

## **Endoskopie: Eine Technik für den Einsatz im neurochirurgischen Alltag?**

### **Endoscopy: Technique for the daily routine in Neurosurgery?**

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#### **Introduction**

Endoscopic procedures were performed for more than 10 years now. Beside pure endoscopic procedures, endoscope-assisted and endoscope-controlled microsurgical technique has been developed. However, use of endoscopic procedures is very inhomogeneous in the different neurosurgical departments. In addition, it is still under discussion, if certain endoscopic procedures should become treatment of first choice.

#### **Material und Methods**

Between March 2003 und May 2004, we performed 43 endoscopic procedures in a previously endoscopically not experienced department. Procedures included 24 third ventriculostomies, 4 endoscopic biopsies, 3 cystostomies, 11 endoscope-assisted procedures in acoustic neuromas, epidermoids, and scull base meningiomas, as well as an endoscope-controlled transsphenoidal resection of a pituitary adenoma..

#### **Results**

13 of 31 pure endoscopic procedures (ventriculostomy, endoscopic biopsy) were performed by endoscopically not experienced surgeons, all but one endoscope-assisted or endoscope-controlled operations by an endoscopically experienced surgeon. In one case re-ventriculostomy had to be performed due to wrong location of the stoma.

## Conclusion

Pure endoscopic operations (ventriculostomy, endoscopic biopsy) may be performed safely with adequate assistance even by not experienced surgeons. Most difficulties were observed related to correct handling of the endoscopic equipment and intraoperative orientation. Endoscope-controlled technique should be performed by endoscopically experienced surgeons, preferably in dedicated centres. To declare specific endoscopic procedures as the first choice treatment (i.e. endoscopic third ventriculostomy for occlusive hydrocephalus), broad and intensive training is necessary.