ABSTRACT IN ENGLISH

CORONARY ANGIOGRAPHY (CA) AND PCI IN AUSTRIA DURING THE YEAR 2007 (Registry-Data with AUDIT 2004 through 2008)

52,260 diagnostic coronary angiographies (CA) and 19,342 percutaneous coronary Interventions (PCIs) were done in Austria during the year 2007. The country hosts 34 centers for diagnostic studies in adults, all of them perform PCI as well. There is an increase of 3.1 % concerning coronary angiography and of 0.42 % in PCI compared to 2006. The PCI/CA ratio increased from 2001-2006 from 31.1% to 38.0% (p<=0.001), but decreased to 37.0 % in 2007.

PCI during or for myocardial infarction (acute PCI) was performed in 6,014 cases, this is an increase from 11.7% during the year 2002 to 31.1% of PCI in 2007. Overall Mortality 2007 after PCI was reported in 1.12%, after elective (non acute) PCI in 0.128% (17/13,328) and after acute PCI for myocardial infarction in 3.31% (199/6014). After acute-PCI 68/5610 (1.21%) patients died having an infarction without, and 131/404 (32.43%) patients died after acute PCI having an infarction with preceding shock before. Emergency bypass surgery rate after PCI was 0.11% and 8 out of the 22 patients died after emergency surgery due to failed PCI.

In 17,494 cases stents (90.45 % of all PCI cases) were implanted. Drug eluting stents (DES) were used in 64.12 % of stent-cases in 2007, compared to 69.2 % during 2006. Paclitaxel again is the most frequently used coating with 3550 documented cases in 2007. During 2003, 2004, 2005, 2006 and 2007 4.9%, 5.5%, 4.9%, 5.8% and 5.2 % of all PCI-cases respectively were done due to in-stent-restenosis. The usage of IIb/IIIa platelet antagonists during 2003 -2007 shows a decreasing percentage of 22.1%, 17.8%, 19.4% 17.7% and 18.55% of all stent-cases. The relative usage of puncture site closing devices increased from 48.3% of PCI in 2003 to 69.2 % in 2007, and in CA from 23.7% in 2005 to 40.2% in 2007. Reporting of vascular complications did not increase at the same time. Brachial punctures reached 2.2%, 1.7%, 3.6%, 8.2% and 7.2% of PCI in 2003 - 2007 respectively.

Twenty-seven audits were performed during 2004-2008 in 26 of the 34 Austrian cathlabs. International comparison lists Austria (8.299 million inhabitants) under the top nations with 6296 CA and 2330 PCI per one million inhabitants, as well as far as the PCI/CA and DES/stent ratios for 2007 are concerned. Communication was improved with help of http://iik.i-med.ac.at/.

<u>In conclusion</u> the year 2007 for the first time breaks the trends of the past years by decreasing the ratio of PCI/CA% and decreasing DES cases. PCI-cases due to in-stent-restenosis do not really decrease jet. The usage of puncture site closing devices and brachial punctures increased. Clot catcher, intracoronary Ultrasound and – Pressure Registration increased slightly.