

## ***Cardiac Tamponade Due to Stab Wound***

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### **INTRODUCTION**

A case with intrapericardial injury following a knife assault is reported and its management and prognosis discussed.

### **CASE REPORT**

A 21 year old Zambian male was brought to the Casualty department collapsed, and with 2 incised wounds, each 8mm length, one on the upper left chest wall anteriorly, the other on the right chest wall posteriorly. He was unconscious, radial pulse was not palpable and blood pressure unrecordable. Muffled heart sounds were present and the neck veins distended. No other injury was found.

Blood was taken for immediate cross matching. A left intercostal drain produced a few mls of blood.

Pericardiocentesis by paraxiphoid puncture produced 10ml of blood. A diagnosis of cardiac tamponade due to intrapericardial injury was made, and he was transferred to theatre while intensive resuscitation was carried out, which also included endotracheal intubation, oxygenation and intravenous colloids and crystalloids. As soon as blood was available, ketalar anaesthesia was given and the chest opened widely through the fifth left interspace. The wound track was seen to pass through the upper lobe of the left lung to enter the pericardium. The pericardium was opened widely and much clot and fresh blood removed. An eight mm incision was found near the pulmonary trunk. Bleeding was controlled briefly by digital pressure to allow circulatory stabilisation, then the wound of the heart closed with interrupted silk sutures. The pericardium was closed loosely over a drain, and the chest closed after insertion of a basal underwaterseal drain. The patient left theatre breathing spontaneously, and was allowed home in good health within three weeks.

At follow up two years after the operation, the patient remains in general good health without any evidence of cardiac arrhythmia or any other abnormality.

### **DISCUSSION**

Aggressive treatment of intrapericardial injury can be rewarding. This patient, despite severe circulatory embarrassment, had a good prospect of survival. About eighty percent of patients admitted with

signs of life can be saved, and there are reports of salvage of patients admitted without signs of life (Beall et al 1972; Mandal and Awarief, 1979).

Pericardiocentesis has been used extensively as definitive treatment (Blalock and Ravitch, 1943; Beall et al, 1966). Needle aspiration of about three to five hundred ml may relieve the tamponade, but there are both limitations and dangers in this approach (Maynard et al 1965) and has been generally abandoned in favour of an aggressive surgical approach (Beal et al, 1972; Mandal and Awarief, 1979). It is now an accepted practice to use pericardiocentesis as a temporising measure to allow fuller resuscitation and preparation for thoracotomy and repair of the heart.

Careful monitoring is necessary postoperatively, but ventilatory support should not be necessary routinely in view of the predominance of healthy young men among those suffering this type of injury. (Thus it falls within the scope of a general surgeon in a district hospital). It is clear that only rapid diagnosis and treatment of this type of injury carries any hope of success; which is well within the scope of a general surgeon in a reasonably equipped district hospital.

### **REFERENCES**

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