manometry showed increased resting anal sphincter pressure (26mm Hg) and absent rectoanal inhibitory reflex (RAIR). Thus, confirming the diagnosis of Hirschsprung's disease with BCS. The child was started on regular rectal wash. She was discharged with a plan for hepatic venous stenting followed by definitive surgery for HD.

Discussion

The patient had Hirschsprung's disease since birth and she developed Budd-Chiari syndrome subsequently at 12 years of age. An extensive literature search did not reveal any similar case. It is highly unlikely that these two diseases are inter-related as one had a onset at birth (congenital disorder) and the other started almost a decade later (likely to be an acquired condition). However, long-standing HD (of 15 years duration) with repeated enterocolitis can give rise to a hypercoagulable state which in turn can produce BCS. Since most cases of HD get operated in early infancy, such late complications due to delayed referral of a symptomatic case have not been documented before. It has been observed that IVC obstruction with or without hepatic vein obstruction may be related to IVC web. In contrast, pure hepatic vein (HV) obstructions are mainly due to hypercoagulable state as coagulation factors are produced in the liver and their concentration is highest in HV.[5] This case had obstruction of hepatic veins and her IVC was patent, thereby suggesting hypercoagulability as a cause of BCS.

The association of total colonic aganglionosis with ileal atresia and congenital thrombophilia due to a mutation in the MTHFR C677T (methylenetetrahydrofolatereductase) gene has been reported. It has been postulated that ileal atresia due to vascular thrombosis in-utero might be responsible for prevention of cranio-caudal migration of neuronal cell from the neural crest, giving rise to total colonic aganglionosis.[6,7] However, in our case the child had classical ano-rectal HD and not total colonic aganglionosis. Though we could not investigate her for hereditary thrombophilia, the temporal correlation of events suggests she might have had acquired thrombophilia due to enterocolitis. Despite lack of reports this case highlights the need for early intervention in HD to prevent such complications.

VIKAS JAIN[1]
UJJAL PODDAR[1]
SHEO KUMAR[2]
SURENDER KUMAR YACHHA[1]
ANSHU SRIVASTAVA[1]

Correspondence: Dr. UjjalPoddar
Departments of Pediatric Gastroenterology[1] and Radiology,[2]
Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS),
Lucknow - 226014, India
Email: ujjalpoddar@hotmail.com

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An uncommon etiology of adrenal enlargement and fever in a patient of cirrhosis diagnosed with EUS guided FNAC

Introduction

We present an interesting case of alcoholic cirrhosis with bilateral adrenal enlargement, presenting with pyrexia of

unknown origin and adrenal insufficiency. Endoscopic ultrasound (EUS) has evolved as a safe and accurate modality for left adrenal FNAC. An EUS guided FNAC of the left adrenal was done, which was suggestive of adrenal histoplasmosis. The patient's hospital course was complicated by coexisting cirrhosis. We briefly discuss adrenal histoplasmosis and advantages of EUS guided adrenal FNAC over an ultrasound or CT guided approach.

Case report

A 35-year-old patient with compensated alcoholic cirrhosis presented with fever for one month. His blood and urine cultures, widal, and peripheral smear for malaria were negative.Chest X-ray and serum iron profile were normal. On admission, his blood pressure was 90/60 mmHg, and biochemistry revealed hyponatremia (120 mEq/L), hyperkalemia (5.5 mEq/L), serum bilirubin 2.0 mg/dl, serum albumin 3.0gm/dl, INR 1.3, and serum cortisol 4.9 µg/dl. A contrast-enhanced abdominal and chest CT showed features of cirrhosis and bilateral adrenal enlargement. EUS showed 3×2.2 cm sized left adrenal with heteroechoic appearance and a maintained outline (**Figure 1**). EUS guided FNAC revealed numerous thin-walled round yeast forms against a necrotic background. These yeast forms were positive for periodic schiff stain and Gomori'smethanaminesilver stain with a morphology consistent with Histoplasma spp. (**Figure 2**). A diagnosis of adrenal insufficiency secondary to histoplasmosis was made and treatment with corticosteroids for adrenal insufficiency and

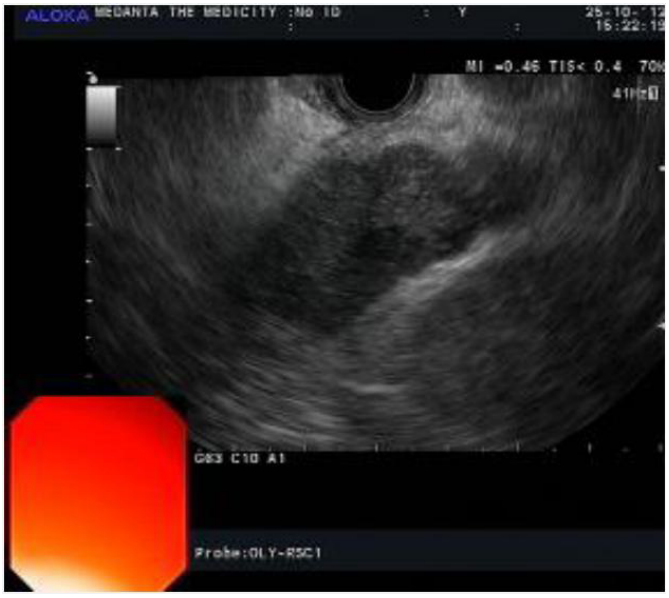

Figure 1: EUS image showing enlarged left adrenal with heterogeneous echotexture and the kidney below it

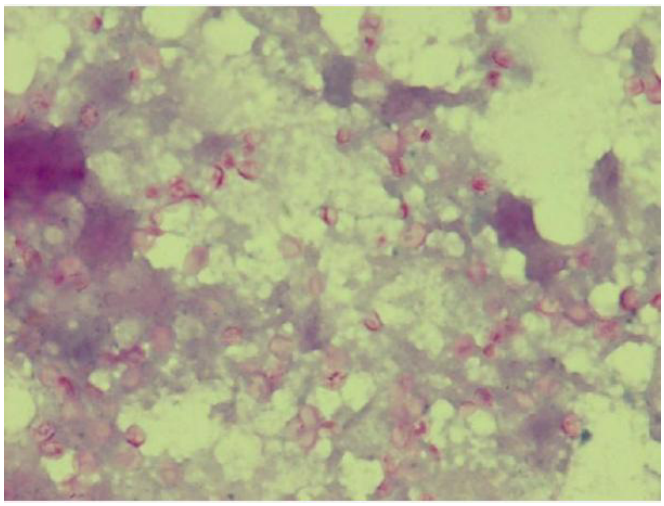

Figure 2: EUS guided adrenal FNAC showing numerous periodic schiff stain positive, thin-walled, round yeast forms with morphology of Histoplasma spp. These yeast forms are of similar size thereby excluding the possibility of cryptococcosis; (PAS 1000x)

liposomal amphotericin B followed by oral itraconazole for histoplasmosis was initiated. The patient's hospital course was complicated by presence of cirrhosis.He developed high gradient ascites, hypoalbuminemia (1.8 gm/dl) and hypotension during hospital stay which improved gradually. Follow-up at 7 months showed his ascites and serum albumin levels (3.6 gm/dl) had improved but the adrenal insufficiency persisted and he is on maintenance steroids.

Discussion

Differential diagnosis of bilateral enlarged adrenals includes neoplastic masses (malignant- metastases, adrenal carcinoma, pheochromocytoma, lymphoma, benign neoplasms like adenoma, congenital adrenal hyperplasia, macronodular adrenal hyperplasia), infections like tuberculosis, histoplasmosis, cryptococcosis, blastomycosis, penicillosis, parasitic cysts, trauma, adrenal hemorrhage, and autoimmune disease (Addison's disease).[1,2] Tissue diagnosis can be undertaken by ultrasound, CT or endosonography (EUS) guided FNAC of adrenal glands. Various approaches have been used for ultrasound and CT guided adrenal sampling including anterior and posterior approach, transhepatic and transpancreatic route. Complications occur in 2.8 to 8.4% of cases and include pneumothorax, pain, perinephric hemorrhage, adrenal hematoma, needle-tract metastasis and pancreatitis. Complications are more common with thick needles and via thetranshepatic route.[3] EUS guided adrenal FNAC has emerged as a safe alternative to ultrasound and CT guided adrenal

FNAC.[4] Left adrenal is identified at the level of celiac trunk as a ''seagull'' shaped structure with the kidney beneath it, with clockwise torque of the echoendoscope. The right adrenal is difficult to negotiate for FNAC as it is deeper and nearer to the inferior vena cava.

Advantages of the EUS guided approach include proximity to the left adrenal as only the posterior stomach wall is traversed during FNAC thus avoiding passage through other organs; real time monitoring of needle passage; it can be completed in the same session with staging; and it is highly accurate for adrenal identification (combined accuracy of three studies being 97%). In contrast, accuracy of ultrasound for adrenal identification is 70% for the left adrenal and 90% for right.[5] Hence, complication ratesare much lower with EUS FNAC than percutaneous approaches.[5]

NARENDRA S CHOUDHARY[1]
RAJESH PURI[1]
HARDIK KOTECHA[1]
RAJAN DUGGAL[2]
SUNIL K MISHRA[3]
NEERAJ SARAF[1]

Correspondence: DrNeerajSaraf
Institutes of Digestive and Hepatobiliary sciences,[1]Histopathology[2] and Endocrinology[3]
Medanta, The Medicity, Gurgaon, Haryana, India
Email: neerajsaraf@hotmail.com

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Gastroscopic findings of Strongyloidiasis causing unresolved upper gastrointestinal bleeding

Introduction

Strongyloides stercolaris is a common soil-transmitted parasite in Thailand and tropical countries. It infects 1.8% of school children in southern Thailand.[1] Disseminated infection or hyperinfection are common in immunocompromised patients such as those on corticosteroid treatment, HIV infection and organ-transplant recipients.[2-5] Upper gastrointestinal bleeding (UGIB) caused by S. stercolaris is an uncommon but severe complication.[2-4] Gastroscopic findings in strongyloidiasis causing UGIB are limited. We report here a case of unresolved UGIB due to S. stercolaris infection with features observed on gastroscopy.

Case report

A 39-year-old woman presented with hematemesis for two weeks. She had been on corticosteroids for Bell's palsy since two months. No history of alcoholism, NSAIDs or liver disease was reported. Physical examination was normal except Cushingoid appearance and mild anemia. Gastroscopy was performed twice but showed only diffuse gastritis and duodenitis. Due to unresolved hematemesis gastroscopy was repeated a third time when it revealed diffuse suppurative ulcers in the stomach and nearly the entire duodenum (**Figures 1 & 2**). Numerous S-shaped, motile worms were detected in the gastric contents (**Figure 3**).

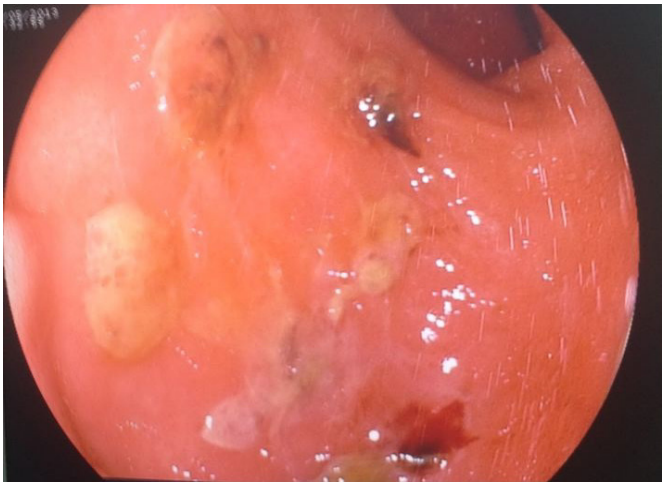

Figure 1: Gastroscopic finding showed diffuse suppurative ulcers in the stomach