

Seven-block pyramid model to build up an endoscopic sinus surgeon

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Surgeons spend most of their professional life acquiring new surgical skills and learning new surgical procedures. On the way of building up an endoscopic sinus surgeon, some may get confused; what should we do first to be professional endoscopic sinus surgeons. This suggested seven-block pyramid model is just our own limited personal experience to help other junior physicians to arrange their priorities while being on their way in endoscopic sinus surgery.

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Place yourself at the feet of the greats

Trainees should be careful observant of their professors in important but unnoticed aspects, such as their demeanor, comments, appearance (clothing and grooming), punctuality, composure, acceptance of responsibility, and interaction with team members and patients [1].

In my own opinion, the first and the most critical step in the making of an endoscopic sinus surgeon is 'Place yourself at the feet of the greats' [2].

Read

There are two kinds of physicians: those who read and those who do not. Read textbooks because they cover the basics, and 90% of people do not know what is in them. Articles are for later. It does not matter which textbook you read, because if the information is important, it will come up again in further reading. If the information is unimportant, it will not come up very often. Read for an hour daily. You will be amazed at how well you do. Read about your patients. Remember Darwin's theory of medical education: 'It cannot be that rare if you are seeing it' [1].

Watch and ask

Try to attend live surgeries, especially of the experts, as much as you can. In addition, try to read about every case before going to the operative theater, especially rare ones. Compare what you have read with what the patient has. Ask about anything that does not match or you do not understand. Attending national or

international conferences is one of essential routes to meet the experts, update your knowledge, and exchange ideas with others.

Surgical simulation

An in-depth understanding of the anatomy of the paranasal sinuses as well as experience with endoscopic instruments is paramount to successful sinus surgery outcomes [3].

A novice surgeon must master the required skills of camera navigation, demonstrate familiarity with instruments, develop good hand–eye coordination, and exhibit bimanual dexterity [4].

In Egypt, endoscopic sinus surgery training is still partially relying on cadaveric dissections.

With the shortage of cadaver donations, declining resources, and an increasing reliance on alternative teaching methodologies, cadaveric training may become obsolete [5].

Endoscopic sinus surgery simulator has proven to be a valuable and effective method of allowing preparation for sinus surgery outside the operating room. However, the initial purchase price and potential maintenance costs prohibit the mainstream use [6].

We believe that an exhaustive private study of anatomy, attending many live surgeries, and subsequently an endoscopic sinus dissection course, and at last beginning step by step surgery under complete supervision will help you to overcome this obstacle.

Figure 1



Seven-block pyramid model to build up an endoscopic sinus surgeon

Learning curve

Endoscopic endonasal surgery has a long learning curve attributable to multiple factors: unfamiliar endoscopic anatomy, lack of endoscopic skills, potential risk for neural and vascular injury, and reconstructive challenges. The learning curve should deal with issues of endoscopic anatomy, instrumentation, two-dimensional visualization, team dynamics, and dealing with complications [7].

Do not rush; working under complete supervision, in a step by step manner, is one of the most trusted methods to reach the top of the ladder.

Documentation

Document all what you see and all the procedures that you do. Remember that very rare case reports come from very simply appearing cases. You should also learn how to edit your movies, keeping only important segments.

Presentation

Presentation of your data, or ideas, in a journal or a conference represents a mandatory cornerstone in your career.

An author's first paper is often the most difficult to write. However, the appropriate dissemination of the results, including the presentation of findings for peer review, is an important responsibility of all who conduct research [8] (Fig. 1).

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Conflicts of interest

None declared.

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