

Retrieval of dislodged ASD device

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Key words : ASD device dislodgement

Background:

A 39 year old male who had a large ostium secundum Atrial Septal Defect (ASD) was undergoing device closure in the cardiology catheterization laboratory when the Amplatzer device became dislodged. It could not be retrieved percutaneously. Emergency

cardiac surgery was performed and the ASD device was retrieved from the pulmonary artery and the ASD was closed with autologous pericardium.

Question: What is a useful instrument to retrieve the device that is shown in the image (fig1)?

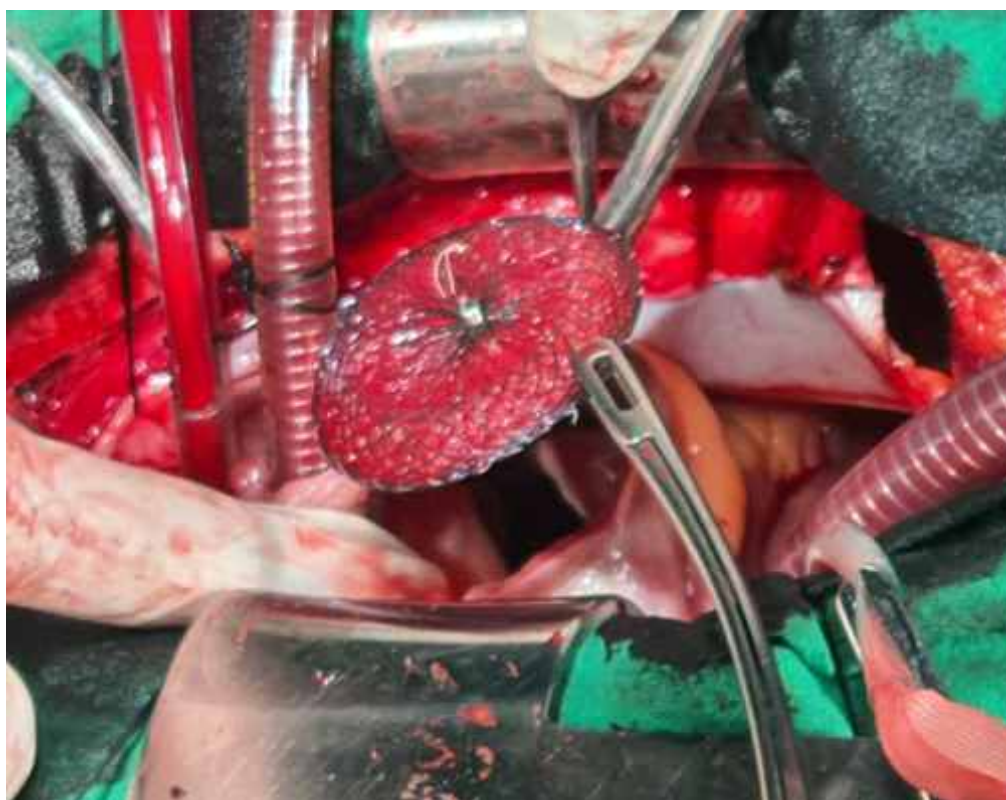


Fig 1 : Surgical retrieval of the Amplatzer device

Answer Desjardins forceps

Discussion

Trans-catheter closure of ostium secundum ASDs is the standard procedure in most medical centers. It is a procedure with minimal complications and a short duration of recovery, but it is not totally risk free. There is a risk of 1.2 % of ASD device dislodgement during the procedure [1]. If the device embolises to the left or right ventricular out flow tracts or beyond, and it cannot be retrieved percutaneously, then surgical removal is indicated [2]. This is not an uncommon emergency operation for the senior registrar in cardiothoracic surgery to be called to perform from time to time.

The Desjardins forceps (fig 2) is usually used by the general surgeons to remove of gallstones and sometimes by the gynecologists to remove endometrial polyps.



Fig 2: Desjardins forceps

Cardiothoracic surgeons have reportedly used it for embolectomy in acute pulmonary embolism in the pulmonary artery [3]. We routinely use the Desjardins forceps to retrieve dislodged ASD devices as its orientation is useful to negotiate the pulmonary artery.

A Desjardins forceps is a useful instrument to have in the one's instrument armamentarium when retrieving a dislodged ASD device.

References

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