

# HOW TO DO IT

## A NEW TECHNIQUE OF CLOSURE OF RIGHT VENTRICULOTOMY IN TETRALOGY OF FALLOT.

Fazle Rabbi, Tariq Azam Siddiqi.

Department of Cardiac Surgery, National Institute of Cardiovascular Diseases, Karachi.

### ABSTRACT

*Haemorrhage after repair of Tetralogy of Fallot may occur occasionally especially in older children and adults. In our experience, bleeding from the ventriculotomy site is responsible for most reopenings. We describe a technique of suturing autologous pericardium over the ventriculotomy which ensures better haemostasis and helps to reduce the chances of bleeding from this site.*

### CORRESPONDENCE

Dr. Fazle Rabbi,  
Associate Professor,  
Department of Cardio surgery,  
National institute of Cardiovascular Diseases, Rafiqui (HJ) Shaheed Road, Karachi.

### TECHNIQUE

Pericardium is taken from the patient after sternotomy and kept in normal saline at room temperature. After closure of VSD either through the RA or RV, we close the vertical ventriculotomy by running prolene sutures by the following technique.

The pericardium is cut to an oval shape. Double ended 5/0 prolene is used with both needles passing through the pericardium first and then through the ventriculotomy incision towards the pulmonary artery, or through the pulmonary artery if a trans-annular patch is used, and then tied (fig-1).

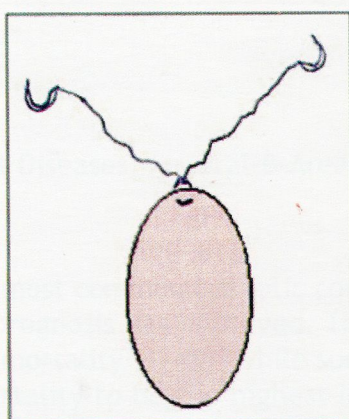


Fig-1

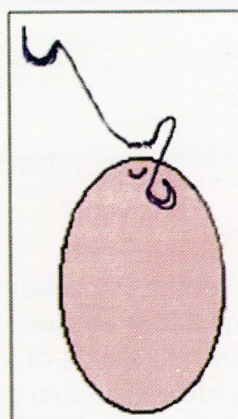


Fig-2

With one needle in backhand (Fig-2) is passed into the pericardium about 4-5 mm away from the edge and then inside out through the ventriculotomy, with the needle coming out about 2mm away from the edge of the ventriculotomy. The needle is then again passed through the pericardium near the edge inside out. This method is repeated in backhand towards the assistant's side and forehand towards the surgeon's side. Finally a knot is placed away from the lower end of the ventriculotomy incision (fig-3). This "double



breasting" technique covers pericardium on both the edges of the ventriculotomy (fig-4).

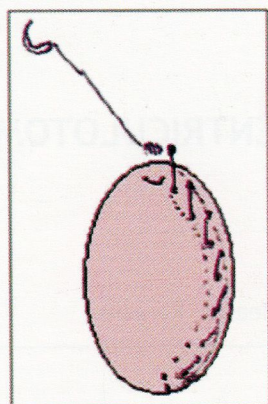


Fig-3

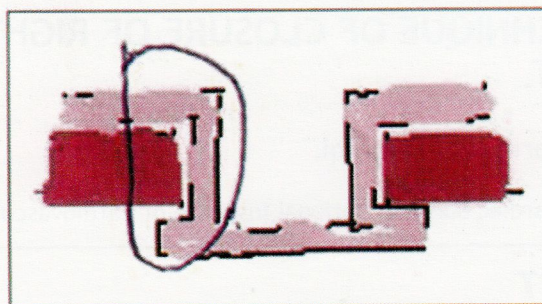


Fig-4

## COMMENTS

The muscle in the RV is friable especially in the cyanosed and older patient. Sutures can cut through easily with right ventricular distention. The needle holes become larger and can cause significant bleeding. By using this "double breasting" technique, the edges of the ventriculotomy and needle holes are well covered with pericardium which prevents bleeding.