Left ventricular function in a large cohort of pseudoxanthoma elasticum patients

Submitted by Emmanuel Lemoine on Tue, 02/24/2015 - 15:43

Titre: Left ventricular function in a large cohort of pseudoxanthoma elasticum patients

Type de publication: Article de revue

Auteur: Bière, Loïc [1], Donal, Erwan [2], Terrien, G. [3], Furber, Alain [4], Martin, Ludovic [5], Prunier, Fabrice [6]

Editeur: Public Library of Science

Type: Article scientifique dans une revue à comité de lecture

Année: 2014

Langue: Anglais

Date: 2014

Numéro: 3

Volume: 9

Titre de la revue: PLoS One

ISSN: 1932-6203

Mots-clés: Cohort Studies [7], Diastole [8], echocardiography [9], Female [10], Humans [11], Male [12], Middle Aged [13], Pseudoxanthoma Elasticum/physiopathology/ultrasonography [14], Systole [15], Ventricular Function, Left [16]

Résumé en anglais: OBJECTIVE: Pseudoxanthoma elasticum (PXE) is a rare autosomal recessive disorder characterized by the mineralization and fragmentation of elastic fibers in the skin, retina, and vascular walls. While there is no doubt that peripheral arterial disease is associated with PXE, several other cardiac complications have been linked with PXE, mainly based on case reports. It remains unclear, whether cardiac systolic or diastolic function impairment is a common complication of PXE.

METHODS: This study conducted systematic assessment of left ventricular systolic and diastolic function via standard echocardiography and two-dimensional strain imaging, in a large cohort of asymptomatic PXE patients (n = 75) and matched healthy controls (n = 30). RESULTS: PXE and controls did not differ in terms of any of the diastolic parameters tested: E-wave (82 +/- 17 cm/s vs. 82 +/- 13 cm/s, p = 0.890), E deceleration time (191.7 +/- 55.6 ms vs. 190.0 +/- 35.9 ms, p = 0.879), and E/Em ratio (7.1 +/- 2.3 vs. 7.0 +/- 1.8, p = 0.829). In addition, no significant differences were observed between PXE and control in terms of left ventricular volumes and ejection fraction, as well as global, basal, mid, and apex longitudinal strains. CONCLUSIONS: These findings revealed that preclinical cardiac dysfunction is uncommon in a large population of asymptomatic PXE patients.

URL de la notice: http://okina.univ-angers.fr/publications/ua8299 [17]

DOI: 10.1371/journal.pone.0090364 [18]

Lien vers le document: http://dx.doi.org/10.1371/journal.pone.0090364 [18]

Titre abrégé: PLoS One
Liens
[1] http://okina.univ-angers.fr/loic.biere/publications
[2] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=10103
[3] http://okina.univ-angers.fr/publications?f%5Bauthor%5D=14228
[4] http://okina.univ-angers.fr/al.furber/publications
[5] http://okina.univ-angers.fr/ludovic.martin/publications
[6] http://okina.univ-angers.fr/f.prunier/publications
[7] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=9910
[8] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=13506
[9] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=10595
[10] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1075
[11] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=991
[12] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=968
[13] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=5941
[14] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=13507
[15] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=13216
[16] http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=13505
[17] http://okina.univ-angers.fr/publications/ua8299
[18] http://dx.doi.org/10.1371/journal.pone.0090364

Publié sur Okina (http://okina.univ-angers.fr)