# Determining an optimal technique for atrial septal defect closure: percutaneous closure as a therapeutic modality of choice

Sir,

We read with great interest the article by Cao *et al*.[1] entitled "Video-assisted thoracoscopic surgery in device closure of atrial septal defect". Cao *et al*.[1] in their study have reported thoracoscopic surgical closure of atrial septal defect (ASD) patients with a new technique (thoracoscopic technique and the transthoracic minimally invasive closure) in order to achieve a more esthetically acceptable outcome. Although we commend the authors for their new technique that they have provided, some comments may be of beneficial.

It has been observed in non-randomized trials that surgical closure techniques have more frequent and significant complications.[2-4] Owing to its low complication rates, being safer and cost-effective than and as effective as surgical closure, percutaneous techniques are preferred widely.[2-4]

Even the authors claimed that they achieved high technical success and good therapeutic outcomes with their safe, effective, cost-acceptable and cosmetic technique, increased incidence and severity of complications associated with the technique could be observed. Complications associated with general anesthesia, intubation, lung ventilation, thoracoscopy, pericardiotomy and atriotomy such as infections, bleeding, effusion and arrhythmogenic focus formation could prolong hospitalization, increase postoperative morbidity and alter the technique's sucsess.[2-5]

Based on data and the evidence in the literature, percutaneous closure of ASD should be considered as a therapeutic modality of choice for ASD occlusion in selected patients.[2-4] In our opinion, the authors' technique could be considered as an option in patients with an unsuitable peripheral access site for percutaneous device.

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