

Percutaneous treatment of native aortic coarctation in adults

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Dear Editor,

With great interest we read the response of Walhout et al. to our case description of two native coarctation patients in which percutaneous angioplasty with stenting was performed [1]. Walhout et al. describe that the occurrence of recoarctation is limited in adult patients with native coarctation. They suggest that evidence for the additive value of stenting for the prevention of recoarctation is limited. Additionally they report that the occurrence of aneurysm formation is similar after balloon angioplasty with or without stenting.

The risk of aneurysm formation after balloon angioplasty reported by Walhout et al. and Fawzy et al. is indeed lower than reported in previous studies [2, 3]. However, this might be related to the fact that only patients with a discrete coarctation or ‘shelf-like’ lesion were included in these

series, as previously hypothesised by Tanous et al. [4] Walhout et al. report that stenting does not prevent aneurysm formation. However, previous studies have shown that the risk for aortic aneurysm formation is 51 % after surgical repair, 17 % after balloon angioplasty and less than 10 % after coarctation with stenting [5, 6]. The long-term effect of covered stents in preventing aneurysm formation needs to be evaluated in larger series.

With regard to the risk of recoarctation, Rodes-Cabau et al. have reported in a series of 80 consecutive children (age 12 ± 10 years) treated with either angioplasty or surgical repair that 18 % of all patients required reintervention for recoarctation [7]. However, studies performed in adults suggest that the risk of recoarctation is still higher after treatment with balloon angioplasty without stenting compared with treatment with additional stenting [6, 8]. These findings suggest that in adults with native aortic coarctation, angioplasty with stenting reduces the risk of recoarctation and might prevent aneurysm formation as compared with balloon angioplasty alone. According to the current guidelines, stenting has become the treatment of first choice in adults with native and recurrent coarctation, although the use of covered or non-covered stents is still a matter of debate [9]. In our opinion, stenting is therefore still advocated in adult native coarctation patients, as it might prevent vessel elastic recoil and reduce the need for reinterventions during follow-up.

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