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**Prognostic factors of chronic otitis media**

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The goals of successful tympanoplasty are the removal of the underlying pathologic processes and the achievement of a mucosal-lined middle ear cleft with an intact tympanic membrane and sound-conducting mechanism. The prognostic factors can be divided into intrinsic factors: eustachian tube function, disease severity and status of residual ossicular chain, and extrinsic factors: surgical technique, staging, design and composition of the graft and prosthesis.

We reviewed the middle ear risk index (MERI) by Becvarovski and type of surgery in our patients. The risk factors of MERI index are otorrhea, perforation of tympanic membrane, cholesteatoma, ossicular status, granulation or effusion of middle ear, previous surgery and smoking.

**Material and methods:** It is retrospective study of 266 patients (157 male and 109 female) with chronic otitis media with or without cholesteatoma in department of Otolaryngology Pardubice between July 1996 and December 2004. All patients underwent 310 surgeries, 15 patients were operated on both sides, 18 patients had two surgeries on one side, 4 patients three surgeries on one side and one patient four surgeries on one side. We distinguished the type of surgery: tympanotomy with resection of retraction pocket (10 cases), atticotomy (58 cases), modified radical mastoidectomy (104 cases), radical mastoidectomy (9 cases), revision after mastoidectomy (48 cases) and simple cortical antromastoidectomy (10 cases) The follow-up period ranged from 1 to 9.5 years; mean 3.1 year.

**Results:** The risk factors of MERI and risk value were otorrhea: dry ear 33 cases, occasionally wet 157 cases, persistently wet 64 cases; perforation of tympanic membrane: none 121 cases, present 132 cases; cholesteatoma: none 87 cases, present 167 cases; ossicular status: normal 84 cases, defect of incus 79 cases, defect of incus and stapes 28 cases, defect of malleus 28 cases, defect of malleus, incus and stapes 34 cases; middle ear: normal mucosa 141 cases, granulations or effusion 112 cases; previous surgery none 185 cases, revision 64 cases; 196 nonsmokers and 58 smokers. Statistical analysis was performed.

**Conclusion:** The MERI index was calculated and compared with hearing level before and after surgery. We concluded patients with higher MERI index had worse preoperative and postoperative air-bone gap.