

## Right adrenal cystic mature teratoma: Masquerading as high density mass

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FIG. 1.

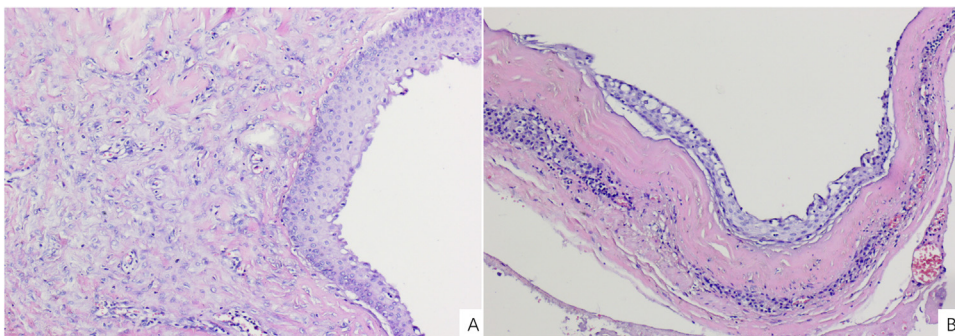


FIG. 2.

### CASE PRESENTATION

**A** 44-year-old woman was admitted to our hospital with the chief complaint of a right adrenal mass that had been previously identified by computed tomography (CT) during a routine health examination. Blood pressure, hormone levels, and routine laboratory test findings were normal. Physical examination findings were unremarkable. There was no history suggestive of any adrenal dysfunction or family history related to familial syndromes. Axial non-contrast enhanced CT through the abdomen showed a 4×3.5 cm mass with a clear margin and uniform high density in the right adrenal gland region (Fig. 1A), at a CT value of approximately 82 Hu, the right adrenal gland was compressed. Enhanced CT revealed the mass without reinforcement (Fig. 1B, C). Laparoscopic surgery removal was planned. Microscopic examination revealed a cystic cavity lined with respiratory epithelium and fibrous connective tissue with chronic inflammatory cells (Fig. 2A, B). The pathological features of the mass supported a diagnosis of cystic

mature teratoma. The patient recovered well without any postoperative complications.

Primary retroperitoneal teratoma is extremely rare, accounting for about 1% of all primary teratomas. Teratomas of the adrenal gland are extremely rare. Adrenal teratomas account for 0.13% of adrenal teratomas.<sup>1</sup> The characteristic imaging findings of mature teratomas are a fat-containing mass with heterogeneous density/signal, fat-fluid level or calcification. The CT and MRI have high reliability in fat detection.<sup>2</sup> There was no fat or calcification in our case with a rare radiographic finding of high density on CT plain, which has not been reported so far. The differential diagnosis of adrenal teratoma includes other lipomatous masses which arising primarily from the adrenal gland such as lipoma, angiomyolipoma, myelolipoma, liposarcoma, pheochromocytoma.<sup>2</sup> The imaging features of adrenal teratoma vary with the composition of the mass, so preoperative diagnosis is difficult.<sup>3</sup> Therefore, the final diagnosis is mainly dependent on pathological examination. Surgical excision is the method of choice for

diagnosis as well as treatment of the mature teratoma. The main surgical method is laparoscopy. A close follow-up after surgery is recommended.<sup>1</sup>

#### DECLARATION OF COMPETING INTEREST

All authors have no conflict of interest and grant to declare.

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