Dr Miskovic: Our indication for a Ross operation is that these patients don’t want a mechanical valve.

Dr Shrestha: Yes, but why not a biological valve in the aortic position? Why don’t you just put in a biological valve in the aortic position? Because the mortality is almost 4% if you are doing Ross operations, and you could do a biological replacement with under 1% mortality, in this age group at least.

Dr Miskovic: We don’t think that a biological valve in these patients is superior to a Ross procedure.

Dr Shrestha: Do you have any data to support that, because you have 4% mortality?


Dr M. Grimm (Innsbruck, Austria): Just one technical question. Are you using glutaraldehyde-treated pericardium for these sleeves or are you using autologous fresh pericardium?

Dr Miskovic: I am not a surgeon. I am a cardiologist. I did perform the study. So I would like...

Dr M. Doss (Frankfurt, Germany): Autologous pericardium.

Dr G. Lutter (Kiel, Germany): So, it is fresh, and it is blood group typed.

Dr Doss: Autologous.

Dr Lutter: So, you take autologous pericardial sleeves?

Dr Miskovic: Yes.

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REFERENCES


Continuous quality improvement is an essential characteristic of cardiothoracic surgery and as such is included in the mission statement of our European Association (www.eacts.org). In this regard, Miskovic and her colleagues can be complimented on an attempt to find a (better) alternative to the pulmonary allograft in the Ross procedure, knowing that these allografts are not universally available and perhaps not easily affordable [1]. Nevertheless, allografts are widely used and are considered as the (good) gold standard in the pulmonary position during the Ross procedure.

Comparison with data from the literature on the right-sided conduit in the Ross procedure is not easy, because no controlled randomized trials exist in this regard. Most likely, these will also never be undertaken. What is available are series (usually not very large) that compare right ventricular outflow tract alternatives in congenital diseases, mostly in children and young adults [2]. This is a different issue from allograft implantation in adult patients. Another difference that complicates comparison of results in the allograft patients is that the extra-anatomic position of the allograft, as in most congenital heart diseases, compares differently with the anatomic positioning for the allograft, as in the Ross operation. Expert-based data seem to be better represented than evidence-based data. In fact, given the lack of evidence-based data, it would be an improvement to only use data from the Ross series with a matching age and with an adequate length of follow-up, to compare the results of right ventricular outflow tract alternatives [3]. Miskovic et al. present a historical study with a mid-term follow-up. Nevertheless, it is clear that the investigated bioprosthesis is not an improvement on the allograft with regard to the outcome data. No cost-effectiveness studies are presented, but the reader should not be surprised when the overall costs of the bioprosthesis implantation with the subsequent interventions would turn out to be an expensive sequence of treatments. Better may turn out to be worse than good in this instance.

Within the series, an attempt is made to improve the results with an alternative surgical technique, the proximal extension of allografts. In this regard, an observed issue in combination with expert-based information seems to be the basis on which the surgical adaptation is introduced. Although such a subgroup analysis can be commented on from a methodological point of view, the presented outcome data do not support this decision. Better may turn out to be worse than good in this regard as well. This raises the question of whether or not authors will follow their own findings and leave this extension and go back to the original technique, which has proved to result in good outcomes.

Using existing knowledge to investigate alternative approaches should allow new data to fit into our adagium of continuous quality improvement.

Keywords: Ross procedure • Allograft • Quality improvement