Incidental Left Atrial False Tendons

Falsos tendones incidentales en aurícula izquierda

ANA F. MALIO, GISELA M. KILLINGER, CARLOS A. RODRÍGUEZ[MTSAC]

The filiform images known as left atrial false tendons (LAFTs) (1) represent fibrous or fibromuscular structures in the left atrium of unknown embryonic origin, and constitute a rare echocardiographic finding. (1, 2) They are relevant, since they can be associated with mitral regurgitation (MR), (2, 3) valve cardiomyopathies, atrial fibrillation, conduction disorders, infectious endocarditis, and they can even interfere in the manipulation of catheters during invasive procedures. (4)

We report a series of four patients with ultrasound diagnosis of LAFTs not involved in mitral valve disfunction nor in MR mechanism. Two patients had a mobile, linear structure attached to the left atrial lateral wall and to the anterior mitral leaflet, without affecting its functioning (arrow in Figure 1). The third case presents a mobile, filiform structure attached to the atrial septum and the base of the anterior mitral leaflet. A cardiac magnetic resonance imaging confirmed LAFT, which was heterogeneous in cine sequences, and hypointense in T1 and T2 without late enhancement after gadolinium. The fourth case corresponds to a female patient who underwent transesophageal echocardiography (under follow-up due to anterior mitral valve prolapse), which revealed a hypermobile, linear structure extending from the left atrial posterior wall to the posterior mitral leaflet, without interference in the prolapse mechanism or the cause of severe MR (arrow in Figure 2).

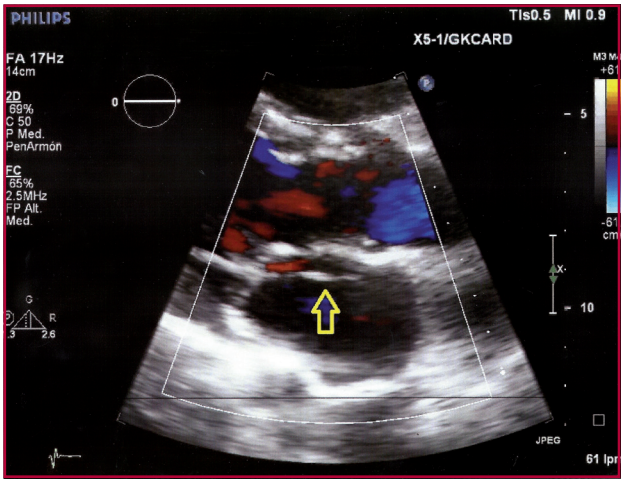

Fig. 1. Transthoracic echocardiography. Long-axis parasternal view with zoom and color-Doppler. A linear image of the left atrial false tendon is observed (arrow). No significant mitral regurgitation in color mode is recorded.

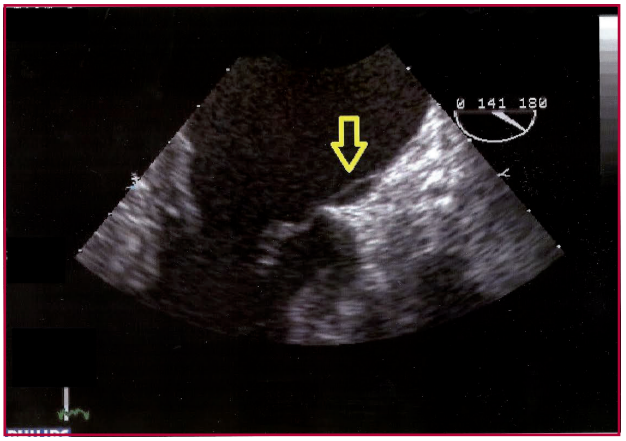

Fig. 2. Transesophageal echocardiography. View at 141°. Image of false tendon attached to the left atrial wall (arrow) is observed, with no interference in mitral leaflet function.

Complementary videos may be found in:
https://youtu.be/Z3R7Mw_B8JU
https://youtu.be/av6VS0JRYUQ
https://youtu.be/1DIAVUEh32o

Conflicts of interest

None declared (See authors' conflicts of interest forms on the website/ Supplementary Material).

REFERENCES

1. Floria M, Gerar M, Marchandise B, Schroeder E. Aberrantly inserted chordae tendineae without significant mitral regurgitation. J Clin Ultrasound 2014;42:57-8. http://doi.org/f5kd4v
2. Baran T, Küçükoğlu S, Ökçün B, Çetin G, Hatemi A, Ünen S. A rare cause of mitral insufficiency: left atrial anomalous band. Echocardiography 2003;20:83-5. http://doi.org/d4v5qw
3. Dawson D, Mankad P, Bloomfield P, Boon N. An unusual cause of severe mitral regurgitation: aberrantly inserted chordae tendineae. J Am Soc Echocardiogr 2008;21:90.e3-4. http://doi.org/fmwbbd
4. Alsaid A, Cawley P, Bauch T, Good C. Hanging by a thread, severe mitral regurgitation due to accessory left atrial cord. Eur Heart J Cardiovasc Imaging 2016;17:943. http://doi.org/b6cq

Rev Argent Cardiol 2017;85:128. http://dx.doi.org/10.7775/rac.v85.i2.10754
Address for reprints: Ana F. Malio - Servicio de Ecocardiografía y Doppler vascular, Centro de Diagnóstico ROSSI - e-mail: Anafmalio@gmail.com