Letter to the Editor

Totally endoscopic removal of dislocated atrial septal defect – closure devices

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With interest, we read the article by Sarris et al. that demonstrated a number of considerable early and late complications of interventionally placed atrial septal defect (ASD) closure devices [1]. A series of 56 patients is reported. It would be important to know how many interventionally implanted ASD-closure devices were implanted in these centers. Another question is which surgical access was used in these 56 operations. Were they all performed by median sternotomy, or did they also use minimal invasive approaches? At our institution, we routinely perform totally endoscopic ASD repairs, if intervention is not feasible [2–4].

In addition, we have experience with seven totally endoscopic removals of ASD-closure devices. The devices were dislocated and led to recurrent shunts or neurologic events. The patients (four female, three male) underwent extracorporeal circulation via the right femoral vessels, using a balloon endoclosure catheter. The da Vinci® telemanipulator (Intuitive Inc., Sunnyvale, CA, USA) was used to expose the right atrium, remove the closure devices, and repair the ASDs either with a patch (n = 5) or by direct closure (n = 2). All procedures were performed in a totally endoscopic fashion without thoracotomy (ports only). Typically, young patients are treated and appreciate a favorable cosmetic result. There were no postoperative complications and no mortality in this series of patients. We consider that totally endoscopic removal of dislocated ASD closure devices is an attractive surgical bail out therapy.

References


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Reply to the Letter to the Editor

Reply to Schachner et al.

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We appreciate the interest showed by Dr Schachner in our article [1] and we thank him for sharing his experience with 7 removals of displaced atrial septal defect (ASD) devices [2].

Dr Schachner’s question regarding the number of interventional ASD closure devices implanted in participating centers during our study period has already been addressed in our article. As stated in the limitations section, several study patients had ASD device placement in other referring institutions. Therefore, it was not possible to determine the ‘denominator’, that is, the undoubtedly much larger overall number of percutaneous ASD closures which were performed during the same time interval without resulting in known surgical complications. There is also considerable uncertainty regarding the ‘numerator’: In the absence of complete long term follow up data, the true incidence of ASD – device related complications for patients who had apparently ‘successful’ ASD device closure during the same time period is unknown, since serious late complications may have remained unreported to the participating centers or treated elsewhere. Such information, as well as a comparison of the safety and efficacy of ASD closure by devices versus