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RECURRENT EPISTAXIS AS AN UNUSUAL PRESENTATION OF EXTRAHEPATIC PORTAL VEIN OBSTRUCTION IN A CHILD: A CASE REPORT

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ABSTRACT

Extrahepatic portal vein obstruction (EHPVO) is a leading cause of portal hypertension in children, most commonly presenting with upper gastrointestinal bleeding due to esophageal varices. However, atypical presentations such as epistaxis are uncommon and may delay diagnosis. We report a 7-year-old male child presenting with recurrent bilateral epistaxis for four days, with a history of similar episodes since early childhood. Clinical examination revealed petechiae and significant splenomegaly. Laboratory evaluation showed severe thrombocytopenia (platelet count: 5,000/mm³) with anemia and normal coagulation parameters. Liver function tests were within normal limits. Radiological imaging demonstrated portal cavernoma, splenomegaly, esophageal varices, and features of portal hypertension consistent with EHPVO. The child was managed with platelet transfusions, antibiotics, and propranolol, resulting in clinical improvement. This case highlights an unusual presentation of EHPVO as epistaxis due to hypersplenism and emphasizes the importance of considering portal hypertension in children presenting with unexplained thrombocytopenia and splenomegaly.

INTRODUCTION

Extrahepatic portal vein obstruction (EHPVO) is one of the most common causes of portal hypertension in children, particularly in developing countries. It results from obstruction of the portal vein leading to increased portal pressure and formation of collateral circulation.

The classical presentation is upper gastrointestinal bleeding due to esophageal varices. Hypersplenism is another common feature, leading to cytopenias such as thrombocytopenia. However, presentation with epistaxis is rare and may lead to diagnostic confusion with primary hematological disorders.

CASE REPORT

A 7-year-old male child presented with recurrent episodes of bleeding from both nostrils for four days. Each episode lasted approximately 5–10 minutes and subsided with local pressure. There was a history of similar episodes since four years of age. There was no history of trauma, nasal picking, hematemesis, melena, or hemoptysis.

On examination, the child was hemodynamically stable. Petechiae were noted over the upper limbs and back. Abdominal examination revealed significant splenomegaly, palpable 7 cm below the left costal margin. The liver was not palpable.

Laboratory investigations revealed severe thrombocytopenia (platelet count: 5,000/mm³), anemia, and near-normal coagulation parameters. Liver function tests were within normal limits. Peripheral smear showed normocytic normochromic anemia with thrombocytopenia.

Ultrasound abdomen revealed splenomegaly with features of portal hypertension. Contrast-enhanced CT scan showed gross splenomegaly, dilated splenic vein, portal cavernoma, esophageal varices, and mild ascites, confirming the diagnosis of EHPVO.

The child was managed with platelet transfusions, intravenous antibiotics, and propranolol therapy. Clinical improvement was noted with no further bleeding episodes, and the patient was referred for further gastroenterological evaluation.

DISCUSSION

EHPVO is characterized by obstruction of the extrahepatic portal vein, resulting in portal hypertension and development of porto-systemic collateral circulation. It is a significant cause of portal hypertension in the pediatric population.

Hypersplenism commonly results in cytopenias, particularly thrombocytopenia, which predisposes to bleeding manifestations. While gastrointestinal bleeding is the most common presentation, epistaxis is a rare manifestation and may lead to misdiagnosis.

In this case, severe thrombocytopenia due to hypersplenism was the underlying cause of recurrent epistaxis. Recognition of associated findings such as splenomegaly is crucial for early diagnosis. Imaging modalities like ultrasound and CT scan play a key role in confirming the diagnosis.

Management includes pharmacological therapy such as beta-blockers to reduce portal pressure, endoscopic management of varices, and surgical interventions in selected cases.

CONCLUSION

Recurrent epistaxis can be an unusual presentation of extrahepatic portal vein obstruction in children. Clinicians should consider portal hypertension in cases of unexplained thrombocytopenia and splenomegaly. Early diagnosis and timely management are essential to prevent complications.

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