Portal hypertension and cholestatic jaundice as a form of presentation of systemic amyloidosis☆

Hipertensión portal e ictericia colestásica como forma de presentación de una amiloidosis sistémica

Systemic amyloidosis is a rare disease, characterised by the extracellular deposition of protein fibrils (amyloid) in different organs, most frequently the kidney, heart and peripheral nervous system.

Liver involvement, which is common in amyloidosis, normally manifests as hepatomegaly and/or slightly raised alkaline phosphatase (ALP) levels; any other clinical expression in the liver is exceptional.

We present the case of an 81-year-old man who presented with constitutional symptoms, beginning two months previously, associated with gradual onset of jaundice and choluria.

His medical history included arterial hypertension, type II diabetes mellitus and mild chronic renal failure. Physical examination showed jaundice and hepatomegaly of 3–4 finger breadths.

Laboratory test results were as follows: creatinine 2, total bilirubin 7.72, direct bilirubin 7.71, serum glutamic oxaloacetic transaminase (SGOT) 137, serum glutamic pyruvic transaminase (SGPT) 142, ALP 1178, gamma glutamyltransferase (GGT) 1961, lactate dehydrogenase (LDH) 246, amylase 169, haemoglobin 8.8, and haematocrit 27. Platelets, white cells and coagulation were within reference ranges. Ca 19–9 levels were 852 mg/dL. Viral serology and non-organ-specific autoantibodies (NOSAs) were negative, immunoglobulins were normal and ferritin was 3649 ng/mL.

Given a suspicion of obstructive jaundice, abdominal ultrasound, contrast-enhanced computed tomography (CT) and magnetic resonance imaging (MRI) were performed, revealing mild ascites, hepatomegaly with no focal lesions, cholelithiasis and normal bile duct diameter. Ultrasound endoscopy and endoscopic retrograde cholangiopancreatography (ERCP) showed normal duct of Wirsung and bile duct, and cholelithiasis.

Nine days after the contrast-enhanced CT, the patient presented severe spikes in blood pressure and a rapidly deteriorating renal function; the symptoms were attributed to acute renal failure due to nephrotoxicity caused by the radiological contrast. The patient responded poorly to conservative treatment and rapidly progressed to oligoanuria in 24 h. He was admitted to a hemodialysis programme.

Diagnostic paracentesis was performed with a serum-ascites albumin gradient (SAAG) > 1.1 g/dL. Given the failure to find any explanation for the biliary obstruction, the patient was diagnosed with ascites of portal origin and started on empirical treatment with steroids. Portal vein catheterization measured a gradient of 8 mmHg. In a subsequent transjugular liver biopsy, a core consistent with extrahepatic biliary obstruction was removed. With no clear diagnosis and a pattern of increasing cholestasis, an exploratory laparotomy was performed in which only hepatomegaly was observed, and a liver wedge biopsy was taken.

Given the suspicion of amyloidosis, immunoelectrophoresis was requested, with results showing increased lambda free light chains and a decreased kappa/lambda ratio. Urine was positive for Bence Jones kappa proteinuria.

The second biopsy confirmed the presence amyloid light-chain deposition in the portal spaces. The bone marrow study ruled out multiple myeloma but pointed to atypical medullary plasmacytosis.

The patient, whose general condition gradually deteriorated, suffered heart failure, anuria and hypotension and also showed intolerance to haemodialysis. He died 42 days after admission.

Systemic amyloidosis with liver involvement can be observed in both primary and secondary form, although it usually causes minimal but delayed liver function abnormalities.

The main symptoms are weight loss, asthenia and abdominal pain. The most common signs include hepatomegaly (present in up to 90% of cases), followed by ascites and, less frequently, purpura and splenomegaly. The most common laboratory abnormality is elevated ALP.[1–7]

Cholestasis as a form of presentation of systemic amyloidosis is associated, according to the literature,[2] with mean survival of four months from diagnosis and is due to abundant amyloid deposits, which make it difficult for bile to pass through the canaliculi and small bile ducts.[8] Our patient presented hepatomegaly and significant hyperbilirubinaemia; values of the latter above 2 mg/dL are usually rare and are associated with a poorer short-term prognosis.[9]

In our patient, we found an SAAG > 1 g/dL, attributable to the associated portal hypertension and confirmed by the finding of a portal pressure gradient of 8 mmHg. The presence of portal hypertension is also rare; its intensity, which appears to be related with the degree of hepatic infiltration, is associated with a poor prognosis.[8]

In our case, the ascites was secondary to the presinusoidal portal hypertension caused by hepatic infiltration of amyloid material. The congestive heart failure and renal failure accompanied by nephrotic syndrome and hypoalbuminaemia clearly were contributing factors.[8–10]

In amyloid light-chain (AL) amyloidosis, the amyloid material is typically deposited in the space of Disse and only occasionally in portal tracts or walls of the liver arterioles. In secondary amyloid A (AA) amyloidosis, deposits are usually located in the walls of the blood vessels around the portal vessels.[1,2]

In systemic amyloidosis with liver involvement, death is generally due to kidney and/or heart failure, but rarely secondary to the liver failure itself.[1]

In conclusion, for a patient with cholestatic jaundice of unclear origin, associated with hepatomegaly and elevated ALP, we would recommend considering a possible diagnosis of systemic amyloidosis with liver involvement, a rare entity

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which usually develops in association with renal insufficiency (proteinuria, nephrotic syndrome) and heart failure.

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Roxanna Jijón Crespín, Maria Luisa Ortiz Sánchez, Angel Vargas Acosta, Jose Antonio Pons, Elena Navarro Noguera, Esther Estrella Diez, Eduardo Sánchez Velasco, Gabriel Carrilero Zaragoza, Ana Pereñíguez López, María Muñoz, Gonzalo Antón, Luis Fernando Carballo

Servicio de Aparato Digestivo, Hospital Virgen de la Arrixaca, Murcia, Spain
E-mail address: roxannajijon@hotmail.es (R. Jijón Crespín).

Ileocolic fistulas after radiotherapy for endometrial carcinoma☆

Fístulas ileocólicas tras radioterapia por carcinoma de endometrio

A 61-year-old woman was examined in outpatients for diarrhoea. Her personal history included total hysterectomy and double adnexectomy for endometrial adenocarcinoma two years previously. During the post-operative period, she had presented symptoms of bowel obstruction due to adhesions that required surgical intervention with adhesiolysis. She subsequently received chemotherapy and radiotherapy (RT). She reported no other surgical history. The patient presented with a six-month history of cramping abdominal pain accompanied by increased bowel movements of 6–7 watery stools daily with defecatory urgency. Colonoscopy was performed which revealed, 15 cm from the anal margin, an ulcerated ileocolic anastomosis, which, in the image, had a surgical appearance (Fig. 1). The scope was advanced a further 30 cm through a loop of small intestine, encountering an abundant flow of liquid content. The colonoscope was withdrawn through this loop and was advanced to the caecum, but no other abnormalities of note were found. In view of these findings, the patient was again questioned and her medical record reviewed, but no history of abdominal bowel surgery could be confirmed. A barium enema was injected and the contrast flowed through a short stenosis, observed at the level of the rectosigmoid junction, in three directions: towards the left colon, along the ileum and from the upper side to end in a blind loop (Fig. 2). The patient was diagnosed with ileocolic fistulas secondary to RT and offered surgical treatment. She opted for conservative therapy, since her symptoms were well controlled by symptomatic medical treatment.

Ileocolic fistulas are rare and most are due to surgical procedures, inflammatory bowel disease or RT. RT for the small intestine and colon can cause lesions such as adhesions, stenosis, ulcers or fistulas. Furthermore, previous surgery may cause loops of the small intestine to be less motile and so enhance the effect of radiation.[1] Although

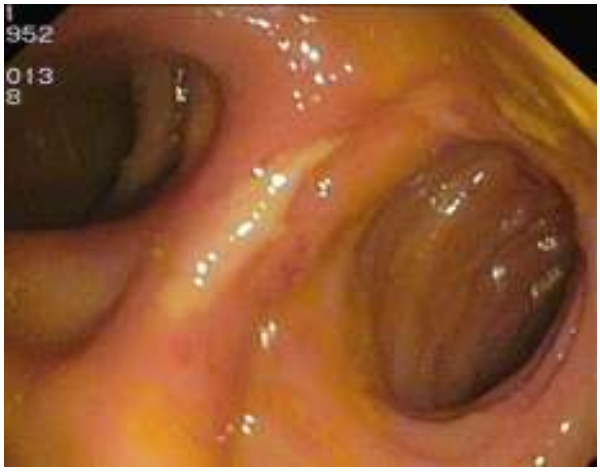

Figure 1 Image of an ileorectal fistula, 15 cm from the anal margin, with an ulcer in one margin.

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