

Double snaring of superior vena cava

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Introduction

Superior septal approach provides the best exposure of the mitral valve. It is the preferred approach for all mitral operations [1]. When the superior vena cava (SVC) is shorter than usual, cannulation of SVC becomes difficult. Air leaking and air blocking of pump lines may develop necessitating the surgeon to divert his attention to the cannulation system. Deairing of tubing set becomes necessary for effective pump perfusion in these situations, which besides being tedious and cumbersome, wastes time, and may compromise the safety. Double throw of SVC tape avoids this complication.

Technique

Pericardial reflections over the SVC are dissected and purse string stitch placed to SVC. Both SVC and inferior vena cava (IVC) are cannulated. Cardiopulmonary perfusion is instituted and the heart is decompressed. IVC snared. Then, SVC taped double times with same tape and the snare squeezed firmly so that air does not enter into the pump lines (Fig. 1).

Discussion

Air blocking of venous system is much more common when superior septal approach is used. Excessive air may impede pump perfusion due to air blocking of

venous line of pump. The most common cause of air invasion is loosening of SVC snare during surgical intervention. We have taped/snared SVC double times as a routine to avoid air leaking into pump line in all patients since 2008. We think that double snaring technique should be in surgical armamentarium of valve surgeons.



Fig. 1 SVC taped double times with same tape and the snare squeezed firmly

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval Lokman hekim univercity has approved our technique since 2012.

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Informed consent Informed consent was obtained from all individual participants included in the study.

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Reference

1. Utley JR, Leyland SA, Nguyenduy T. Comparison of outcomes with three atrial incisions for mitral valve operations. Right lateral, superior septal, and transseptal. *J Thorac Cardiovasc Surg.* 1995;109: 582–7.