The Importance of Surgical Technique

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Editorial

Surgery has many facets. It is science, craft and art, all at the same time. In addition, it has strong ethical and philosophical components. The science is in determining disease processes and appropriate treatments based on the available evidence, or in setting out to obtain evidence when this is lacking. The craft is in implementing that treatment – the skills required for getting the job done. The art is in carrying out the task with as little trauma to the tissues as possible; in practice, this is often described as “elegance”. The ethics is in highlighting the question “what is in the patient’s best interest?”, and making this question the driving force of all our decisions and actions at all times. The philosophy is in taking a step back and reflecting on what has been achieved so far, reminding ourselves the errors made and lessons learnt, interpreting the reasons why those errors were made, and extrapolating all this into the future trying to decide in which direction we should go next.

These facets are all inter-dependent. For example, a particular surgical technique may be considered as part of the craft of surgery, but this is acceptable only if the scientific evidence supports its utility. Likewise, any proposed artistic adjustment to that craft must be subjected to, and withstand scientific scrutiny. Conversely, without the craft and art of surgery, there would be no surgical science to discuss. This also applies to the ethics and philosophy of surgery, which exist to moderate and guide the craft, art and science. Nevertheless, each facet may be addressed in isolation for the sake of clarity of discussion.

Of all these facets, the craft and art of surgery (i.e., surgical techniques) are least well represented by the medical community in general, and in the medical literature in particular, even within specifically surgical journals. This may be surprising to society as a whole, given that these two issues often define non-medical people’s view of surgery. Most people’s view of surgery is often summed up by that famous line in the old British movie series Doctor in the House, where the senior surgeon, Sir Lancelot Spratt (played by James Robertson Justice), states that a good surgeon is one with the heart of a lion, the eyes of an eagle and the hands of a lady. This statement, however, has failed to impress the medical community and literature, which portray surgery from a primarily scientific perspective, describing surgical techniques only to a very minimum level of detail that may be needed to sustain the scientific discussion. This is reflected in the following three observations:

1. The surgical literature is full of articles that may be several thousand words long, presenting and/or comparing the results of various surgical procedures, with detailed statistical analysis, yet the actual surgical technique used is often described in only a short paragraph with little or no illustration. Such papers aim to present and discuss the results of a particular technique rather than teach the technique itself.

2. In any given issue of most surgical journals, there may be about 25 to 45 articles, of which no more than two or three may be primarily about surgical technique. Often there are none; many journals do not even consider such articles.

3. Even journals that do accept such articles tend to discriminate against them. Such articles are usually placed in the technical section of the journal if there is one, or in the section of brief communications or case reports. These sections impose significant restrictions on manuscripts as compared to the section of scientific/original articles. Indeed, most journals allow a word count of up to four or five thousand, 8 authors or more, 8 figures/tables and 25 to 50 references for scientific/original articles. Conversely, for the technical section, brief communications and case reports, the allowed word count is usually less than one thousand, with no more than 3 or 4 authors, 2 figures, and 10 references. In addition, journals sometimes state in their instructions to authors that such articles would be accepted only if they are exceptional, which insinuates that they do not really want them.
Clearly, surgical technique per se is not a priority for most journals. To some extent, this is understandable given that editors are mindful of citation rates, which tend to be very low for technical papers and highest for review articles, clinical studies and guidelines. Nevertheless, this is quite disappointing to those who are primarily interested in technique, such as myself. I have spent much time thinking about surgical technique, and how to improve it. I have also written many articles about this issue. However, most of those articles have been rejected outright with dismissive comments by multiple journals. Only five of them have been published [1-5], of which two had been combined with additional scientific studies [4,5]. Furthermore, on one memorable occasion, I had written what I considered a rather nice technical paper aiming to facilitate various issues in surgery for congenital heart disease. However, that paper was altered so much by my co-authors, who were all senior to me, that it stopped being about surgical technique altogether. So I ended up publishing a paper about a subject I had not intended to write and did not care much about. Still, I mustn’t be ungrateful; at least it got published!

Despite this relatively feeble representation in the literature, surgical techniques matter because they offer the skills necessary for good outcome. Skill is the ability to make the difficult easy, and this is precisely what surgical techniques do. Consequently, they represent important strides in the quest to make good surgical results reliably achievable and reproducible. In this sense, they are advocates of patients’ interest; this is where they merge with ethics. They should be more than welcomed and given a forum. To this effect, I am delighted to see the launch of this journal, which aims to do just that. It fills an important gap and is long overdue. I wish it great success.

References