

source: https://doi.org/10.48350/1297 | downloaded: 28.4.2024

European Journal of Cardio-thoracic Surgery 37 (2010) 235

www.elsevier.com/locate/ejcts

## Images in cardio-thoracic surgery

## Subclavian artery and jugular vein rupture after a blunt thoracic trauma due to a BMX handlebar

Ramin Ipaktchi <sup>a</sup>, Sabine Dettmer <sup>b</sup>, Peter M. Vogt <sup>a</sup>, Karsten Knobloch <sup>a,\*</sup>

<sup>a</sup> Plastic, Hand and Reconstructive Surgery, Hannover Medical School, Germany
<sup>b</sup> Radiology, Hannover Medical School, Germany

Received 5 June 2009; received in revised form 4 July 2009; accepted 13 July 2009; Available online 22 August 2009

Keywords: Trauma; Rupture; Subclavian artery; Blunt trauma

A 14-year-old BMX driver suffered a blunt trauma towards the lateral neck (Fig. 1). A computed tomography (CT) angiography revealed a dye stop in the left subclavian artery with collateral blood flow (Fig. 2). Interventional catheterisation revealed a rupture. However, no peripheral pulse deficit was evident, and, therefore, no immediate vascular surgery was performed.



Fig. 1. Blunt trauma by the steering gear of a BMX bicycle in a 14-year-old boy.



Fig. 2. Three-dimensional reformation of a CT angiography revealing a dye stop of the proximal left subclavian artery before the origin of the vertebral artery with collateral blood flow through the vertebral artery and additional flow beyond the resolution of the CT angiography, and a fracture of the first left rib. Follow-up ultrasound revealed a regular flow pattern and no false aneurysm as well as no signs of a subclavian steal syndrome.

E-mail address: Knobloch.karsten@mh-hannover.de (K. Knobloch).

<sup>\*</sup> Corresponding author. Address: Plastic, Hand and Reconstructive Surgery, Hannover Medical School, Carl-Neuberg-Str. 1, 30625 Hannover, Germany. Tel.: +49 511 532 8864; fax: +49 511 532 8890.