P19: EFFECT OF GROWTH HORMONE REPLACEMENT IN THE VASCULAR SYSTEM OF ADULT PATIENTS WITH CHILDHOOD ONSET HYPOPITUITARISM

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Results: brachial cuff (Mobil-O-Graph).
modynamic measurements were measured non-invasively 1 day before (T0) and 1 day after (T1) TAVI using a validated oscillometric method using a brachial cuff (Mobil-O-Graph).

Methods: TAVI Care & Cure is an observational ongoing study including consecutive patients undergoing TAVI procedure. Central and peripheral hemodynamic parameters were limited. We performed a pilot study to investigate possible short-term hemodynamic changes after TAVI in older patients.

Results: 40 patients were included. Mean aortic valve area at baseline was 0.73 ± 0.18 cm². As expected indices of severity of the aortic valve stenosis improved. Systolic blood pressure (SBP) dropped by 8.5%, from 130.3 ± 22.9 mmHg to 119.5 ± 15.8 mmHg (p < 0.005). Diastolic blood pressure (DBP) dropped by 13.1% from 74.8 ± 14.5 mmHg to 65.0 ± 11.3 mmHg (p < 0.001). The aPulse Wave Velocity (aPWV) decreased from 12.05 ± 1.99 m/s to 11.6 ± 1.56 m/s (p = 0.006)(Fig. 1). Patients with high aPWV at baseline showed a significantly larger reduction in SBP in comparison to patients with low aPWV: -20.3 ± 11.4 mmHg (-14.1%) vs. -3.1 mmHg (-2.6%), respectively (p = 0.033). The same trend was found for the DBP: -16.2 ± 20.45% from 74.8 ± 14.5 mmHg to 65.0 ± 11.3 mmHg (p < 0.001) for high vs. low aPWV at baseline (p = 0.037).

Conclusion: We found short term changes of blood pressure and aortic stiffness after TAVI. The amplitude of the changes was the largest in patients with elevated aortic stiffness at baseline.

Figure 1: Changes of hemodynamic parameters after TAVI: Systolic Blood Pressure (a), Diastolic Blood Pressure (b) and aPulse Wave Velocity (c).