MASS phenotype and oral abnormalities

Paloma Horjinec[1,2]*, Francisc Ludvig Horjinec[2]

[1]"Gr.T.Popa" University of Medicine and Pharmacy, Iasi, Romania

[2]"Promedicanon" Office, Iasi, Romania

KEYWORDS: MASS phenotype, mitral regurgitation, oral abnormalities.

CITATION: Cardiol Croat. 2018;13(11-12):378. | https://doi.org/10.15836/ccar2018.378

***ADDRESS FOR CORRESPONDENCE**: Paloma Horjinec, "Gr.T.Popa" University of Medicine and Pharmacy, I st Medical Department, 700115, 16th University Street, Iasi, Romania. / Phone: +40722569770 / E-mail: maneacpaloma@yahoo.com

ORCID: Paloma Horjinec, http://orcid.org/0000-0003-0672-7289 • Francisc Ludvig Horjinec, http://orcid.org/0000-0002-9324-3364

Introduction: MASS phenotype is a particular type of fibrillinopathy, the following Ghent criteria being present: Z score of aortic root < 3(child) / 2 (adult); systemic score <5; mitral valve prolapsed (M); borderline aorta dilation(A); skin striae (S) and skeletal features (S).[1] The goal of the study was to reveal correlations between oral abnormalities and cardiac pathology in MASS phenotype, for a better approach and therapy of cardiac involvement.

Patients and Methods: Our study included 28 patients, with 2 years monitorization, aged between 5 and 48 years, with MASS phenotype. Every 6 months, cardiological and dental examination, laboratory findings, electrocardiogram and transthoracic echocardiogram were done. As concerning patients symptoms, the following were predominant: atypical chest pain, 1st class dyspnea and palpitations. Mild and moderate mitral regurgitation were usually seen on echocardiography, as mild or moderate pulmonary hypertension; 1 patient required mitral valve reconstruction, due to his severe mitral valve regurgitation and severe pulmonary hypertension. The most common oral anomalies were the following: dental implantation abnormalities, periodontal disease, maxillary protrusion and temporomandibular joint dysfunction.

Results: The study revealed a direct correlation between mitral regurgitation severity and oral modifications. The strongest connection was between temporomandibular joint dysfunction and mitral valve prolapsed (r= 0.728, p=0.03), concordant with previous studies. This observation sustains a previous affirmation: fibrillin deficiency inside mitral valve, in fibrillinopathies, is the same as fibrillin deficiency in temporomandibular joint.

Conclusion: Oral anomalies, inside MASS phenotype, could be an outcome marker for cardiovascular evolution in this disease.

RECEIVED:
October 17, 2018

ACCEPTED:
November 5, 2018

LITERATURE

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