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To the Editor

We read with interest the report concerning the association between anomalous mitral arcade and anomalies of the tricuspid valve in a recent issue of *Cardiology in the Young*.[1]

Becker and his colleagues in 1971[2] grouped various forms of tricuspid anomalies under the unifying term of "tricuspid valvar dysplasia." The unifying feature of the group is the thickening of the valvar leaflets along with faulty development of the tension apparatus. The degree of dysplasia can range from mild to severe, and can be found in valvar leaflets also afflicted by Ebstein's malformation. Similar lesions can afflict the leaflets of the mitral valve, and with their short cords, poorly attached papillary muscles and thickened leaflets, they can similarly be gathered under the heading of "mitral valve dysplasia."[3] Sometimes, they also produce an appearance which, with a muscular or fibrous arch joining the two papillary muscles, is seen as an anomalous mitral arcade.[4] The two atrioventricular valves, nonetheless, show different lesions in certain circumstances. Thus, there are only extremely rare cases of Ebstein's malformation of the mitral valve, and none reported thus far of a "tricuspid arcade." These differences are probably due to the different embryological background of the tricuspid and mitral valves,[3] so that any event occurring during morphogenesis leads to "side-specific" anomalies only if falling in the very early stages of development. There is striking evidence, however, that all these anomalies should be included in a common group of atrioventricular valvar malformations,[4,5] which are often accompanied by dysplasia of the arterial valves under the term of "congenital polyvalvar dysplasia."[6] Ebstein's malformation and the arcade lesion of the mitral valve are the only "side-specific" anomalies in this pathological spectrum.

The association of an arcade lesion of the mitral valve and dysplasia of the tricuspid valve, therefore, should not come as a surprise, probably being part of a pathologic event afflicting the atrioventricular valves during their intrauterine development. We have described two similar cases of such associations.[3] In our cases, as in that described by Mandke and his colleagues,[1] the developmental arrest seems to have occurred much earlier than in the original cases described by Layman and Edwards,[4] since the mitral arcade, which was continuous with the leaflet, was still muscular in its structure. From a clinical standpoint, mitral incompetence and/or stenosis may obscure the lesion afflicting the tricuspid valve. The diagnostic and clinical approach to patients with abnormalities of the mitral valve, therefore, should include a precise assessment of the anatomy and function of the tricuspid valve.

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