Quality control in percutaneous intervention

Report 2017 - BWGIC

A. Coronary interventions

Missions of the BWGIC include an active contribution to the quality control of data encoded in the QERMID database (Qermid©Tuteurs coronaires). The BWGIC contributed to the selection of relevant items, to the definition of quality indicators and to the validation of encoded data by a « peer review ».

Peer review was initiated by BWGIC in 1996 and was maintained without interruption since, despite difficulties in obtaining data from QERMID between 2012 and 2015.

In 2016, peer review was mainly based on review and analysis of the whole dataset of PCI data in QERMID database. Characterization of population, indications, procedural results and technical aspects were monitored in selected centers, compared with data from other centers, literature and with those of previous years. Aggregated data form Belgian centers were transmitted to the European Society of cardiology (EAPCI) for publication in the “EAPCI White Book data collection”.

In 2016, a total number of 28246 PCI were performed in the 49 belgian PCI centers, confirming the constant increase since 2013. The majority (73%) were male patients.

Mortality at 30 days was obtained for the Belgian patients (n=27752) in whom we have a reliable access to long-term follow-up. Overall mortality was 2.93%, mainly related to acute cases (acute coronary syndromes). For elective patients, 30-days mortality was 0.75% vs 5.6%
among patients admitted for an acute coronary syndrome. No significant difference among centers was observed.

The majority of procedures were done by radial access, following the recent recommendations of the European society of Cardiology.

B. Structural interventions

B1. TAVI

Transcatheter aortic valve implantations are now performed almost routinely in many Belgian centers. The following centers did contribute to the TAVI registry:


A total of 580 procedures were recorded in 2016 in our database.

Mean age was 82.3 ±8.9 years. 31% were in atrial fibrillation. The mean gradient was 47±21 mmHg. This population included 45% of male patients, mostly at high surgical risk (Euroscore II: 8.4±4.2 and STS score: 6.6±3.1).

Procedural mortality was 1.6% for Edwards valves and 1.7% for Corevalves (NS).
B2. Closure of left atrial appendage (LAAO) offers new therapeutic opportunities to some high-risk patients in atrial fibrillation. In 2016, 163 procedures were done in Belgium and data were collected in a registry (BLAAO) for further analysis.

B3. Mitraclips: 80 (vs 53 in 2015) procedures were done in 2016. A new database is designed (Percutaneous Mitral Valve Treatment Registry) to collect data prospectively.

Communication with centers

Every year, PCI data are presented to all members during the general assembly (spring meeting of the BWGIC). In addition, a newsletter is addressed to all members summarizing some results of the QERMID data base and of other registries and encouraging for active contribution to the acquisition of accurate data.

Prof Claude Hanet
Project coordinator
email: claude.hanet@uclouvain.be