

CASE REPORT

Hepatic Ectopy of the Adrenal Gland in a Black African Woman: Diagnostic and Therapeutic Aspects

Kouamé B, Kramo N, Coulibaly I, Drabo A, Fofana A, Konan K, Amangoua EJV, Konan PG, Dékou A

Department of Urology Abidjan-Cocody University Hospital (Côte d'Ivoire).

Received: 07 September 2025 Accepted: 22 September 2025 Published: 29 September 2025 Corresponding Author: Kouamé B, Department of Urology Abidjan-Cocody University Hospital (Côte d'Ivoire).

1. Introduction

Accessory liver lobe has been little described in the literature, as it is relatively rare [1]. Ectopic liver tissue has been described at a variety of locations, including the gallbladder, liver ligaments, diaphragm, spleen, umbilical cord, pancreas, adrenal glands, omentum and even the oesophagus and thoracic cavity[2]. To our knowledge, in the African context, this is a case that has not yet been observed.

We report the first observation of such a case in the black race. In this paper, we describe the diagnostic circumstances and therapeutic approach; followed by a review of the literature.

2. Observation

Mrs D.M., aged 43, G2P2, came to the clinic with an abdominal pain that had been felt for a month. The pain, which originated on the left side, was paroxysmal and radiated to the left lower limb, with no digestive problems. The patient mentioned no

medical history of any kind. On arrival, Mrs. D.M. was found to be in good general condition with stable haemodynamic parameters. The laboratory work-up showed a cortisol level of 73 ng/ml at 8 o'clock, and the blood count showed mild anaemia of 11.6 g/dl. The rest of the laboratory work-up was normal. The abdominal CT revealed a left adrenal tissue mass measuring 71 mm×58 mm with micro-calcification and an intense increase in volume after injecting the contrast material. The mass was in contact with the upper part of the left kidney with no evidence of invasion.

We concluded that the patient had a left adrenal tumour and recommended a left adrenalectomy.

We requested a preoperative work-up, which was normal. The patient underwent a left adrenalectomy by lumbotomy. Intraoperatively, we found a reddish mass taking up the entire left adrenal gland with a soft, roughly oval consistency. The adrenalectomy

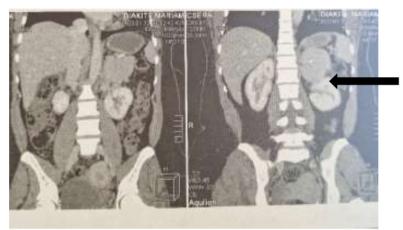


Figure 1. Abdominal CT scan of a frontal section showing a left adrenal tumour.

Citation: Kouamé B , Kramo N, Coulibaly I, *et al.* Hepatic Ectopy of the Adrenal Gland in a Black African Woman: Diagnostic and Therapeutic Aspects. Archives of Urology 2025;7(2): 41-43.

©The Author(s) 2025. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

was performed in monobloc. The post-operative period was marked by haemodynamic instability, for which she spent three days in intensive care. The histological analysis of the surgical specimen revealed an appearance suggestive of hepatic ectopy of the left adrenal gland. The patient resumed her daily activities and 15 months later, gave birth to a child.

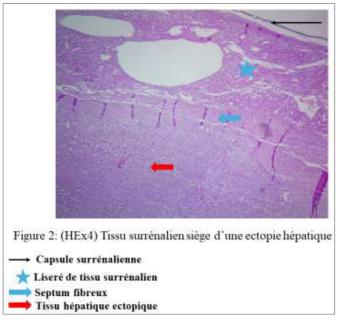


Figure 2. (HEx4) Tissue surrenalien siege d'une ectopie hepatique

3. Comments

Ectopic liver is one of the organogenetic anomalies. The hepatic embryo arises from the endoblast, like several others (thyroid, oesophagus, etc.). Residual hepatic spots may be found all along the endoblastic layer; including the adrenal gland.

Various locations have been reported, as have other congenital anomalies associated with liver ectopy. In the umbilicus, the association with congenital umbilical hernia has been described by Charbonnel et al. [3]. In the thorax, ectopic liver has been found in the left hemithorax in association with diaphragmatic hernia [4]. To the best of our knowledge, our case is the first in the black race.

Complications, although rare, have been described in relation to these accessory hepatic nodules, including complications due to a compression of neighbouring structures, especially when an accessory hepatic lobe is involved; probably because of the volume of tissue. However, we must highlight the propensity for carcinogenesis above all. Hepatocellular carcinomas have been described in the ectopic liver tissue [5,6]. According to the literature, adrenal tumours larger than 3 cm are suspected of malignancy [7]. Preoperative imaging should be used to assess the possibility of surgical removal of this tumour and to look for distant metastases from the outset. A combination of computed tomography (CT), magnetic resonance imaging (MRI) and angiography is useful to assess

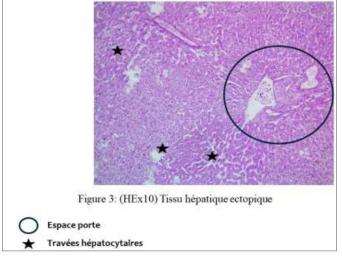


Figure 3. (HEx10) Tissue hepatique ectopique

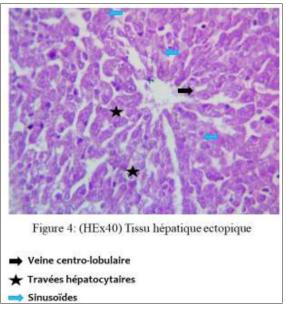


Figure 4. (HEx40) Tissue hepatique ectopique

the tumour and its extent [7-8]. Angiography and MRI were not necessary in the case of our patient, since the clinical and CT data was clearly expressive. In our case, there was no cancer.

In most cases, ectopic liver lobe is discovered unexpectedly during laparoscopy, laparotomy or autopsy [9] in the form of a mass during imaging: ultrasound, scans [10]. The treatment approach to adopt in case of ectopic adrenal gland liver remains surgical removal in monobloc. This is what we followed in our case. The importance of histological examination must be emphasised here. Only this examination can confirm the hepatic nature of the mass adjacent to the adrenal gland.

4. Conclusion

We strongly recommend systematic anatomo pathological examination to avoid unfortunate errors regarding the actual nature of the tissue grafted onto the adrenal gland.

This finding is the first description in the black race and in sub-Saharan Africa.

5. References

- 1. Lundy J, Johnson E, Edwards K, Riviera D: Laparoscopic management of gallbladder-associated ectopic liver. *JSLS*. 2005; 9(4):485-487.
- 2. Sakarya A, Erhan Y, Aydede H, Kara E, Ilgoul O, Ciftdogan C: Ectopic liver (choristoma) associated with the gallbladder encountered during laparoscopic cholecystectomy: a case report. *Surg Endosc.* 2002; 16(7): 1106
- 3. Charbonnel E, Van Kote G, Godeffroy Y et al. : Foie surnumé- Charbonnel E, Van Kote G, Godeffroy

Y et al.: Foie surnumé- E, Van Kote G, Godeffroy Y et al.: Foie surnuméraire. Un cas de localisation particulière dans l'omphalocele. *Chir Pediatr*. 1988; **29**:330-335.

- Bedii Salman A: Left-sided congenital diaphragmatic hernia associated with intrathoracic ectopic liver lobule. Eur J Cardiothorac Surg. 2002; 21(3):558-560.
- 5. Leone N, De Paolis P, Carrera M, Carucci P, Masso A, David E et al.: Ectopic liver and hepatocarcinogenesis: report of three cases with four years' follow-up. *Eur J Gastroenterol Hepatol*. 2004; 16(8):727-729.
- 6. Caygill CP, Gatenby PA: Ectopic liver an hepatocarcinogenesis. *Eur J Gastroenterol Hepatol*. 2004; 16(8):731-735.
- 7. 7-Welsh SJ, Khan S. Radiological localizing techniques in adrenal tumors, Minerva Endocrinol 2009; 34 (2): 161 -9.
- 8. 8- Aancès C, Comparo P, Quenet F, Durand X, Culine S, Sèbe P, et al. Histoire naturelle et prise en charge des sarcomes du retroperitoine: état des lieux par le comité de l'association française d'urologie sous-comité organes génitaux externes. Prog Urol 2011;21:441-7.
- 9. 9-Fellbaum C, Beham A, Schmid C: [Isolated accessory liver (hepar succenturium) at the neck of the gallbladder. Case report with few review of the literature]. Wien Klin Wochemchr. 1987; 99(23):825-827.
- 10. 10. Hamdani SD, Baron RL: Ectopic liver simulating a mass in the gallbladder wall: imaging finding. *AJR*. *Am J Roentgenol*.1994; 162(3):647-648.