrongly diagnosed as diverticulitis in the CT scan.

Age, comorbidities, and severity of bleeding are important factors that influence the length of hospital stay and overall outcome[1,2,6]. In this study only the severity of bleeding assess with haemoglobin drop was noted as a significant predictor of long hospital stay and morbidity.

Conclusions –

Majority of colonic causes can be managed conservatively with blood transfusion in carefully selected patients. CT and colonoscopy are complementary in diagnosing the cause for bleeding, however in few patients cause ca be illusive. Amount of drop in haemoglobin is a significant factor for duration of hospital stay.

Consent – Informed consent was taken from patients prior to discharge from hospital to use non personal data in the study.

References

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