BLEEDING FROM THE RECTUM

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BLEEDING from the anal orifice is a sign which demands investigation. Since the rectum is the terminus of the gastrointestinal tract, blood which emanates therefrom may represent any portion from mouth to perineum. Careful questioning of the patient regarding the character of the bleeding is important, since blood originating from any part of the tract is fairly characteristic of that section. In general, red blood represents bleeding from the cecum downward, and black bleeding (melena) from the mouth through the small intestine. However, exceptions may occur. Truly massive hemorrhage from esophageal varices, hiatus hernia, gastric neoplasm or peptic ulcer may irritate the small and large intestine so that peristalsis will hurry blood to the rectum while it is still bright red. Fortunately, vomiting which occurs in most cases of massive gastric hemorrhage will suggest localization.

Melena

Melena, or tarry stool, represents blood altered by its passage through the small intestine. This form of blood may appear mixed with stool or as sticky, foul smelling, tarry masses. If such blood has come through the upper tract more rapidly than chyme, it may not have been completely changed and may appear dark red or impart a Burgundy wine color to the water in the bowl. Such stool gives a four plus benzidine or guaiac reaction. Iron compounds prescribed for anemia produce a black, tarry stool. Ingestion of beets produces a dark red stool, sometimes assumed to be blood. Table 1 lists the common causes of melena.

Colonic and Rectal Bleeding

Bright red blood usually has its origin in the colon or rectum and careful evaluation of the patient's history serves to establish the source in most cases. Such localization is important. We have seen patients subjected to complete gastrointestinal investigation and exploratory laparotomy for anemia due to hemorrhoidal bleeding. A few minutes spent in determining the character of the bleeding would have saved unnecessary expense and a major operative procedure.

Blood of colonic origin is always *mixed* with stool unless the bleeding is sudden and profuse, in which case it may appear as a mass of clots. Carcinoma, polyps, and ulcerative colitis produce blood that is churned with stool and most patients will volunteer this information if questioned carefully. Large papillary lesions of the cecum or ascending colon may bleed constantly, but

in such small amounts that it escapes the patient's detection. Sudden massive hemorrhage from the colon is usually due to a benign lesion.

Benign or malignant lesions as low as the rectosigmoid most often produce blood mixed with stool but, below this point, it may be described as "on stool." Bleeding from the hemorrhoidal area and anal canal can usually be differentiated by relation to passage of stool and whether or not blood comes from inside or outside the sphincters.

Hemorrhoidal bleeding follows the passage of stool and is described by the patient as "streaks" on the stool, or blood in the bowl. More severe bleeding is in the form of "squirts" or "drips." The entire perineum may be bathed in blood. This is explained by the sudden release of the tamponade effect of the stool on the hemorrhoid at the time of greatest effort and pressure. As the turgid prolapsing hemorrhoids retract, they are stripped by contracting sphincters.

Other sources of bleeding are anal papilla and fissure in ano. These are traumatized by the passage of stool leaving a small amount of blood on the anal margin which is picked up by tissue. Chronic recurrent fissures or anal scars that are epithelialized and therefore inactive often are the seat of minute telangiectases that bleed following the passage of hard stool. This blood is also seen on the tissue and its source is not apparent on casual examination.

Blood which appears on undergarments has its source outside the sphincter. The commonest causes of this type of bleeding are permanently prolapsed hemorrhoids, or rectal mucosa and prolapsed ulcerated anal papillae. An occasional prolapsed polyp may also be responsible for bleeding of this nature.

Other causes of bleeding from the colon may be obscure and almost impossible to locate. Among these are ruptured telangiectases, submucosal infarcts, the per rhexin hemorrhage of hypertensives, the obscure bleeding from diverticulosis, and that associated with hemorrhagic diatheses.

Diagnostic Procedures

Patients with melena as a sign of bleeding should be subjected to complete upper gastrointestinal investigation. Red blood from the rectum, however, should require initial rectal and colonic examination. Anoscopic and proctosigmoidoscopic examination, followed by colon x-rays with double air contrast technic are indicated for those exhibiting blood mixed with stool. If bleeding is of the anorectal type, i. e., follows stool or "on stool," or appears on the tissue, anoscopic and proctosigmoidoscopic examination may be sufficient, provided the cause of bleeding is obvious. If there is any change in bowel habit, no matter how slight, colon x-ray is indicated to eliminate carcinoma. Double air contrast technic should always be employed where blood is mixed with stool (if barium enema is negative), since this may be the only indication of polyp.

Self Observation

A fairly accurate diagnosis can usually be made from the patient's statements prior to examination. Detailed self-observations on the duration, amount,

and frequency of bleeding are common. There is minute accuracy on such points as the relation of bleeding to the passage of stool and whether it is mixed or not. Most patients can describe a rectal prolapse, protruding internal hemorrhoids or a prolapsed hypertrophied anal papilla. Indeed, more often than we suspect, the pathologic condition has been viewed with a mirror. It only remains for the physician to bring out the details of these valuable observations.

The appearance of red blood at the anal orifice has its origin in the majority of instances in the anorectal area and the immediate 20 centimeters above this point. Careful history taking and proctosigmoidoscopic examination will result in an accurate diagnosis in most cases. In others, careful repeated roentgen investigation may be necessary and multiple proctosigmoidoscopic examinations are of definite value.

Table 1

Causes of Melena

Peptic ulcer
Hiatus hernia
Esophageal varices
Meckel's diverticulum
Small bowel tumors
Tumors of stomach
Anomalies of small intestine (with ulceration)
Bleeding gastritis

Table 2

Causes of Bleeding from the Large Intestine

Hemorrhoids	
Carcinoma	
Adenomas (Polyps)	
Ulcerative colitis	
Intussusception	
Obscure origin	Telangiectases
	Diverticulosis
	Hemorrhagic diatheses
	Per rhexin hemorrhage