Applications of phase-contrast velocimetry sequences in cardiovascular imaging.

Submitted by Christophe Aube on Mon, 09/29/2014 - 15:42

Titre
Applications of phase-contrast velocimetry sequences in cardiovascular imaging.

Type de publication
Article de revue

Auteur
Caroff, J [1], Bière, Loïc [2], Trebuchet, Guillaume [3], Nedelcu, C [4], Sibileau, E. [5], Beregi, J-P [6], Aubé, Christophe [7], Furber, Alain [8], Willoteaux, Serge [9] Aubé, Christophe [7], Furber, Alain [8], Willoteaux, Serge [9]

Editeur
Elsevier Masson

Type
Article scientifique dans une revue à comité de lecture

Année
2012

Langue
Anglais

Date
2012 Mar

Pagination
159-170

Volume
93

Titre de la revue
Diagnostic and Interventional Imaging

ISSN
2211-5684

Mots-clés
Aneurysm, Dissecting [10], Aortic Aneurysm, Thoracic [11], Cardiovascular Diseases [12], Heart Defects, Congenital [13], Heart Valve Diseases [14], Hemodynamics [15], Humans [16], Image Enhancement [17], Image Processing, Computer-Assisted [18], Imaging, Three-Dimensional [19], Magnetic Resonance Angiography [20], Magnetic Resonance Imaging [21], Renal Artery Obstruction [22], Rheology [23], Stroke Volume [24]

Résumé en anglais
AIMS: To describe and illustrate the main applications of phase-contrast flow quantification in cardiovascular imaging.

CONCLUSION: Phase-contrast velocimetry sequences provide an accurate, reliable, reproducible and non-invasive study of blood flow, information which is sometimes not available from other investigation methods. The haemodynamic information obtained from these complement MRI angiography images. They appear to have a range of clinical applications, firstly improving pathophysiological understanding but also contributing to the treatment and follow-up strategy after surgical or endovascular treatment.

URL de la notice

DOI
10.1016/j.diii.2012.01.008 [26]

Identifiant (ID) PubMed
22421280 [27]

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