Is closure of atrial septal defects in adults still controversial?

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We would like to thank T. Ebels for taking interest in our manuscript in an editorial comment and are happy to further elaborate on our view regarding the closure of atrial septal defects in adults [1,2].

We agree with T. Ebels that defining which patients to treat—with regard to shunt size, defect size and haemodynamic importance—is an interesting and difficult task. He questioned how our patients managed compared with those not referred to closure: this question was not the one we sought to answer in our study. We wanted to investigate the impact of age in those accepted for closure. To investigate whether closure is beneficial, compared with medical treatment, a clinical randomized study is desirable but is not without difficult ethical considerations. We are presently conducting several studies on the Danish Database Registers that consider some of these aspects and hope to shed more light on this important question.

T. Ebels pointed out that, during the study period, there was a change in the international recommendations for closure, with a possible change in our study cohort as well. We stated in our manuscript that all patients had either right ventricular dilatation and/or associated symptoms. These criteria were met during the entire period of investigation by all patients. We think the trend is moving toward closing defects that fulfill one of these two criteria, instead of using exact shunt ratios and defect sizes, and this was how our patients were chosen during the entire period of time.

T. Ebels requested analyses dealing with symptoms and objective measurements in relation to shunt size and defect size. We disagree that this would add further to our understanding of which patients to treat, since the criteria for closure have moved away from these points. Therefore, we do not believe that this is clinically relevant information.

T. Ebels asked for more information on what happened at individual patient level, including further information on each patient with complications. This study involved 196 patients. The majority had the most common symptoms, such as dyspnoea, dizziness, arrhythmias, syncope or similar. Those were all listed in Tables 3 and 5, which described exactly how many patients had the symptoms before and after the procedure in all groups. It was also stated that all the patients experiencing complications were treated without long lasting symptoms or health issues for the patient. Conducting studies like this does necessitate some ‘lumping’ of patients together into groups, as described by T. Ebels. We trust that the reader fully appreciates the difference between the different types of complications listed and have included all the specific complications for this reason.

The aim of this study was to investigate the impact of age on closure of an ASD. We have added information on the two treatments used but have not made this our main focus. Several other papers had investigated this aspect before we did. Defining when a patient is elderly is difficult and this definition is probably changing rapidly. In our population, we defined patients aged >50 years as elderly, so as to enable comparison with similar studies using ages between 40 and 60 and to maintain a cohort large enough for investigation.

We agree with T. Ebels that the perfect study, which tells us what treatment to offer elderly patients, still does not exist. But we obviously disagree with him and do feel that this study adds to the existing information.

REFERENCES


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