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ARE LEFT HANDED SURGEONS LEFT OUT?

THE SINISTRAL:

“ If by chance I touched a pencil, a pen or a needle, I was bitterly rebuked, and more than once I have been beaten for being awkward and wanting a graceful manner.”

These were the words of Benjamin Franklin, noted left-handed American inventor, scientist, printer, statesman and philosopher, who had a miserable childhood. His words reflect the exact state of affairs and consequently, the state of mind of the lonely left-hander in this right-dominated world.

Studies have revealed that left-handers are generally more inhibited and anxious, and this doesn't go without reason. The scientific reason is that, in left-handers the right half of the brain dominates, and it is the same side that controls the negative aspect of emotion. As a result, in an attempt to relieve their anxiety, left-handers like to colour code things, and make lists whenever possible. The more practical and logical reason is that, the environment of our world strongly favours the right handed majority. Although sinistrals are considered to be more intellectual and artistic, (studies have revealed higher levels of IQ among left-handers) it has also been documented that they are more prone to unintentional injuries, sports injuries and accidents. In fact, even the rate of finger amputation has been found to be higher among left handed industrial workers. Even items of everyday usage, such as scissors and can-openers are biased towards the right-handed. The saving grace in this distressing situation for the left-hander is that, Nature has made him/her a born fighter. A review of literature and history reveals that left-handers from time immemorial have shown a natural talent and inborn skill in games of combat such as fencing and tennis. In fact, research analysed data shows that societies which were rather quite

violent and aggressive, had a higher proportion of left-handers. Thus, left-handedness which has been proved to develop in the womb, brings along with it an inborn endurance and strength to survive tough situations and living circumstances, such as it already is in our world at large for the sinistral.

Coming to familiar waters, and more relevantly to this article, studies have shown that 80% of left-handed surgeons believe that endoscopic surgery needs to be modified for the left-handed endoscopic surgeon, though 66% feel that they experience no difficulty in handling the custom-made endoscopy instruments. Left handed surgeons lack access to left handed instruments while training, receive little mentoring about their left handedness, and are more prone to needle stick injuries than their right handed colleagues. By and large, laterality-related comfort has its impact on endoscopic surgery, and technical modifications are warranted to suit the needs of the left-handed surgeon.

What follows next is a launch into what exactly I have been facing ever since I started taking baby steps into the skill-dominated field of Otorhinolaryngology, and what in my opinion needs to be done in each of those challenging situations by the budding left-handed ENT surgeon.

BEING A LEFT-HANDED ENT SURGEON..

Being a left-handed surgeon, more specifically a left-handed ENT surgeon, presents a unique pattern of difficulties.

The problems start right at the OPD itself. When I sit down at a cubicle with the patient at a distance of less than 8 inches in front of me & the Bull's eye lamp at 6 inches above and behind the left shoulder of the patient, focus the light into the patient's ear/nose/throat and try to examine the parts, I find that irritatingly, something keeps blocking the light from falling on the patient's parts. It took me a few exasperating days in the OPD, to realize, that that "something" was my very own right upper limb!



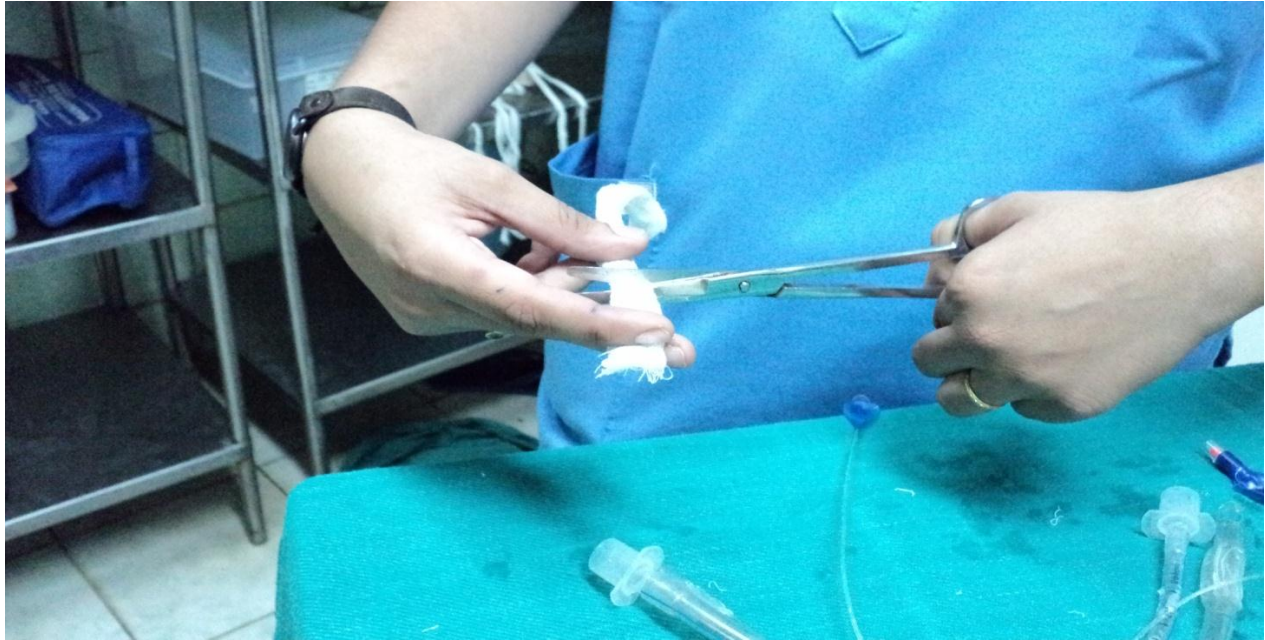
To overcome this problem, for a left handed ENT practitioner, the Bull's eye lamp needs to be placed above and behind the right shoulder of the patient, at the level of the right ear.

The next confusion arises when a left-hander tries to wield the endoscope. I had carefully observed that my seniors, while doing endoscopic examination, stand to the right side of the patient and hold the endoscope in their left hand. While performing an endoscopic surgery, they follow the same discipline and proceed with the steps of surgery, with the instrument held in their right hand. So when I was given the opportunity to learn endoscopy, I diligently followed the same principles. (Frankly, I didn't have a choice anyway, as the arrangement in the endoscopy room demanded that we carry out the procedure in that particular orientation. In other words, the arrangement is always such as to suit the right-handed majority! Ideally, for a left hander, standing to the left of the patient would be comfortable.) So faithfully standing to the right of the patient, I hesitantly and carefully took the endoscope in my left hand, adjusted the focus, white balance and position of the camera and haltingly introduced the endoscope into the anaesthetized and decongested patient's nasal cavity. Much to my surprise, it seemed to be quite easy. I was delighted! Maybe being left-handed is an advantage with respect to endoscopy, I mused. But alas, my happiness was short-lived. Only when I started operating endoscopically, did I realize my shortcomings. I was not able to control the movements of the instrument I was using and synchronize it with the endoscope. Though this difficulty is quite common with beginners, the problem was that, though I was holding the endoscope comfortably in my left hand, the instrument, with which I need to make the finest of maneuvers, was in my non-dominant hand. This would not do. This realization pushed me to start learning to use the endoscope with my right hand, so that my left would be free to handle the instruments.



A left handed surgeon cannot cut with the commonly available scissors. As simple as this statement is, as humiliating it is, until you discover where the problem actually lies.

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The blades of the commonly available scissors are oriented in such a way, that they approximate and cut well only when used with the right hand and the right hander can see the cutting line. When you try to use it with the left hand, the blades instead of approximating actually move away from each other, and you are actually cutting blindly.

This picture shows left hander's scissors to the left and the usual right



hander's scissors to the right.

This really alarmed me! So I also started making efforts to make my right hand work atleast half as well as my left, since I realized that a naturally left-handed ENT surgeon needs to become ambidextrous, if he/she wishes to prove his mettle in this field. My seniors and teachers kept encouraging me to do this. I give my right hand exercises in the form of writing, cutting shapes on paper, cutting vegetables and cooking.

Being a minority, the left-handers are at a disadvantage even in the operation theatre. The operating table and the Boyle's apparatus are arranged in such a fashion that the anaesthesiologist stands to the left of the patient, while the ENT surgeon is to the right. Once I started learning septal correction surgeries, I realized that standing to the right of the patient and using my left hand to operate was very uncomfortable. So I requested to be allowed to stand to the left of the patient so that I could operate comfortably. Though this was quite a relief for me in one sense, the flip side was that I ended up having to share working space with the anaesthesiologists, which turned out to be irritating for both of us.

For tonsillectomies, when the patient is intubated nasally, the usual practice of the anaesthesiologist is to introduce the endotracheal tube through the left nostril of the patient and fix all the tubings in such a way that they come to the left side of the patient and the ENT surgeon at the head end of the table, which serves to be convenient to the anaesthesiologist and the right handed ENT surgeon. A similar arrangement for a left handed ENT surgeon, is not only irritating for him/her as all the anaesthetic tubings keep coming in the way of his/her dominant hand, but more alarmingly also places the patient at risk for an accidental extubation due to the very same reasons. So when a left-handed ENT surgeon is blessed with the liberty to arrange the operating room to his/her convenience, he/she should first thing, place the anaesthetic equipment and the anaesthesiologists to the right side of the patient.

The most depressing problem my handedness leads me to face, is the confusion and difficulty that my teachers and seniors have when they try to teach me surgical steps. They need to first get oriented to my orientation and then teach me!

The right attitude for the left!:

Inspite of all these issues surrounding the left handed surgeon, he/she has the unique capability to use his/her left hand exceptionally well. While a left hander can with some struggle manage to make his/her right hand usable, the same cannot be said of a natural right hander. In this right-oriented world, a right hander cannot that easily make his/her left hand work as well as his/her right. Like my HOD, Professor.Dr.T.Balasubramanian,MS,DLO, rightly puts it, being a left-handed ENT surgeon is like a double edged sword. It can make or break you depending on your attitude and how you deal with the issues associated with it. The right approach for a left-handed surgeon is to make himself/herself ambidextrous! That way, he/she can get the best of both worlds (left and right), if I may put it that way!

REFERENCES:

1. Makay O et al. Surgeon's view on the limitation of left-handedness during endoscopic surgery. J Laparoendosc. Adv Surg Tech A 2008 April; 18(2):217-21.
2. New Scientist Print Edition 22nd July 2004, Lisbon.
3. Cardiff Western Mail, July 2001.
4. Adrian E Flatt MD FRCS. Is being left-handed a handicap? The short and useless answer is "yes and no". Proc (Bayl Univ Med Cent) 2008 July; 21(3):304-307.
5. Adusimilli PS et al. left handed surgeons:are they left out? Curr Surg 2004;61(6):587-591.
6. Coren S. left-hander: everything you need to know about left-handedness. London: John Murray, 1992.