Case	(410) The impostor. pitfalls in urachal anomalies.
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CASE PRESENTATION

An 87-year-old woman was referred to the emergency department with epigastric pain of two weeks duration. Physical examination revealed a temperature of 37.8°C and umbilical discharge with periumbilical erythema.

Laboratory tests revealed a Creactive-protein level of 150 mg/dL and leucocytosis of 13.000/mm3 with 79% neutrophils. Computed tomography (CT) was performed owing to diagnostic suspicion of complicated diverticulitis.

CT depicted an intraperitoneal hypoattenuating fluid collection with rim enhancement at the medium third of the infra-umbilical midline. Although there was an asymmetrical thickening of the anterosuperior bladder wall without a distinct plane of cleavage in between, no comunication either with the bladder dome or umbilicus was demonstrated.

Surrounding periumbilical fat stranding suggested infection (Panel A).

DISCUSSION

The theoretical location of the lesion along the course of the urachus between the bladder and the umbilicus aroused suspicion of a complicated urachal remnant. However, underlying malignancy could not be ruled out because of the patient´s age.

Congenital urachal anomalies derive from the absence of obliteration of the urachal duct in fetal life. They remain undiagnosed until developing complications generally throughout childhood. According to which end of the urachal remnant failed to obliterate, these anomalies are classified in four types.

Patent urachus is the most frequent abnormality. Nonetheless, as the lesion in question seemed to have both bladder and umbilical ends obliterated, urachal cyst was reported. Besides, focal thickening of the bladder dome could have been consistent with a vesicourachal diverticulum despite not having demonstrated clear communication amongst both structures.

The patient was hospitalized with antibiotic therapy and surgical drainage was carried out. Eight months later, a follow-up CT showed a fibrotic band extending upward from the bladder dome towards the umbilicus without trace of the collection, but bladder wall thickening persisted (Panel B). When comparing with CT images from 2012, neither evidence of a congenital urachal anomaly nor bladder dome thickening were found then (Panel C).

Hence, the final diagnosis was thought to be a thickening of the superiorbladder wall secondary to a probable urothelial carcinoma. However, the patient passed away from an aortic dissection.

CONCLUSION

Urachal anomalies are incidental findings whose prevalence is increasing due to crosssectional imaging. They are asymptomatic unless reaching a large size or becoming infected.

However, urachal remnants may mimic multiple entities such as neoplasms from other organs. Likewise, other diseases can mimic urachal anomalies at imaging. Therefore, differentiating these simulators from urachal anomalies is crucial to establish an adequate treatment.

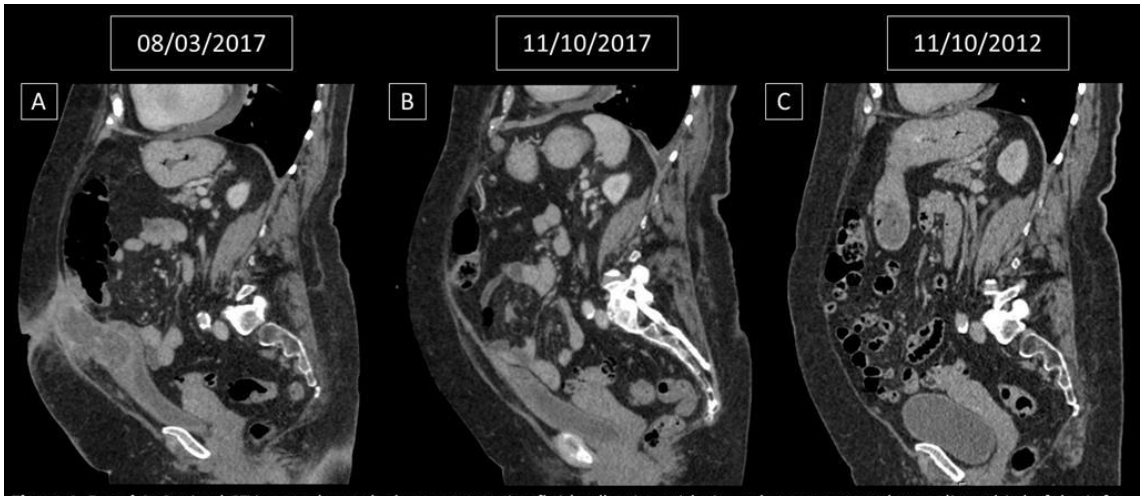

Figure 1. Panel A. Sagittal CT image showed a hypoattenuating fluid collection with rim enhancement at the medium third of the infra-umbilical midline. There was an asymmetrical thickening of the anterosuperior bladder wall as well. Surrounding periumbilical fat stranding suggested infection. **Panel B.** Follow-up sagittal CT image depicted a fibrotic band extending upward from the bladder dome towards the umbilicus without trace of the collection, but bladder wall thickening persisted. **Panel C.** In previous sagittal CT images neither evidence of a congenital urachal anomaly nor bladder dome thickening were found.

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