Associated complications of congenital aortopathies in children

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Background: Congenital aortopathies include a variety of disorders such as aortic stenosis, aortic coarctation, bicuspid aortic valve. The overall mortality rate following complications is 2.49-2.78 per 100,000 population. The study aimed to assess the factors with potential for development of complications in congenital aortopathies in children.
Material and methods: The study included 71 children aged from 1 month to 18 years (mean age of 9.26 ± 0.82 years). The ratio of girls to boys was 1:2. A total of 55 children were from rural areas and 16 were from urban areas.
Results: Echocardiographic data and the Z score revealed distinct aortic dilatation in 30 children, the most common site of dilation being the Valsalva sinus (26.03 ± 1.24, $p<0.005$). The most common pathologies associated with aortic dilatation were aortic coarctation and bicuspid aortic valve (accounting for 63.33% cases), followed by aortic stenosis (30% cases) and genetic diseases affecting the aortic wall structure (6.67% cases).
Conclusions: Aortic dilatation is commonly encountered in congenital aortopathies and can lead to life-threatening complications such as aortic aneurysms, aortic dissection and rupture. Early diagnosis and close follow-up are essential in this situation.
Key words: Congenital aortopathies, aortic dilatation, children.