Maastricht University

Pacing the heart

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Pacing the heart:
synchronization or orchestration?

Propositions

1. Pacing-induced acute hemodynamic response in heart failure patients primarily depends on the patient's intrinsic interventricular dyssynchrony. (Chapter 2)

2. The benefits of restoring atrioventricular coupling on left ventricular hemodynamics can outweigh the adverse effects of pacing-induced ventricular dyssynchrony. (Chapter 4)

3. Though septal flash and early shortening of the septum coincide, they have distinctive causes. (Chapter 6)

4. To obtain the largest hemodynamic improvement following CRT in the presence of scar, the left ventricular lead should be placed in a balanced position remote from both the scar and the right ventricular lead. (Chapter 7)

5. Hearts and medical engineers are look-a-likes: they both adapt to their environment to increase their efficiency.

6. As *entrecôte* flourishes with *Bordeaux red*, *electrical* cardiac resynchronization therapy thrives with insight in the *mechanical* function of the heart.

7. Model complexity should not exceed the complexity of the research question to be addressed.

8. Computer simulations and animal experiments cannot replace each other; rather they form a true synergy.

9. Van valoriseren kun je leren.

10. Onderzoek is als mountainbiken: als je nooit onderuit gaat, probeer je niet hard genoeg.

Peter Huntjens
Maastricht, June 27th, 2019