

Case	(351) Partial testicular torsion: don't stop in scrotal doppler and know the diagnosis keys
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## CASE PRESENTATION

A 20-year-old man presented to the emergency department complaining of an increase in size and elevation of the right testicle for twelve hours, without associated pain. The patient had undergone a bilateral orchidopexy six years ago, because of a right testicular torsion.

The scrotal ultrasound (US) performed showed the right testicle with normal morphology, but the vascularization was slightly diminished in the right testicle with respect to the left one.

The right spermatic cord was more tortuous than the left one with a possible loop adjacent to the testicle. Additionally, some arterial vessel of the right testicle had lost the diastolic phase in the spectral analysis. A partial right testicular torsion was surgically confirmed.

## DISCUSSION

Diagnosis: Right partial testicular torsion. Testicular torsion is a surgical emergency more frequent in adolescents (1). A partial or complete torsion would be diagnosed depending on whether the cord rotation is greater or less than 360 degrees, respectively (2).

The best diagnosis technique is ultrasound, including gray scale imaging, color and power Doppler with spectral analysis (2). At beginning of torsion, the testicle may be normal at gray scale US. As the ischemia progresses, the testicle becomes heterogeneous, hypoechoic and larger (1, 2).

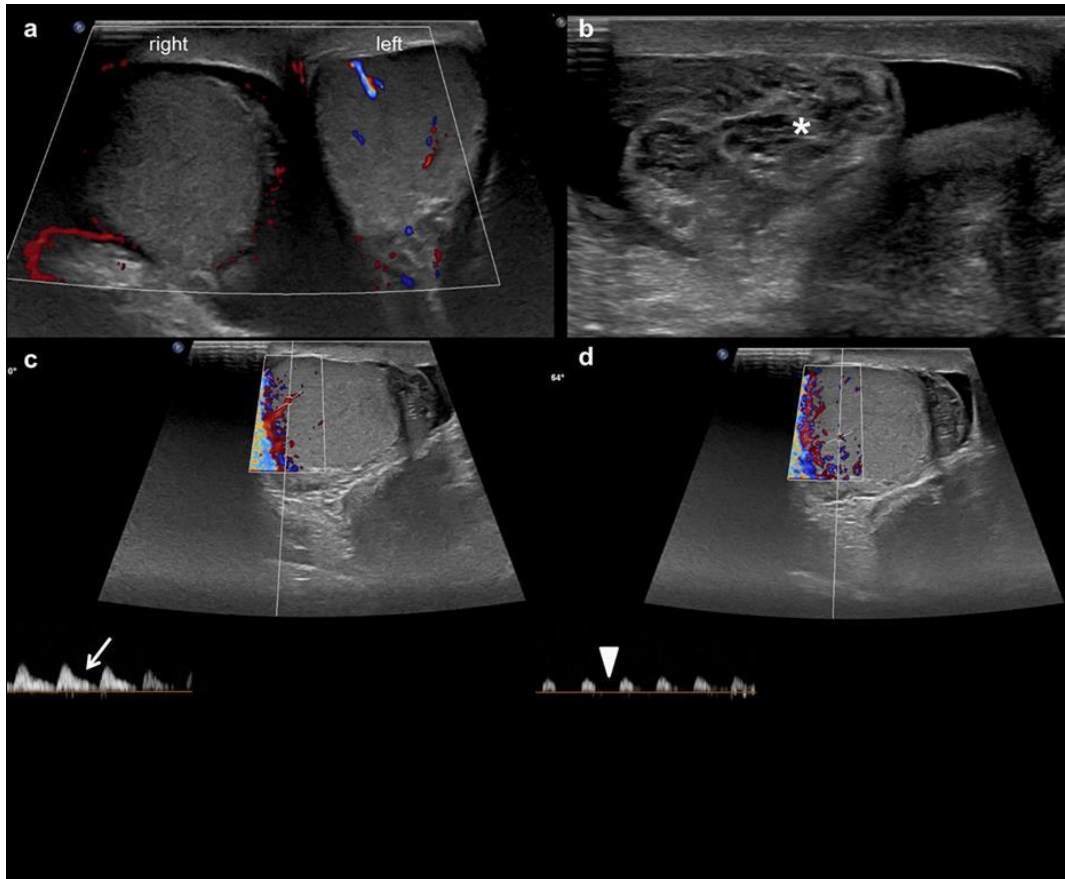
We can find a decrease in the arterial and venous vascularization of the affected testicle with respect to the contralateral testicle but, sometimes, in the early stages of complete and partial testicular torsion, color Doppler US may reveal a normal perfusion pattern (3).

In such cases, we should evaluate the spermatic cord throughout its course, looking for the "whirlpool pattern", a highly specific finding suggestive of torsion (3).

When it is associated with a poststenotic flow in the testicle, it should reaffirm us for the diagnosis of partial testicular torsion (2, 3), as in our case. This poststenotic flow should be diagnosed in face of an increase in resistance of the arterial flow, due to the decrease in diastolic flow velocities or even a reverse diastolic flow (2).

## CONCLUSION

Partial testicular torsion is a surgical emergency that requires an early ultrasonographic diagnosis. To evaluate the spermatic cord and to perform a Spectral Doppler testicular analysis can prevent us to erroneously ruling out the diagnosis of testicular torsion.



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