HIGH PREVALENCE OF CARDIOVASCULAR ABNORMALITIES IN TURNER SYNDROME EVALUATED BY MAGNETIC RESONANCE IMAGING

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BACKGROUND: Turner syndrome (gonadal dysgenesis with sex chromosome abnormalities) has been associated with cardiovascular malformations, presenting as a major health threat. OBJECTIVE: To evaluate the incidence of cardiovascular malformations in 33 patients with Turner’s syndrome followed up in the Hospital de Clínicas of Porto Alegre. METHODOLOGY: A transversal study in which a Cardiac and Thoracic Magnetic Resonance Imaging (MRI) with focus on the evaluation of the aorta was performed in 33 patients with Turner Syndrome. RESULTS: The patients had average age of 20 years and 10 months and height of 138.7 cm. Approximately 42.42% of the patients presented karyotype 45,X and 33.33% webbed neck. Through MRI 54.54% of patients showed anomalies; the bicuspid aortic valve was the most frequent found present in 24.24% of patients. Through MRI, cardiovascular malformations were found in 42.42%, and elongation of the transverse arch was present in 27.27% of patients. Aortic dilatation was found in 66.66% of patients, and it was considered severe in 12.12%. The most frequent place of dilatation was in the aortic root and in the tubular portion of the ascending thoracic aorta. CONCLUSION: The results of present study corroborate with the literature that says cardiovascular anomalies are common in Turner’s syndrome, especially diagnosed through magnetic resonance imaging. Aortic dilatation, most prominent in the ascending aorta, is very frequent in Turner’s syndrome and that predicts high risk for acute aortic events such as dissection, potentially fatal.