Multi-modality imaging in ischemic heart disease, arrhythmia and cardiac-mechanics

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Stellingen behorend bij het proefschrift getiteld:

Multi-modality imaging in ischemic heart disease, arrhythmia and cardiac-mechanics

1. The echocardiographic evaluation of LV mechanical efficiency is a promising tool for both diagnosis and prognostication of various cardiac diseases. (This thesis)

2. Although previous trials have not demonstrate an effect of HRT on total coronary atherosclerosis changes, our findings suggest coronary plaques should be evaluated for compositional changes following HRT. (This thesis)

3. Segmental CW may therefore serve as a low cost, non-invasive marker of myocardial viability. (This thesis)

4. Assessment of posterior LA adipose tissue attenuation may potentially guide/personalize the use of anti-inflammatory therapy to reduce AF recurrences. (This thesis)

5. Although the incidence of cardiovascular events is associated with stenosis severity, a substantial proportion of cardiac events arise from non-obstructive coronary lesions (*Han D, Chen B, Gransar H, Achenbach S, Al-Mallah MH, Budoff MJ, et al. Prognostic significance of plaque location in non-obstructive coronary artery disease: from the CONFIRM registry. Eur Heart J Cardiovasc Imaging 2021*)

6. Whether an ischemic myocardial segment is hypokinetic or dyskinetic depends on the balance between the stress imposed on that segment and the sum of the active and passive stresses within the segment.
(*Skulstad H, Edvardsen T, Urheim S, Rabben SI, Stugaard M, Lyseggen E, et al. Postsystolic shortening in ischemic myocardium: active contraction or passive recoil? Circulation 2002;106:718-724*)

7. Clinical assessment of left ventricular (LV) systolic function is commonly performed by measuring indices of myocardial fibre shortening such as LV ejection fraction which is a global index, and LV wall thickening, myocardial velocity, and strain which reflect regional function. The shortening indices, however, do not reflect myocardial work or oxygen demand.
(*Russell K, Eriksen M, Aaberge L, Wilhelmsen N, Skulstad H, Remme EW, et al. A novel clinical method for quantification of regional left ventricular pressure-strain loop area: a non-invasive index of myocardial work. Eur Heart J 2012;33:724-733*)

8. Obesity is a worldwide epidemic and constitutes a strong risk factor for atrial fibrillation (AF), the most prevalent arrhythmia in humans.
(*Ciuffo L, Nguyen H, Marques MD, Aronis KN, Sivasambu B, de Vasconcelos HD, et al. Periatrial Fat Quality Predicts Atrial Fibrillation Ablation Outcome. Circ Cardiovasc Imaging 2019;12:e008764*)

9. Een arts is net als een detective (*Bob Michels gepensioneerd internist-endocrinoloog, 2008*)- Geneeskunde is in veel opzichten vergelijkbaar met detectivewerk.

10. Valar Morghulis (*proverb in High Valyrian, A Song of Ice and Fire 1996, George RR Martin*)- Despite accelerating scientific innovation, death is and will remain an unavoidable part of life.