

## Physician - Pediatric Cardiac and Vascular Surgery/Adult Congenital Heart Diseases

[MEP-03]

### Repair of the Cardiac Erosion Because of the Occluder Device, A Challenging Situation

Huseyin Demirtas<sup>1</sup>, Abdullah Ozer<sup>1</sup>, Mehmet Burak Gulcan<sup>2</sup>, Issa Shide<sup>1</sup>, Yonca Durkan<sup>1</sup>, Gürsel Levent Otkar<sup>1</sup>, Gülten Tacoy<sup>3</sup>

<sup>1</sup>Department of Cardiovascular Surgery, Gazi University Faculty of Medicine, Ankara, Türkiye

<sup>2</sup>Department of Cardiovascular Surgery, Erzurum City Hospital, Erzurum, Türkiye

<sup>3</sup>Department of Cardiology, Gazi University Faculty of Medicine, Ankara, Türkiye

**Cardiovascular Surgery and Interventions** 2024;11(Suppl 1):MEP-03

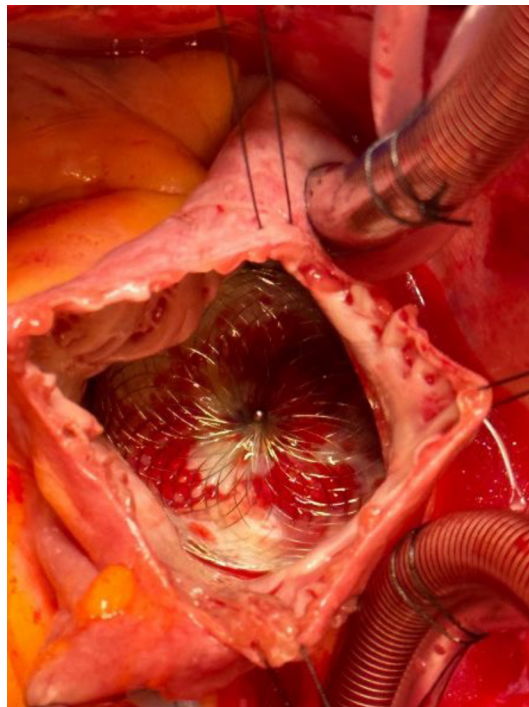
Doi: 10.5606/e-cvsi.2024.mep-03

E-mail: drmburakgulcan@gmail.com

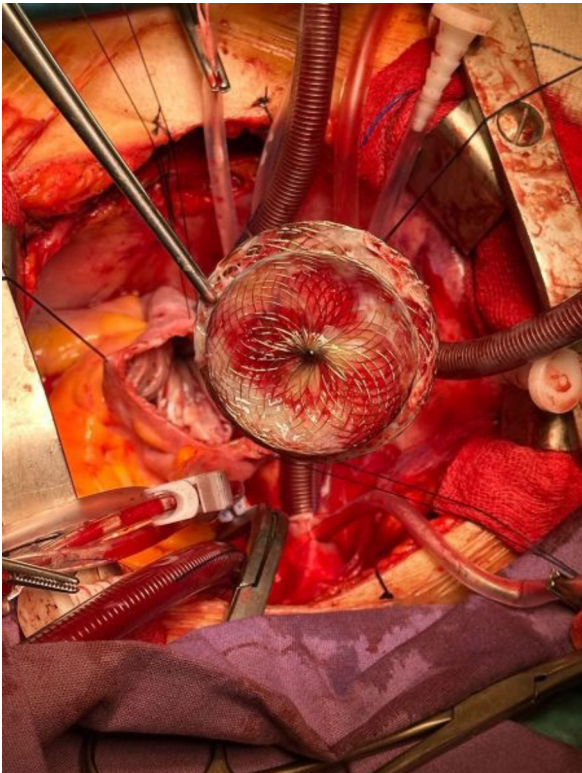
Received: July 30, 2024 - Accepted: September 29, 2024

Atrial septal defect is the most common congenital heart disease in adults. Atrial septal occluder devices are popular for treating secundum atrial septal defects. However, it has risks of complications such as cardiac tissue erosion, thrombus, and effusion. A 63-year-old female patient with atrial septal erosion who underwent intervention for secundum atrial septal defect three years ago presented to the clinic. We removed the occluder device and successfully repaired the atrial septum with bovine. While intravascular techniques have been developed for the closure of atrial septal defects, surgery remains important in treatment. Furthermore, occluder devices have important risks. This case demonstrates a successful repair after cardiac tissue erosion due to the occluder device.

**Keywords:** Atrial septal defect sinus venosus, atrial septum, atrial, cardiac catheterization, heart septal defects, septal occluder device.



**Figure 1.** Amplatzer on septal wall.



**Figure 2.** Amplatzer, resected.



**Figure 3.** Postrepair image.

## References

1. Brida M, Chessa M, Celermajer D, Li W, Geva T, Khairy P, et al. Atrial septal defect in adulthood: A new paradigm for congenital heart disease. *Eur Heart J* 2022;43:2660-71. doi: 10.1093/eurheartj/ehab646.
2. Baumgartner H, De Backer J, Babu-Narayan SV, Budts W, Chessa M, Diller GP, et al. 2020 ESC Guidelines for the management of adult congenital heart disease. *Eur Heart J* 2021;42:563-645. doi: 10.1093/eurheartj/ehaa554.
3. Stout KK, Daniels CJ, Aboulhosn JA, Bozkurt B, Broberg CS, Colman JM, et al. 2018 AHA/ACC Guideline for the management of adults with congenital heart disease: A report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Circulation* 2019;139:e698-800. doi: 10.1161/CIR.0000000000000603.
4. Zdradzinski MJ, Elkin RL, Lee JM, Qureshi AM, El-Mallah W, Krasuski RA. Contributors to and impact of residual shunting after device closure of atrial septal defects. *Am Heart J* 2016;177:112-9. doi: 10.1016/j.ahj.2016.03.022.
5. Crawford GB, Brindis RG, Krucoff MW, Mansalis BP, Carroll JD. Percutaneous atrial septal occluder devices and cardiac erosion: A review of the literature. *Catheter Cardiovasc Interv* 2012;80:157-67. doi: 10.1002/ccd.24347.