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WJH mainly publishes articles reporting research results and findings obtained in the field of hepatology and covering a wide range of topics including chronic cholestatic liver diseases, cirrhosis and its complications, clinical alcoholic liver disease, drug induced liver disease autoimmune, fatty liver disease, genetic and pediatric liver diseases, hepatocellular carcinoma, hepatic stellate cells and fibrosis, liver immunology, liver regeneration, hepatic surgery, liver transplantation, biliary tract pathophysiology, non-invasive markers of liver fibrosis, viral hepatitis.

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Rectal varices vs hemorrhoids-diagnosis and management

Zain Majid, Taha Yaseen, Abbas Ali Tasneem, Nasir Hassan Luck

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Abstract

Rectal varices are an uncommon manifestation of portal hypertension. Although hemorrhoids can be seen in cirrhotic patients, distinguishing between rectal varices and hemorrhoids can be challenging. Furthermore, the underlying mechanism and treatment options vary. Hence, the correct identification is of utmost important. Through this letter, we highlight the features of both and listed the distinguishing points between the two etiologies.

Key Words: Rectal varices; Hemorrhoids; Portal hypertension; Cirrhosis; Bleeding; Pain

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Core Tip: Distinguishing rectal varices from hemorrhoids is crucial, as the treatment approaches for each condition differ. Therefore, timely referral to a gastroenterologist is of paramount importance.

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INTRODUCTION

Portal hypertension is a major complication of chronic liver disease and can lead to the development of ascites, hepatic encephalopathy, esophageal varices, or hepatorenal syndrome[1]. The normal hepatic venous pressure gradient ranges between 1 to 5 mmHg; however, when it exceeds 10 mmHg, it is termed clinically significant portal hypertension. While the esophagus is the most common location of varices, ectopic varices can occur throughout the gastrointestinal (GI) tract, though they account for

Table 1 Classification of internal hemorrhoids

Grade	Hemorrhoid characteristics
I	Bulging into the anal canal but do not prolapse
II	Prolapsing during defecation but reduce spontaneously
III	Prolapsing but need manual reduction
IV	Prolapsing but are irreducible

less than 5% of variceal bleeding cases[2]. Ectopic varices are most commonly found in the duodenal bulb, with colorectal varices being relatively rare[3]. The clinical presentation of these varices depends on their location and may manifest as hematemesis, hematochezia, or obscure GI bleeding[3].

RECTAL VARICES

The first citation of rectal varices goes back to 1954. Rectal varices comprise less than 5% cases of variceal-related bleeding in the Western world[4]. They signify dilated portosystemic shunting between the inferior mesenteric system and the internal iliac system[5]. These can occur in both cirrhotic and non-cirrhotic patients[5]. Endoscopy remains the mainstay of diagnosis, while ultrasound doppler or endoscopic ultrasound can also be utilized[6]. Management is challenging due to both the difficulty of identification and the complexity of controlling the bleeding[7]. Initial treatment mirrors that of other variceal bleeds, focusing on hemodynamic stabilization, antibiotic administration, and the use of vasoactive agents [8]. This usually involves the use of sigmoidoscopy with injection sclerotherapy and band ligation, while in refractory cases, angioembolization or transjugular intrahepatic portosystemic shunts may be considered[8].

HEMORRHOIDS

Hemorrhoids are a common anorectal condition caused by the enlargement and displacement of anal cushions due to the destruction of their supporting structures. Various mechanisms have been proposed, with the widely accepted one being the sliding of the anal canal lining[8]. Hemorrhoids can occur either above or below the anal canal, with those above termed internal hemorrhoids and those below called external hemorrhoids[9].

They are evident in patients between the ages of 45 years and 65 years and mainly occur due to raised pressure in the hemorrhoidal plexus. Hemorrhoids occur at three main sites, which include the left lateral, right anterior, and right posterior. While venous drainage is *via* the hemorrhoidal vein into the iliac veins[10]. Hemorrhoids are classified into internal or external hemorrhoids based upon their location in relation to the dentate line. Internal hemorrhoids are subclassified into four grades, as shown in Table 1.

Most patients with internal hemorrhoids present with painless bleeding[9,10], while patients with external hemorrhoids present with bleeding, pain, or prolapse[11]. Treatment of hemorrhoids include high fiber diet, increased water intake, warm sitz bath along with stool softening agents[10].

CONCLUSION

Accurate identification of these overlapping conditions is crucial, as the treatment approaches vary significantly, as outlined in Table 2. We recommend early referral to a specialist or gastroenterologist when management challenges arise.

Table 2 Difference between rectal varices and hemorrhoids

Characteristics	Rectal varices	Hemorrhoids
Extend	Extend beyond 4 cm from anal verge	Less than 4 cm from anal verge
Location	Rectum, anal canal	Anal canal
Effect on digit pressure	Collapse on digital pressure	
Effect on inserting proctoscope	Do not prolapse in proctoscope	Prolapse
Management	EVBL Sclerotherapy	High fiber diet Stool softening agents

Angioembolization	Increased water intake
TIPs	Warm sitz bath

TIP: Transjugular intrahepatic portosystemic shunts.

FOOTNOTES

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