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(CASE REPORT)

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Cystic dysplasia of the testis: A Case Report

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Abstract

Cystic dysplasia of the testis is a rare congenital anomaly. It presents a diagnostic.

Challenge to the physician and should be distinguished from malignant lesions. We herewith present a 29-year-old man who presented with right scrotal swelling and a history of right renal agenesis. Detailed investigations, including ultrasound and magnetic resonance imaging, helped establish the diagnosis of cystic dysplasia. To the best of our knowledge, our case is one of the first cases of cystic dysplasia of the Rete testis in the literature, which presented as scrotal swelling with associated renal anomalies.

Keywords: Adult; Renal; Dysplasia; Rete Testis

1. Introduction

Cystic dysplasia of the testis is a rare congenital anomaly representing a diagnostically challenging condition.[1] Moreover, it must be distinguished from malignant lesions.2 We are herewith reporting the diagnostic ultrasound (US) and magnetic resonance imaging (MRI) features of cystic dysplasia of the rete testis to increase awareness of the disorder.

2. Case report

A 43-year-old male presented with right scrotal swelling and pain. US scrotal examination showed an enlarged right testis measuring about 4.5x2.3x3cm, with heterogeneous multicystic intratesticular lesions and calcifications. The left testis showed average size, shape, and echotexture with no focal lesion. US examination of the abdomen showed an absent right kidney. In an MRI study, the lesion showed cystic changes manifested by low and high signal intensities on short and long TE sequences, respectively, with no contrast uptake on the postcontrast series.

Tumor markers were measured. Human chorionic gonadotrophin (HCG) was negative. The serum alfafetoprotein level was normal, which was concomitant with benign neoplasm. These findings were consistent with the diagnosis of cystic dysplasia of the rete testis.

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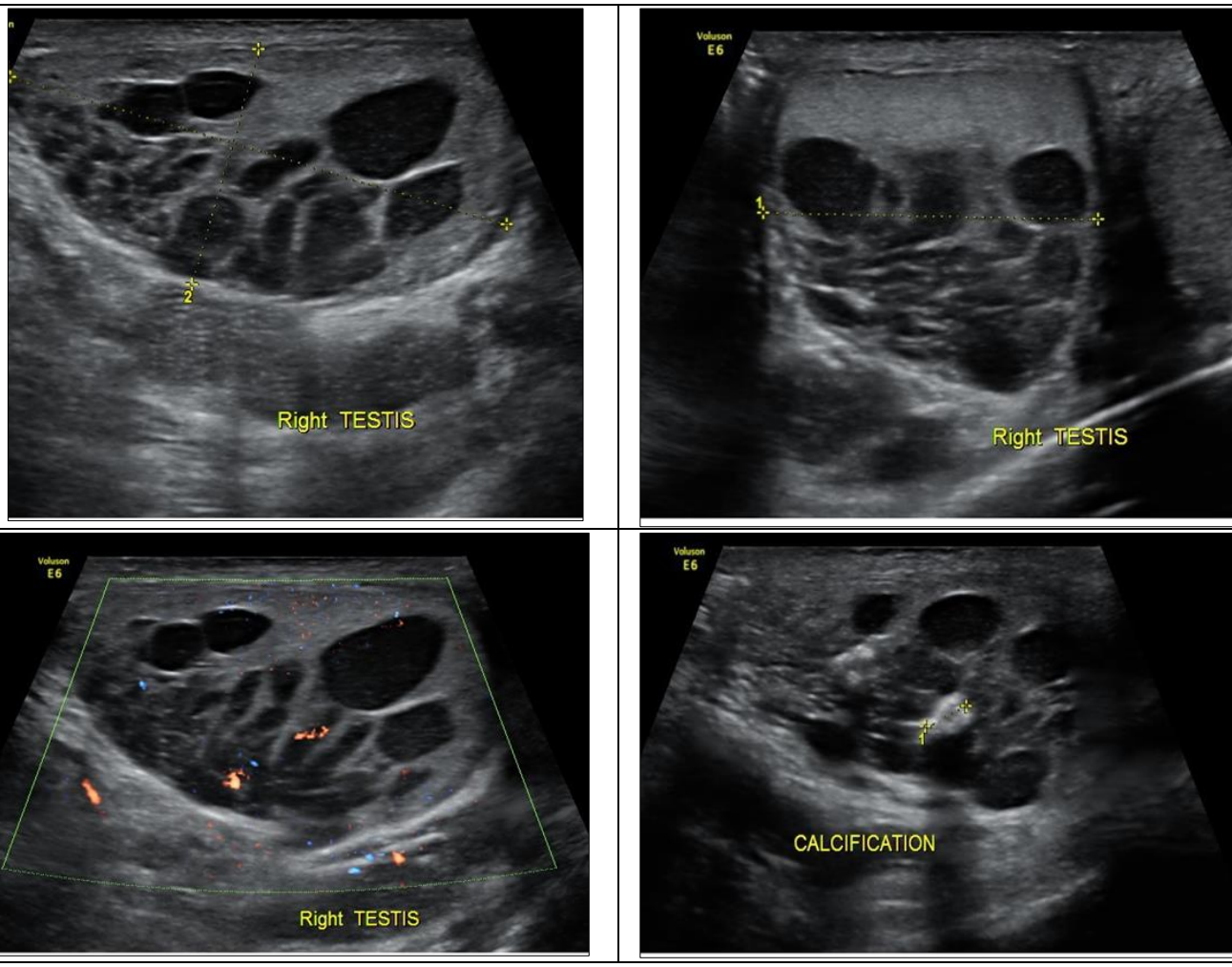
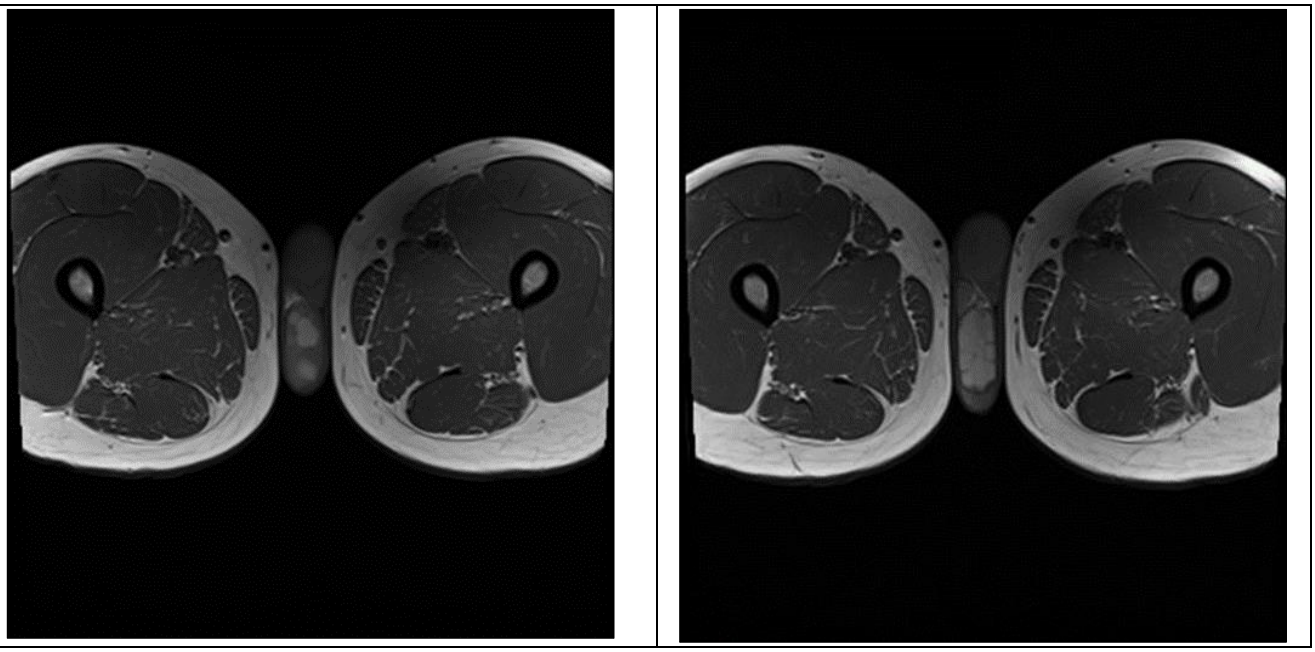


Figure 1 Ultrasound images showed an enlarged right testis with heterogeneous multicystic intratesticular lesions with calcifications.



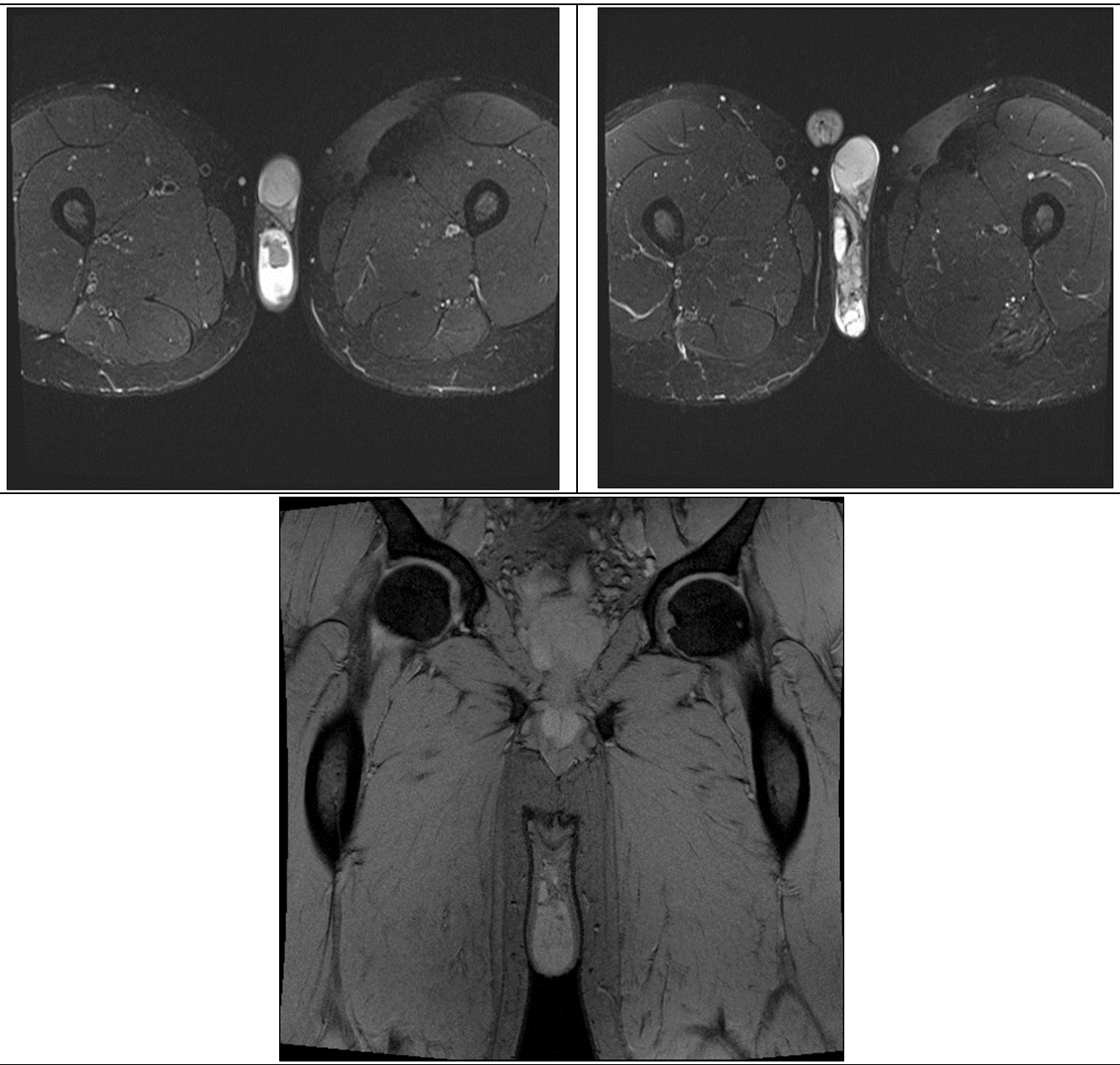


Figure 2 MRI axial and coronal images showed cystic changes manifested by low and high signal intensities on short and long TE sequences, respectively, with no contrast uptake on postcontrast series

3. Discussion

Cystic dysplasia of the testis is a rare congenital anomaly that results in numerous irregularly shaped cystic spaces in the mediastinum testis.3 In the literature, this lesion is often associated with ipsilateral urogenital lesions, such as renal agenesis or multicystic dysplasia of the kidney, in order of frequency. The common embryologic origin of both organs explains the pathogenesis.[4]

The clinical presentation of such a disorder usually occurs in the pediatric age group as an asymptomatic scrotal swelling that can mimic testicular tumors.[3] Our case presented as an inguinal swelling with ipsilateral renal agenesis.

3.1. The differential diagnosis includes:

- testicular teratoma
- epidermoid cyst
- juvenile granulosa cell tumor–gonadal stromal tumor
- cystic lymphangioma.[5]

The age of the patient at presentation, examination features, tumor markers, and sonographic appearance may assist in making a presumptive and occasionally definitive diagnosis pre-operatively. 5

Based on the findings of these tests, we put cystic dysplasia on top of the differential diagnosis in our case.

4. Conclusion

Cystic dysplasia of the rete testis is a rare benign congenital condition often associated with renal anomalies. It requires differentiation from malignancy, and treatment options based on clinical findings and histopathology range from conservative management to surgery [1][2][3].

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest is to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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