**THE HIGH-DEGREE ATRIOVENTRICULAR BLOCK REMAINS A SEVERE PROGNOSTIC MARKER IN THE PRIMARY PERCUTANEOUS CORONARY INTERVENTION ERA**

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I used my research study to comment on the new study results in patients with an acute myocardial infarction (AMI) complicated by a high-degree atrioventricular block (HAVB). We collected the group of 15 patients with a transvenous temporary atrioventricular sequential cardiac pacing (TAVSCP); all patients had AMI and HAVB; cardiac output (CO)/ cardiac index (CI) was measured by thermodilution. We assessed the hemodynamic effect of TAVSCP compared to the ventricular cardiac pacing. CO/CI was measured in 7 patients. TAVSCP results: CO = 4.19 ± 0.74 L/min, CI = 2.19 ± 0.31 L/min/m2. Ventricular pacing results CO = 3.57 ± 0.91 L/min, CI = 1.86 ± 0.40 L/min/m2. TAVSCP resulted in a significantly higher CO by 17%, p < 0.0005; CI was higher by 18%, p < 0.002. HAVB results: CO = 3.40 L/min, CI = 1.76 L/min/m2. We tested one patient to detect and assess changes in sympathovagal balance caused by the loss of atrioventricular sequence because of complete heart block (CHB). We recorded the intra-cardiac ECG record of consecutive atrial potentials for 45 minutes during TAVSCP and CHB, we performed the spectral analysis of atrial heart rate variability: CHB resulted in decrease in vagal activity, Power HF component decreased from 104.0 to 10.3 ms2; Relative Power HF decreased from 63.3% to 35.3%; Ratio LF/HF increased from 0.2381 to 1.1081; Relative Power LF increased from 16.1% to 39.3%. CHB reduced the average interval between atrial potentials to 600.8 ms from 645.7 ms on TAVSCP; atrial heart rate became faster 99.86 b.p.m. from 92.92 b.p.m. Our study conclusion: TAVSCP is hemodynamically superior to the ventricular pacing. The atrial heart rate variability record suggested prompt changes in sympathovagal balance immediately after the loss of atrioventricular sequence because of CHB. These findings deserve further investigation in view of the high in-hospital mortality.