# Liver, heart and vein injury developing concomitantly due to tube thoracostomy

Tüp torakostomiye bağlı eş zamanlı gelişen karaciğer, kalp ve damar yaralanması

### Ersan Özbudak,<sup>1</sup> Aslı Gül Akgül,<sup>2</sup> Sadan Yavuz,<sup>1</sup> Ali Aydın,<sup>1</sup> Salih Topcu<sup>2</sup>

Departments of <sup>1</sup>Cardiovascular Surgery and <sup>2</sup>Thoracic Surgery, Medical Faculty of Kocaeli University, Kocaeli, Turkey

Although chest tube insertion is routinely performed for certain indications, it is still possible for serious complications to occur during this common procedure.<sup>[1,2]</sup> As a case in point, we inserted a small bore chest catheter (10F) in a 35-year-old male patient suffering from a traumatic hemothorax. Surprisingly, thoracic computed tomography showed that the catheter had entered via the eighth intercostal space and ended up at the right atrium after passing through the hepatic vein, inferior vena cava, and foramen ovale (Figure 1a, b). In addition, three-dimensional reconstruction revealed that the catheter had passed from the hepatic zone to the heart behind the sternum (Figure 1c). Multislice computed tomography shows the cause of the catheter in different transverse dissection (Figure 1d-k). We then removed the catheter via a sternotomy without any complications. Patient was discharged postoperative seventh day from the hospital.

#### **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.



**Figure 1.** Illustration (a) and radiological images (b-k) showing the way of catheter from hepatic zone to the heart at computed tomography scan sections both with three-dimensional reconstruction.

## REFERENCES

- 1. Symbas PN. Chest drainage tubes. Surg Clin North Am 1989;69:41-6.
- 2. Kerger H, Blaettner T, Froehlich C, Ernst J, Frietsch T, Isselhorst C, et al. Perforation of the left atrium by a chest tube in a patient with cardiomegaly: management of a rare, but life-threatening complication. Resuscitation 2007;74:178-82.



Available online at www.tgkdc.dergisi.org doi: 10.5606/tgkdc.dergisi.2015.9249 QR (Quick Response) Code Received: September 16, 2013 Accepted: February 12, 2014 Correspondence: Ersan Özbudak, M.D. Kocaeli Üniversitesi Tip Fakültesi, Kalp ve Damar Cerrahisi Anabilim Dalı, 41380 Umuttepe, Kocaeli, Turkey. Tel: +90 505 - 275 37 83 e-mail: ersanozbudak@yahoo.com