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A True Ectopic, Locally Vascularized Spleen : a Very Rare Anomaly

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Key words. Ectopic spleen ; spleen.

Abstract. In contrast to a wandering or ectopic spleen which is vascularized by the original splenic vessels this case describes a true ectopic, locally vascularized spleen in the pelvis. To our knowledge this anomaly has never been described in the literature before.

A 51-year-old male patient presented with a rectal tumour 11 cm from the margo ani. During clinical staging, CT of the abdomen revealed a well-circumscribed polylobular soft-tissue mass ($10 \times 4.5 \times 4.5$ cm) localised on the cranial side of the bladder (Fig. 1a and Fig. 1b). Furthermore, this mass resembled the spleen, which was absent from its normal position. The patient had no relevant medical history. Clinical examination of the obese patient was normal. Complete blood count, liver function tests and renal function tests were normal. CEA was 1,2 ng/ml. According to the American Joint Committee on Cancer, the rectal tumour was staged as G2, cT2N0M0.

The patient was scheduled for an anterior resection. Peroperatively, the unique spleen was localised retroperitoneally and fixed on the cranial side of the bladder. The blood supply consisted of numerous small arteries and veins connected to the pelvic vessels. In order to achieve a safe and oncological resection of the rectum, it was mandatory to resect the spleen first. Inspection of the other compartments of the abdomen revealed no other accessory spleens nor did it show a wandering spleen. Pre-operatively, the platelet count was 371×10^3/microL and increased postoperatively from 284×10^3/microL on day one to 668×10^3/microL on day seven.

A wandering or ectopic spleen is rare with a reported incidence of less than 0.5% in several large series of splenectomies. Wandering spleens are vascularized by the original splenic vessels and have a normal shape and

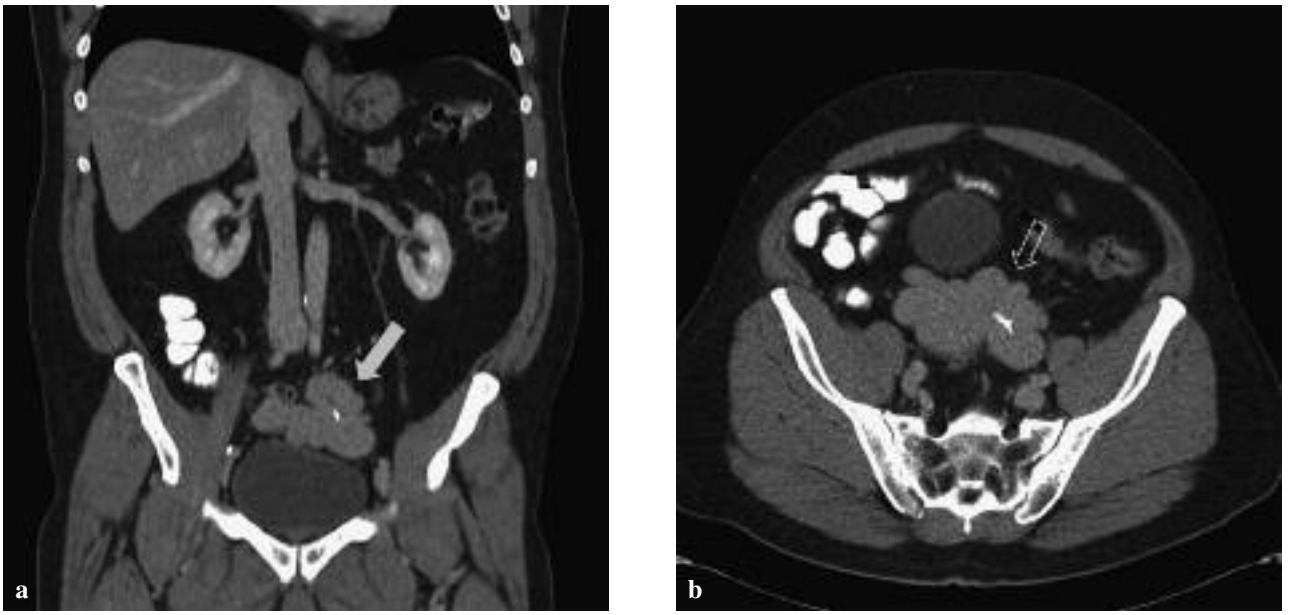

Fig. 1
Abdominal CT : True ectopic spleen in the pelvis (arrows). .

form. They are usually detected incidentally as an abdominal or pelvic mass and are mainly found in children and women of 20-40 years of age (1-3, 5). Failure of the development of the gastrosplenic and splenorenal ligament are the causes in the congenital form. Laxity of the ligaments due to abdominal wall laxity, the hormonal effect of pregnancy and splenomegaly are the main causes in the acquired form.

In contrast to a wandering spleen, the vascular supply in this patient originated from local vessels to the spleen's ectopic location. The spleen was of normal size and consisted of morphologically normal spleen tissue with foetal lobulation still present. The weight of the resected spleen was 145 gram. Accessory spleens are possible in the pelvis, although they measure about 1-3 cm in diameter and derive their blood supply from a branch of the splenic artery and drain into the splenic vein (1, 4-6).

To our knowledge this report is the first in the literature that describes a true ectopic, locally vascularized spleen in the pelvis.

References

1. Gayer G., Zissin R., Apter S. *et al.* CT findings in congenital anomalies of the spleen. *Br J Radiol*, 2001, **74** : 767-772.
2. Ben Ely A., Zissin R., Copel L. *et al.* The wandering spleen : CT findings and possible pitfalls in diagnosis. *Clin Radiol*, 2006, **61** : 954-958.
3. Karmazyn B., Steinberg R., Gayer G. *et al.* Wandering spleen – the challenge of ultrasound diagnosis : a report of 7 cases. *J Clin Ultrasound*, 2005, **33** : 433-438.
4. Grinbaum R., Zamir O., Fiels S. *et al.* Torsion of an accessory spleen. *Abdom Imaging*, 2006, **31** : 110-112.
4. Vural M., Kacar S., Kosar U. *et al.* Symptomatic wandering accessory spleen in the pelvis : sonographic findings. *J Clin ultrasound*, 1999, **27** : 534-536.
5. Üngör B., Malas M. A., Sulak O. *et al.* Development of the spleen during the foetal period. *Surg Radiol Anat*, 2007, **29** : 543-550.

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