management and it remains to be seen whether the STICH trial results trigger a paradigm shift in clinical practice.

**Supplementary material**

Supplementary material is available at *European Heart Journal* online.

**Funding**

**Conflict of interest:** none declared.

**References**

The list of references is available in the online version of this paper.

---

**CARDIOVASCULAR FLASHLIGHT**

doi:10.1093/eurheartj/ehs322

Online publish-ahead-of-print 16 October 2012

---

**Recurrent syncope in the young: do not forget the coronary arteries**

**Corinna Foglia, Walter Knirsch, and Emanuela Regina Valsangiacomo Buechel**

Division of Pediatric Cardiology, University Children’s Hospital Zurich, Steinwiesstr 75, Zurich 8032, Switzerland

* Corresponding author. Tel: +41 1 266 7339, Fax: +41 1 266 7981, Email: emanuela.valsangiacomo@kispi.uzh.ch

This paper was guest edited by Brahmajee Kartik Nallamothu, University of Michigan, USA

A 9-year-old patient was resuscitated after sudden cardiac arrest (SCD) during a soccer game. The boy had a history of exercise-related syncope since the age of 5, but all the previous extensive cardiac evaluations were unremarkable.

During resuscitation, ECG documented ventricular fibrillation (Panel A); defibrillation was successful. At hospital admission, clinical and non-invasive cardiac findings were unremarkable. Cardiac catheterization was performed primarily for invasive electrophysiological study. Coronary angiography showed a prominent right coronary artery (Panel B) and the left coronary ostium was missed; all the left coronary system was exclusively perfused retrogradely (Panel C). Diagnosis of atresia of the left coronary artery (LCA) was done. Further non-invasive perfusion imaging was performed. SPECT with adenosine stress testing demonstrated intact myocardial perfusion (Panel D); CT confirmed lack of continuity between the LCA and the aortic root (Panel D). MRI ruled out presence of scars. LCA atresia was confirmed intraoperatively, as ostium cannulation was not possible either from the aortic root or from the LCA (Panel E). Surgical revascularization consisted of LIMA/LAD bypass. 3 months later, the patient was well and asymptomatic, and the aorto-coronary bypass patent.

Even though generally a rare condition, congenital anomalies of the coronary arteries are a common cause of SCD in young individuals. Among all anomalies, atresia of one coronary artery is exceedingly rare, having been reported in few isolated cases. In patients with a typical history of exercise-related ischaemic symptoms, the level of suspicion should be high and invasive evaluation initiated. Timely diagnosis is crucial for preventing SCD and planning surgical revascularization.

Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2012. For permissions please email: journals.permissions@oup.com