



ECHOCARDIOGRAPHIC AND ELECTROCARDIOGRAPHIC FINDINGS IN PATIENTS WITH ANKYLOSING SPONDYLITIS: A PROSPECTIVE 8-YEAR ANALYSIS.

Raissa Pires Medeiros (UFAM, Manaus, AM, Brasil), Matheus Diniz Araújo Teixeira (UFAM, Manaus, AM, Brasil), Maykom Lira Barbosa (UFAM, Manaus, AM, Brasil), Júlia Cristina Souza Alves (UFAM, Manaus, AM, Brasil), Isabelle Louise Cruz Lopo Figueiredo (UFAM, Manaus, AM, Brasil), Gabriel Pacífico Seabra Nunes (Universidade Nilton Lins, Manaus, AM, Brasil), Marlúcia Nascimento Nobre (UFAM, Manaus, AM, Brasil), Sandra Lúcia Euzébio Ribeiro (UFAM, Manaus, AM, Brasil)

BACKGROUND

Ankylosing Spondylitis (AS) is a chronic inflammatory disease that affects the axial and / or peripheral skeleton. In the present decade, the knowledge generated about the relationship between cardiovascular risk and AS implied the need to evaluate certain classical risk factors and their cardiac manifestations, which implies a higher morbidity and mortality in these patients. Aim of this study is to evaluate the echocardiographic and electrocardiographic findings in patients with AS after 8 years.

MATERIALS AND METHODS

Prospective study performed at the rheumatology service, evaluating patients with AS diagnosis (modified New York criteria / 1984). Data from 2011 and 2019 were recorded in a protocol on risk factors: diabetes mellitus (DM), systemic arterial hypertension (SAH), smoking, dyslipidemia and a family history of cardiovascular disease (CVD), and then performed electrocardiogram (ECG) and echocardiogram (ECO), by a single cardiologist, in order to seek new alterations.

RESULTS

Twenty-one patients were evaluated, six (28%) female and 15 (72%) male, mean age 44.6 years and mean disease time 24 years. In 2011, on the risk factors: three (14%) had DM, nine (42%) had SAH, five (23%) had dyslipidemia. In ECG were found: Left ventricular hypertrophy (14%), right (4%) and left (4%) and early repolarization (9%). In ECO were found: diastolic dysfunction (19%), concentric hypertrophy (19%), mitral insufficiency (14%) and tricuspid insufficiency (9%) and mitral prolapse (5%). In 2019, we observed only five patients evolved with risk factors, three (14%) had dyslipidemia and two (9%) had DM. In the ECG we found three patients with new alterations: posterior divisional block (4%), slow progression in V5 and V6 (4%) and delayed conduction in the right branch (4%). In the ECO, we found seven patients with new alterations: mild aortic dilatation (9%), aortic insufficiency (14%), mitral (9%) and mild tricuspid (9%), thickening (14%) and aortic valve calcification (9%). Of the seven patients with new ECO changes in 2019, four (57%) had dyslipidemia, two (28%) DM, three (42%) SAH, two (28%) former smokers, two (28%) with a positive family history of CVD.

CONCLUSION

In our study, all patients evaluated in 2019 who presented alterations in ECG and ECO also had time to disease (> 10 years) and two or more risk factors, showing a possible association of these findings with these alterations. The most affected valves were the aortic valves as observed in the literature. The most prevalent risk factor was dyslipidemia followed by SAH.