Summary

Introduction: Surgical rehabilitation of voice and speech, with implantation of Provox 2 voice prosthesis is becoming a standard procedure in Poland in the last few years. Still some opinions are raised, considering the potential risk of complications, particularly, when tracheo-esophageal puncture is finally located in the irradiated tissue. Aim of the study: The assessment of safety, and analysis of complication encountered with tracheo-esophageal puncture, and implantation of voice prosthesis.

Material and method: The 106 cases of patients treated with mentioned above method. The primary implantation was performed in 73 (68,9%) cases; the secondary implantation in 33 (31,1%). The 85 (80,2%) patients received radiotherapy before, or after implantation. In the analyzed period (2002—2004) apart of 106 implantations, the replacement of 132 prostheses was performed. Results: There was only one, potentially life-threatening complication recorded in the analyzed group of 106 patients — inhalation of prosthesis to tracheo-bronchial tree. The most common complications directly related to implantation were: infection in the place of created fistula after secondary implantation 4/33(12,1%), and spontaneous partial extrusion of prosthesis with occlusion of created fistula tract 8/106 (7,5%). The average lifetime of prosthesis in place, was 9,8 months in irradiated field, and 9,7 months in patients who did not received radiotherapy. Conclusions: Surgical rehabilitation of voice and speech, with implantation of vocal prosthesis is safe and reliable procedure. The radiotherapy applied before or after creation of tracheo-esophageal fistula is not a contra indication for this method. Generally low rate of complications is similar in both groups — who does received or not received radiotherapy. Also the stability of implanted prostheses were similar in both groups.