QUALITY OF LIFE AS AN INTEGRAL ASPECT OF TRANSAPICAL TRANSCATHETER AORTIC VALVE IMPLANTATION OUTCOME

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Objectives: Transapical transcatheter aortic valve implantation (TA-TAVI) has been shown to be an effective and safe alternative procedure in selected high-risk patients with aortic stenosis. However, as elderly patients with multiple co-existing disorders are treated, quality of life (QoL) becomes a fundamental aspect of outcome. We therefore assessed not only clinical parameters such as morbidity and mortality but also focused on subjective improvement of life quality after TA-TAVI procedures. Furthermore, efficiency of TA-TAVI therapy was evaluated by comparison with surgical aortic valve replacement (AVR) and patients with chronic diseases in terms of these aspects.

Methods: Between June 2008 to October 2011, 60 consecutive TA-TAVI patients (age 78.8 ± 6.3 years; 66.7% women, log EuroSCORE 22.1% ± 16.7%; Edwards Sapien XT) were included in the study. Complication rates were evaluated according to VARC criteria. Forty-four patients could be asked about life quality six months after the procedure, using the SF-36 survey to assess quality of life. Response rate was 95.7%. Norm based Physical Component Summary (PCS) and Mental Component Summary (MCS) scores were calculated. Comparison of data of, for example, patients with chronic disease was assessed with two tailed t-test. Kaplan-Meier analysis was utilized for survival statistics.

Results: Thirty-day mortality was 5%, and overall 1-year survival rate was 78.3%; 3.4% of patients had a stroke, and 8.5% required pacemaker implantation. Results of the SF-36 demonstrated relatively low PCS (36.47 ± 10.47) and MCS (44.63 ± 11.4) scores. However, in 79.6% of patients, postoperative QoL was rated improved or at least unchanged. Compared with results of surgical AVR, quality of life after TA-TAVI was shown to be significantly lower, with values close to patients with life-limiting diseases like cancer.

Conclusions: In conclusion, self-assessment by the SF-36 survey is an effective instrument with which to evaluate disease-related life quality. For evaluation of TA-TAVI efficiency, QoL should be analysed in addition to clinical parameters. Due to considerably impaired QoL PCS and MCS scores, careful psychological supervision of TA-TAVI patients has to be considered in the pre- and postoperative course.