Reviewer's report

Title: Concomitant surgical ablation for atrial fibrillation (AF) in patients with significant atrial dilation >55 mm. Worth the effort?

Version: 1  Date: 4 July 2015

Reviewer: Nicolas doll Doll

Reviewer's report:

This manuscript describes a single center, retrospective analysis of 124 patients with a left atrial size < 55 mm (mean 60.7 mm) undergoing concomitant surgical AF ablation. 12 month follow up was obtained in all patients using implantable loop recorders (ILR) in 54 patients and 24-h Holter monitoring in 70 patients. Primary end point was freedom from atrial fibrillation at 12 months. During the follow up period 11 patients underwent additional catheter based ablations, 23 patients received electrical cardioversions. Overall freedom of atrial fibrillation one year after the procedure was 64.4%, freedom from antiarrhythmic drugs 59.4%.

The authors identified paroxysmal atrial fibrillation, duration of AF and LA diameters < 70 mm as predictors for success/failure.

comments:

1. this paper is well written and organized.
2. based on the data presented, the authors conclude, that AF patients with significantly enlarged LA diameters have reasonable success rates of obtaining sinus rhythm when undergoing concomitant surgical ablations at 1 year follow up. Limitations of the study (single center, retrospective data, relatively small study group, wide variety of concomitant cardiac surgery procedures, use of four different ablation devices and three different lesion sets as well as two different modes of obtaining follow up results) are being outlined clearly and discussed.
3. very nice discussion part pointing out relevant aspects of current literature with regards to the findings of this study.
4. it is not mentioned, in which patients a biatrial ablation approach was chosen, and if so, why. The relatively small study group in addition to various lesion sets and ablation probes (with different energy sources) results in a rather inhomogenous surgical approach and drawing conclusions based on this data is certainly limited. Would suggest to add this aspect in terms of setting up future investigations, which should not only have large numbers but also focus on minimizing these variables which could very well impact success rates.
5. overall interesting paper which helps guiding clinical practitioners in the situation of enlarged LA diameters
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests: No