

# Zastosowanie noża obrotowo-ssącego (*shaver*) w chirurgii otorynolaryngologicznej

Rotation suction-knife (shaver) in otorhinolaryngological  
surgery

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## Summary

**Introduction:** Rotation suction knife (shaver or microdebridor) was developed in beginning 1985 in orthopedic surgery. In the field of otolaryngology it was used in 1992—1994. Shaver is a combination of suction and cutting round knife working together. Knives of different shapes are put into handpiece. They have outer sheath with window, which protect the inner rotating blade. The blade is connected to suction and cutting tissue is removed from the operation field. In otolaryngology surgery we mostly used the oscillation cutting mode which is the most sufficient. Shaver surgery is precise in soft tissue resection, so the most advantages to powered the system is in rhinosurgery, polypectomy with extension to pansinus surgery. Microdebridor can be also used for nasopharynx-adenoidectomy, chonanal atresia surgery, turbino-plasty, dacryocystorhinostomy, sella turcica tumor resection or laryngeal surgery.

**Material and methods:** We used the Storz's shaver system with a handpiece with a motor in the vertical part of the T-shaped handle. Suction and transport of rejected material does not pass through the motor system. The suction channel is straight and clogging is minimized. We performed shaver surgery during functional endonasal endoscopic surgery (FESS) for polypectomy in 15 cases, medial antrostomy (uncinectomy for „swinging door" procedure) in 10 cases, nasopharyngeal-adenoidectomy in 3 cases and turbinoplasty (inferior turbinectomy) in 10 cases.

**Results:** In our material we did not observe any complications during and after surgery. The healing process is very good without obstruction and crusting. The shaver system has an excel-lent protection for surrounding tissue and minimalized the tissue destruction.

**Conclusions:** Shaver is an excellent powered instruments for rhinosurgery especially massive polyps of nose and sinuses. It is very sufficient to prevent normal tissue and remove pathological one, this can be achieved in no bleeding area.