

C50. Transcatheter Aortic Heartvalve Implantation Of Edwards Sapien Bioprothesis With A Mobile X-ray System Experiences And Results Of An Interdisciplinary Workgroup

Holger Schroefel¹; Gerhard Schymik²; Heinz Baumann³; Frank Redling¹; Veronika Elsner¹; Bernd-Dieter Gonska³; Claus Schmitt²; Herbert Posival¹

¹*Clinic for Heart Surgery, Karlsruhe, Germany;* ²*City Clinic, Dep. of Cardiology, Karlsruhe, Germany;* ³*St. Vincentius Clinic, Dep. of Cardiology, Karlsruhe, Germany*

OBJECTIVES: Up to now only few datas about transcatheter aortic heart valve implantation as a common clinical used method by using a mobile X-ray system are available.

METHODS: We refer to 115 patients being treated with transcatheter aortic valve implantation during 4/2008 – 1/2009, their implantation parameters and their follow-up.

RESULTS: Including criterias for the transcatheter implantation were a severe aortic stenosis, Euroscore > 20% or STS-Score > 10%, age of more than 75. The transapical (TA) method was undertaken in 60 patients whereas 55 patients were treated using the transfemoral (TF) access. Primary successful results were seen in 96%, in 94% without using ECC. A reduction of Pmax from 72 to 17 and Pmean from 46 to 10 mmHg was shown. The severity of aortic insufficiency after implantation was in 93% at a maximum of I°. In 5 cases it became necessary to convert into a conventional operation. 6 patients died acute (5.2%). Incidences of severe complications (dead, conversion, neurological complications) was 16% within the first 50 patients, for the following patients it was reduced to 7.3%, lower complications (vascular complications, re-thoracotomie, pace maker implantation) were at 24% and 13% respectively.

CONCLUSIONS: The transcatheter aortic heart valve implantation is a method with high rates of primary success and acceptable rates of complications. The results of the second 50 patients show an improvement compared to the initial population of 50 patients. Within a skilled interdisciplinary team and a mobile X-ray system even high risk patients with a significant aortic stenosis can be treated successfully.