International Journal of Sciences

Research Article Volume 13 – June 2024 (06)

Extensive Hepatocellular Adenoma Causing Dyspeptic Symptoms: Case Report

Felipe A. Paraíso[1], Débora M. C. Rezeck[1], Giovanna Dias J. Souza[1], Enzo Faria Cunha[1], Nadim Isaac Filho[2], Érica Manuela da S. Boa Sorte[2], Amanda P. dos Santos[2], Jéssica S. Bose[2], Paula Andraous Merhi[2], Sara de Freitas Abrão[2], Leonardo Oliveira Alves Borborema Junior[2], Márcia F. da Rocha[3]

[1]Undergraduate student of medicine, Faculdade de Medicina de São Jose Rio Preto – FAMERP, SP, Brazil
[2]Resident in Gastroenterology, Faculdade de Medicina de São Jose Rio Preto – FAMERP, SP, Brazil
[3]*Assistance physician, Gastroenterology Service, Fundação Faculdade de Medicina de São Jose Rio Preto – Funfarme, SP, Brazil*

Abstract: Hepatocellular adenoma is a benign solid hepatic tumor of varying size. **Objective**: To describe the case of a patient taking a combined oral contraceptive who presented with extensive focal points of hepatocellular adenoma causing dyspeptic syndrome and was submitted to surgical treatment. **Conclusion**: Extensive hepatocellular adenoma is uncommon in the general population. However, this paper describes a patient taking a combined oral contraception who developed this symptomatic condition without any other associated risk factors.

Keywords: Hepatocellular Adenoma, Dyspepsia, Contraceptive

Introduction

Hepatocellular adenoma is a rare benign proliferation of hepatocytes that is more common in women in fertile age and normally associated with the use of combined oral contraceptives [1]. This tumor can also occur in men who take anabolic steroids [2] or patients with metabolic disease, such as Von Gierke disease and hemochromatosis [3]. We describe the case of a patient taking a combined oral contraceptive who presented with extensive focal points of hepatocellular adenoma that caused dyspeptic syndrome refractory to conventional treatment.

Case report

A 43-year-old woman taking a combined oral contraceptive complained of postprandial bloating, nausea and pyrosis with a two-year history. The patient reported previous treatment with ranitidine, with no improvement. The total abdominal ultrasonogram revealed circumscribed, hypoechogenic, hepatic, solid nodules, which were larger in segments II, III, VI, measuring 3.5 cm x 3.8 cm x 3.6 cm; 12.9 cm x 10.4 cm x 10 cm; 4.9 cm x 2.7 cm x 3.7 cm. The abdominal computed tomogram (CT) revealed multiple sparse hypervascularized nodular formations throughout the hepatic parenchyma, with small permeating calcifications and central hypoattenuating areas measuring approximately 12.3 cm x 9 cm located in segment II. The patient history revealed type II diabetes mellitus, systemic arterial hypertension and dyslipidemia. The patient reported intentional weight loss of three kg in one month, reported no changes in intestinal habits and no use of alcoholic beverages. The abdominal physical examination revealed a globose abdomen with normal percussion and no palpable masses or visceromegaly. The patient was in a good general state, with no abnormalities in other systems. Hemoglobin: 12 g/dL; leukocytes: 12,730 mm^3; platelets: 415,000 mm^3; ALT: 9 U/L: AST: 20 U/L; albumin: 4.29 g/dL; prothrombin time: INR 1.08; alfa-fetoprotein: 2.44 ng/mL; negative blood results for hepatitis B and C. Nuclear magnetic resonance imaging of the abdomen revealed a circumscribed mass in the left flank in contact with the gastric fundus measuring 13 cm x 12.5 cm x 10.8 cm. CT-guided hepatic biopsy revealed hepatic adenoma. The patient was submitted to surgical resection of the tumor via left lateral hepatectomy and nodulectomy of segment VI, with no complications.

Published at: http://www.ijsciences.com/pub/issue/2024-06/
DOI: 10.18483/ijSci.2764; Online ISSN: 2305-3925; Print ISSN: 2410-4477

Felipe A. Paraíso, Débora M. C. Rezeck, Giovanna Dias J. Souza, Enzo Faria Cunha, Márcia F. da Rocha (Correspondence)
+

Pathology

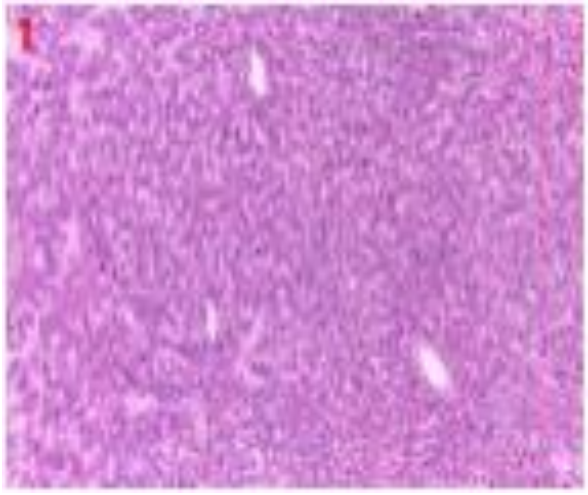

Image 1: Hepatocellular adenoma with no atypical cells (hematoxylin and eosin, magnification: 100 x)

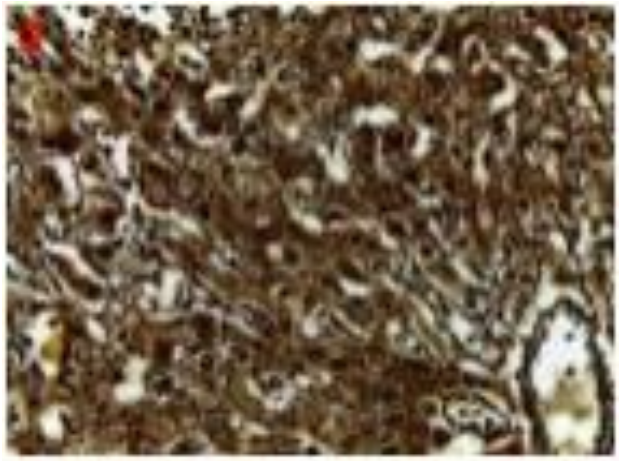

Image 2: Hepatocellular adenoma, atypical cells (reticulin, magnification: 400 x)

Immunohistochemical analysis: The study revealed the absence of the nuclear expression of beta-catenin. The set of findings indicated hepatic adenoma, but without sufficient criteria for the classification of a specific subtype (unclassifiable).

Discussion

Hepatocellular adenoma is an uncommon, benign, solid tumor of varying size. However, this report describes the case of a patient taking a combined oral contraceptive who developed a symptomatic condition with no other associated risk factors. Hepatocellular adenoma generally manifests as a solitary nodule, with multiple nodules occurring in 30 to 40% of cases. Microscopically, there is a regular proliferation of hepatocytes of normal appearance with no significant atypia. In the physiopathology, the main risk factor is the use of combined oral contraceptives. However, individuals taking anabolic steroids and those with genetic syndromes, such as Von Gierke disease or hemochromatosis, also have an increased risk of hepatocellular adenoma [1,2]. Clinically, the condition is generally asymptomatic. When symptomatic, however, abdominal pain in the upper right quadrant is the main complaint. Acute abdomen occurs in 12% of cases, normally resulting from spontaneous rupture and abdominal bleeding. Acute abdomen can occur in up to 20% of cases involving tumors large than 5 cm [5,6]. Diagnosis is achieved through laboratory and imaging exams, such as computed tomography and magnetic resonance. In CT without contrast, the tumor is generally seen as a well demarcated hypodense lesion. With contrast CT, the tumor has transitory hyperuptake in the arterial phase, becomes heterogeneously hypodense in the portal phase and becomes hypodense with a hypodense capsule in the equilibrium phase. With NMR, the tumor appears as hypointense to hyperintense lesions in T1 [6,7,8]. Surgical treatment is reserved for cases in which the adenoma is larger than 5 cm and produces importance symptoms of compression or intra-abdominal bleeding in cases of rupture.

References

1. Rooks JB, Ory HW, Ishak KG, Strauss LT, Greenspan JR, Hill AP, Tyler CW Jr. Epidemiology of hepatocellular adenoma. The role of oral contraceptive use. JAMA. 1979 Aug 17;242(7):644-8
2. Socas L, Zumbado M, Perez-Luzardo O, et al. Hepatocellular adenomas associated with anabolic steroid use in bodybuilders: a report of two cases and review of literature. Br J Sports Med 2005;39:e27
3. Buell JF, Tranchart H, Cannon R, et al. Management of benign hepatic tumors. Surg Clin North Am 2010;4:719–35
4. Weimann A, Ringe B, Klempnauer J et al. Benign liver tumors: differential diagnosis and indications for surgery. World J Surg 1997; 21:983-991
5. Nagorney DM. Benign hepatic tumors: focal nodular hyperplasia and hepatocellular adenoma. World J Surg 1995; 19:13-18
6. Martinez-Mier G, Enriquez De los Santos H, Grube-Pagola P. Large hepatic adenoma in a 21-year-old male. BMJ Case Rep. 2013 Dec 4;2013:bcr2013202111. doi: 10.1136/bcr-2013-202111
7. Valls C, Figueras J, Jaurrieta E. Diagnóstico por imagen del nódulo hepático: una aproximación por escenarios clínicos. Cir Esp 2001; 69:490-497
8. PALOMO SANCHEZ, J. C. et al. Hepatocellular adenoma. Oncología (Barc.) [online]. 2004, vol.27, n.5 [cited 2024-01-10], pp.45-48