

Ventricular septal defect as a result of stab injury

Bıçaklanma sonrası meydana gelen ventriküler septal defekt

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Penetrating injury of the heart is a serious condition carrying a high fatality risk. Prompt intervention is critical. Traumatic ventricular septal defect (VSD) usually results from blunt chest trauma (1).

A 35 years old female patient was admitted to hospital in a state of hypovolemic shock following a stab chest injury with a kitchen knife. There in, a diagnosis of penetrating cardiac injury and left hemithorax was detected and left posterolateral thoracotomy was performed. Thereupon, pericardiotomy was performed within the thoracic cavity. Active bleeding was detected on the lateral surface of the left ventricle. Bleeding was ceased by a primary repair of the injured tissue using pericardial tissue and the patient was transferred to the Ondokuz Mayıs University Hospital for further assessment. On arrival at University Hospital, the patient was in poor general condition, with a difficulty in orientation or cooperation. Echocardiographic examination revealed apical VSD with a diameter of 2 cm and an important left-to-right shunt. Because the patient displayed hemodynamic instability and had pulmonary congestion signs, we decided to perform an urgent operation to repair the

penetrating ventricular septal defect. We reached the ventricular septum via the right ventriculotomy. We found a defect of 2 cm in diameter under the trabecula septomarginalis and within the trabecular septum (Fig. 1). The VSD was closed with a Dacron patch using six single U-stitches polypropylene 6/0 with Teflon pledgets (Fig. 2).

Penetrating cardiac injuries should be diagnosed immediately and if surgery is necessary, it must be performed without a delay. Hemorrhagic shock, cardiac tamponade, great vessel injuries and important left-to-right shunt are indications for surgery (2). Our case showed that each patient with cardiac injury should be evaluated for potential injury of intracardiac structures.

References

1. Pretre R, Chilcott M. Blunt trauma to the heart and great vessels. N Engl J Med 1997;336:626-32.
2. Tesinsky L, Pirk J, Al-Hiti H, Malek I. An isolated ventricular septal defect as a consequence of penetrating injury to the heart. Eur J Card Thorac Surg 1999;15:2213.

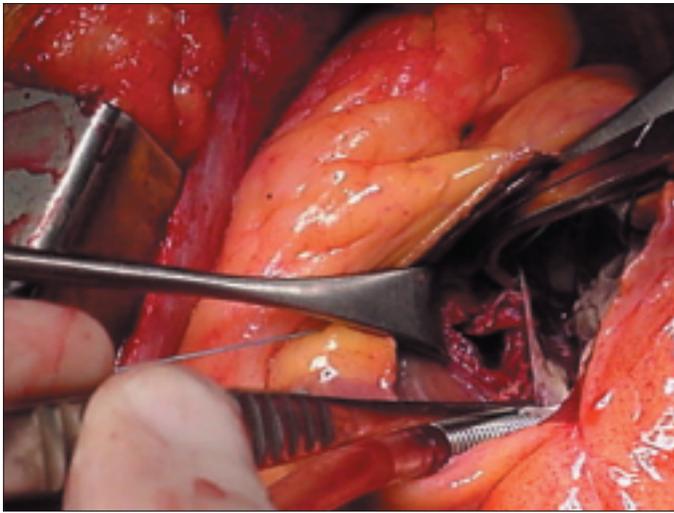


Figure 1. Post-traumatic ventricular septal defect (black arrow)

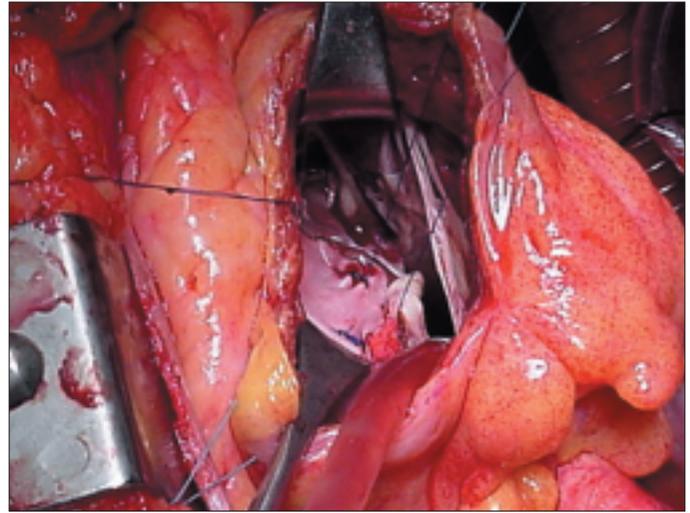


Figure 2. Closure of the ventricular septal defect with a Dacron patch (black arrow)