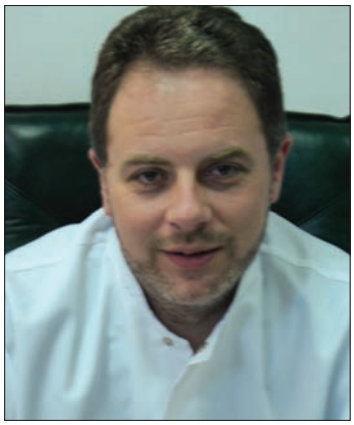
EDITORIAL

What have I learned in 20 years of endoscopic sinus surgery?



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Endoscopic sinus surgery has been introduced in Romania since 1993, when two important ENT&HNS Departments – Bucharest "Sfanta Maria" Hospital and Cluj Napoca County Hospital, bought the basic set instruments for this kind of surgery.

We started the procedures in our Department in the autumn of 1994 and, since then, more than 7000 procedures have been performed. After 20 years I thought about the learning curve and, of course, about the things I have learned during this intense period of time.

Several times I have asked myself how I can improve my personal education and then the alumni way of training. In fact, it is so simple. We have to learn theory (physiology, pathology, basic knowledge of the procedure, different techniques), then go back to the Anatomy lab; afterwards, CT and imaging courses are welcome. Assistance during surgery is mandatory at the beginning and of course attending surgical courses and interactive multimedia teaching software are also required.

It is obvious that there are no simple cases, so it is mandatory to individualise each and to operate it as it is the most difficult.

I imagined a 3-step learning algorithm consisting in: learning macroscopic and endoscopic anatomy, followed by lessons of imagistic details and ultimately developing the ability to compare, correlate and integrate the 3 types of images. **Then….comes the TRAINING and, finally, operating on a correctly investigated patient with a realistic indication for endoscopic approach.**

Chronic rhinosinusitis (CRS) is a chronic, recurrent, benign disease. The surgical goal is sometimes not achieved, so my personal experience shows that maximal medical therapy should be administered before surgery in order to be able to estimate the results of your treatment and to properly prepare the operating field. It is better to cure the infection when it is demonstrated by cultures from the nose and sinuses and to recommend a flash of corticosteroids, 10 days before surgery, in order to reduce the oedema and of course the bleeding during surgery. Moreover, the surgeon has to take into account that the operation should relief patients' symptoms and to deal with his/her personal expectations.

We have to operate patients not CT scans. We have to integrate the CT scan appearance with the patient's symptoms and, of course, with the endoscopic examination and to stage properly the disease. Then, it is better to analyze the imaging donations to find out all the anatomic variations and the anatomic changes due to the disease or to previous surgery. Sometimes we perform excellent operations with no symptoms alleviation, because the background of the disease is much more general (i.e. allergy, cilia dysfunction, mucoviscidosis). Another aspect is related to antrostomies that do not incorporate the natural ostium or that leave in place a posterior fontanel leading to mucus recirculation and symptoms persistence.

A strong piece of advice is: **do not operate when you cannot see**! When the surgical field is filled with blood, try to clean it to ensure a proper hemostasis or stop the operation. Lots of accidents happen when the surgeon tries to work in a bloody field saying to himself: "I know the landmarks, I performed thousands of operations like this, so I can complete the whole procedure".

When you deal with tumors, keep in mind that piece meal resection is accepted, look carefully for the origin of the tumor and create enough space for a proper dissection. Enough space allows for a better view and access to the tumor origin and also permits 4 hands surgery.

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When you plan a procedure, be honest with yourself, think twice about your equipment, personal and team skills and about the help ready to be offered by your colleagues or friends in the department. **Individualize each case** and be aware of **leaving in place some landmarks** for potential future operations!

Do not blame your colleagues even if they have failed…..one day you could be in the same situation. Offer yourself a **proper learning curve**, start with simple cases with a supervisor for the first 100 procedures and then with a colleague ready to help for the next 100. Properly plan the surgery and try to asses difficult cases, such as revision surgery, step by step.

Be ready to convert the operation into an open procedure if necessary.

Do not start your career with failures and, finally, please do not think first about the financial purposes!