Functional endoscopic sinus surgery (FESS) developed from a renewed and deepened understanding of the pathophysiology of the nose and the sinuses. Primarily a diagnostic endoscopic concept it is based on the findings that frontal and maxillary sinuses are subordinate cavities to the ethmoids. Disease usually starts in the nose and spreads through the ethmoidal prechambers to the larger sinuses. Standard rhinoscopy and x-rays are frequently not enough to identify the underlying causes for chronic or recurrent sinusitis. The combination of diagnostic endoscopy of the lateral nasal wall with conventional of computed tomography has proven to be the ideal method for examination of inflammatory diseases of the nose and the sinuses. Based on such an diagnostic approach many an unnecessary surgery can usually be avoided by placing proper medical therapy often under endoscopic guidance to the very area of the problem. If a clear indication for a surgical approach is established, this usually aims for the underlying cause of sinus disease in the lateral nasal wall only, instead of the secondarily involved larger sinuses, which usually will head off without having been touched at all. With limited surgical procedures, adapted to the individual pathology, diseased ethmoid compartments are operated on, stenotic clefts widened and prechambers to frontal and maxillary sinuses cleared from disease. The mucosa with these procedures is protected as much as possible and care is taken not to denude significant bone areas. In the extreme, a total sphenoethmoidectomy can be performed with this technique, although the true advantage is that even in most cases of massive disease such radical procedures can be avoided. Endoscopic sinus surgery is, however, by no means a “cure-all-technique”. Though it can be applied to a wide spectrum of indications apart from nasal polyposis, the technique has its clear limits as well as its specific problems. As all kinds of ethmoid surgery it requires a detailed knowledge if the critical anatomy, adequate training and experience to avoid the risks and hazards involved. Apart from chronic sinusitis, mucoceles, complications of acute sinusitis and massive nasal polyposis the rage of indications for endoscopic approaches has been extended today: orbital and optic nerve decompression are only two of the more recent developments in transnasal endoscopic surgery.

For the first time at an international meeting, a videotape on blue-light endoscopy for detection and consequently, of CSF-leaks will be shown.