Abstract:

Background. Financial pressure and economic responsibility for budgets demand that different treatments for the same condition be compared for cost effectiveness. In the sector of vascular medicine a cost comparison of carotid endarterectomy (CEA) and carotid artery stenting (CAS) for carotid stenosis is of particular interest.

Methods. We compared the total internal costs and the staff and material costs incurred for 30 CEAs (7 female patients) and 30 CASs (8 female patients). Symptomatic stenosis of the carotid artery was present in 14 of the 30 patients in the CEA group and 26 of the 30 in the CAS group. The average age was 70.2 years in the CEA group and 68.4 years in the CAS group.

Results. On average the total internal cost was EUR 3617.61 for CEA and EUR 4,551.67 for CAS. Total procedural costs were EUR 508.61 for CEA and EUR 2142.67 for CAS; CAS involved EUR 1983.81 for material costs, while CEA involved 276.71 for material costs and EUR 448 for anaesthesia in addition. The most cost intensive items for CEA were the patch (EUR 118.--) sterilisation (EUR 54.48), and the shunt (EUR 28.05). In the case of CAS the most expensive items were the stent (EUR 800.--), the protection system (EUR 800.--), and the balloon catheter (EUR 118.--). Nonprocedural costs (ward, intermediate care suite, laboratory, X-ray and others) were comparable in both groups (CEA:...
EUR 2661; CAS EUR 2409). Conclusions. The increasing importance of economics in medicine makes transparent analyses of cost and effectiveness of different treatment options for the same disease necessary. The data presented may give an insight into the resources consumed by and possible income that could accrue from reconstructive treatments for carotid artery stenosis.