



Interesting Image / İlginç Görüntü

## Sliding hiatal hernia mimicking a left atrial mass

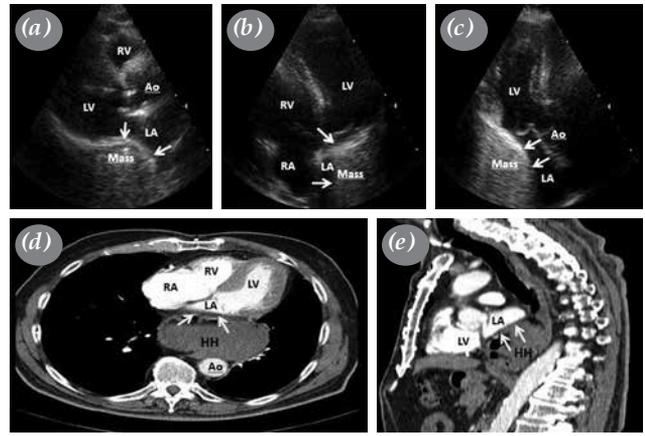
*Sol atriyal kitleyi taklit eden sliding tip hiatal herni*

Umut Kocabaş<sup>1</sup>, Flora Özkalaycı<sup>1</sup>, Armağan Altun<sup>1</sup>

Department of Cardiology, Başkent University İstanbul Hospital, İstanbul, Turkey

An 82-year-old man was referred to our clinic for cardiac evaluation before inguinal hernia repair surgery. His previous medical history revealed hypertension and coronary artery disease. The patient was asymptomatic, and his physical examination was unremarkable. A 12-lead electrocardiography demonstrated normal sinus rhythm with first-degree atrioventricular block. Transthoracic echocardiography (TTE) showed regional wall motion abnormalities and left ventricular ejection fraction was 50% as assessed by the Simpson's method. Additionally, TTE parasternal long axis view, apical four-chamber view and apical long axis view demonstrated compression of the left atrium by an extrinsic, hyperechoic mass (Figure 1a-c). Thoracic computed tomography revealed a large sliding type hiatus hernia with intrathoracic extension to the posterior mediastinum and compression of left atrium from the posterior aspect (Figure 1d, e).

Hiatal hernia is defined as the protrusion of an organ, typically the stomach, from abdomen to thorax through the esophageal hiatus in the diaphragm and is usually associated with symptoms of gastroesophageal reflux disease.<sup>[1]</sup> Rarely, large hiatal hernias may lead to cardiac symptoms and complications such as dyspnea and exercise impairment, recurrent acute heart failure, angina-like chest pain and electrocardiographic changes due to its mechanical compression.<sup>[2-5]</sup> In some cases, hiatal hernia may mimic a left atrial mass and is diagnosed incidentally on TTE.<sup>[6]</sup>



**Figure 1.** (a) Transthoracic echocardiographic parasternal long axis view, (b) apical four-chamber view and (c) apical long axis view showing extrinsic compression of the left atrium by a large mass (arrows). (d) Axial and (e) sagittal computed tomography scans showing a large sliding type hiatus hernia compressing to the left atrium from posterior mediastinum (arrows).

RV: Right ventricle; LV: Left ventricle; Ao: Aorta; LA: Left atrium; RA: Right atrium; HH: Hiatus hernia.

### Declaration of conflicting interests

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

### Funding

The authors received no financial support for the research and/or authorship of this article.

### REFERENCES

1. Johnson DA, Ruffin WK. Hiatal hernia. *Gastrointest Endosc Clin N Am* 1996;6:641-66.

Received: May 22, 2018 Accepted: November 11, 2018

Correspondence: Umut Kocabaş, MD, Başkent Üniversitesi İstanbul Hastanesi, Kardiyoloji Kliniği, 34662 Üsküdar, İstanbul, Turkey.

Tel: +90 507 - 997 49 99 e-mail: umutkocabas@hotmail.com

Cite this article as:

Kocabaş U, Özkalaycı F, Altun A. Sliding hiatal hernia mimicking a left atrial mass. *Turk Gogus Kalp Dama* 2019;27(1):125-126

©2019 All right reserved by the Turkish Society of Cardiovascular Surgery.

2. Naoum C, Falk GL, Ng AC, Lu T, Ridley L, Ing AJ, et al. Left atrial compression and the mechanism of exercise impairment in patients with a large hiatal hernia. *J Am Coll Cardiol* 2011;58:1624-34.
3. Siu CW, Jim MH, Ho HH, Chu F, Chan HW, Lau CP, et al. Recurrent acute heart failure caused by sliding hiatus hernia. *Postgrad Med J* 2005;81:268-9.
4. Hokamaki J, Kawano H, Miyamoto S, Sugiyama S, Fukushima R, Sakamoto T, et al. Dynamic electrocardiographic changes due to cardiac compression by a giant hiatal hernia. *Intern Med* 2005;44:136-40.
5. Meteroğlu F, Şahin A, Oruç M, Onat S. Adult Bochdalek hernia: an analysis of eight patients. *Türk Gogus Kalp Dama* 2015;23:514-8.
6. Yang SS, Wagner P, Dennis C. Images in cardiovascular medicine. Hiatal hernia masquerading as left atrial mass. *Circulation* 1996;93:836.