Blunt cardiac trauma: right atrioventricular groove rupture

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A 24-year old patient who was involved in a car accident presented with hypotension and jugular-vein distension. The CT scan showed a hemopericardium (Fig. 1). Intraoperative finding was a rupture of the right atrioventricular groove (Fig. 2).

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Figure 1: CT scan showing a hemopericardium (asterisk).

Figure 2: (A) Intraoperative photograph showing a rupture of the right atrioventricular groove ~4 cm long (arrow). (B) Being careful not to injure the right coronary artery, the rupture site was closed with pledgeted 5/0 polypropylene interrupted mattress sutures assisted with cardiopulmonary bypass (arrow head). Ao: ascending aorta; RA: right atrium; RV: right ventricle.