Percutaneous aortic valvoplasty in congenital aortic valvar stenosis

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This issue of Cardiology in the Young contains an important article from our Mexican colleagues entitled "Percutaneous aortic valvoplasty in congenital aortic valvar stenosis". Alva and his colleagues describe a large series of patients from a single institution, claiming that the cohort is the largest yet reported in Latin America. It includes 141 patients with congenital aortic stenosis who were treated with balloon valvotomy between 1987 and 2001. Data on intermediate term follow-up are presented for 70 of these patients. The authors have adopted an actuarial approach to the group of patients in whom follow-up information is available. This type of analysis reveals a steady rise in the number of patients crossing over to the group made up of those deemed to have failed the procedure. This simply emphasizes the palliative nature of the treatment of congenital aortic stenosis, be it surgical or by balloon valvotomy. The cohort of patients in whom follow-up is available, by necessity, skews the data towards a worse outcome, since those seeking follow-up are more likely to have significant residual lesions. Despite this, the curve showing freedom from total events reveals that over seven-tenths of patients remain well palliated for many years. A small number of their patients required replacement of the aortic valve secondary to severe valvar insufficiency following the valvotomy, but in none of these was the surgical intervention requested as an emergency. Alva and his associates are quite candid in their presentation of the deaths that occurred in their series. Review of Table 1 shows that 3 of these children were in cardiogenic shock, while the other 2 had measured gradients greater than 100 mmHg. This is consistent with this particular group of patients being at high risk.

The authors are to be commended for the quality of their clinical care, which is reflected in the results presented in this series. Having lived and worked in a developing country, specifically Venezuela, I have first hand knowledge of the additional limitations and challenges faced by the authors over and above those posed by the congenital malformation itself. The excellent results are a tribute to the dedication, ingenuity, and creativity of Alva and his colleagues. This large series presented from a single institution, therefore, emphasizes the fact that, although balloon valvotomy for aortic stenosis is a palliative procedure, excellent results can be achieved in the intermediate term. Their results lend further support to balloon valvotomy being the procedure of choice for initial palliation of the child with aortic valvar stenosis.

Reference