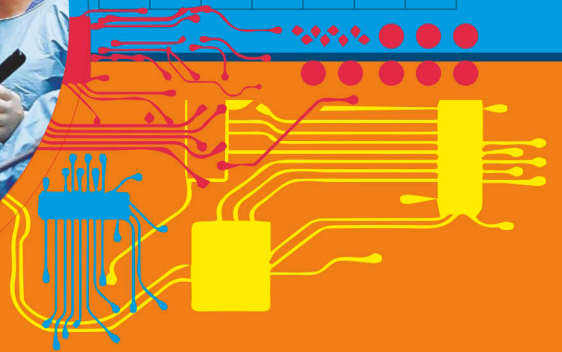
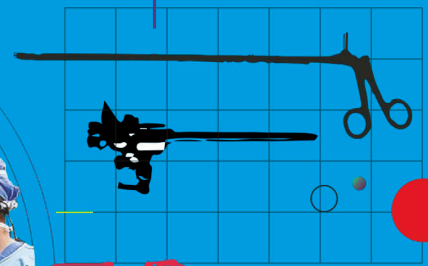
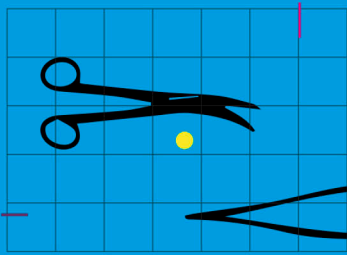


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BASIC SURGICAL TECHNIQUES



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„The surgeon dedicates himself to the most divine of all occupations, to cure without miracles and to work miracles without words“
(J.W. Goethe)

FOREWORD

Writing a book is a great challenge. Its contents cannot be changed. It will have an impact on those, who will read it (and hopefully there will be many). The ideas

“If possible, the operations should be performed under ideal weather conditions, in a brightly lit room with clean air. The patient should be positioned on a bed or a low, well-padded table. High tables are not good, as the hands of the surgeon would then also be held high and consequently rapidly tiring him. In hospitals or larger surgical institutions there are special operating tables for this purpose; however, these can be dispensed with. The instruments are kept on a tray covered by a towel and held by a theatre assistant, who handles them over at the right time with the right speed. Before the operation, the instruments must be examined, to evaluate if they are sharpened suitably, if they are strong enough, have no defects etc. Quite a few surgeons would be embarrassed if these precautions were to be neglected “

“Never prepare for the operation in front of the patient. Examination of knives and dipping them in oil, waxing of sutures, that used to be done by the auxiliary staff, which used to do it with special skill, should be carefully avoided as an insensitive procedure.”

“Anaesthesia”

Both the older and the younger surgeons should pay special attention to make operation more tolerable for the patient and the pain caused by operation should be alleviated as far as possible. This is a law dictated by humanity. Our predecessors did their best to meet these requirements. They distracted the patient’s attention by talking to them. Later they gave narcotizing agents (opiate products). Jules Germain Cloquet (1790-1883), a French surgeon, operated on a woman’s breast while she was purportedly under the influence of hypnosis. For the same purpose they performed the surgical incision at the origin of the nerves, with the concept, that by this way the communication between the brain and the periphery would be disrupted. They got disappointed. In 1784, James Moore successfully used nerve compression in order to eliminate pain, before an amputation performed painlessly by John Hunter, the ‘father’ of modern surgery (Skills of Surgical Operation, the book was printed at academic printer Emich Gustav in 1867).

written in a book obstinately hold the imprints of an era. Let me quote you as an example Dr. Navratil Imre’s book (Surgical Techniques printed by Gustav Emich in 1867), in which terms like sterilization or narcosis had yet to be introduced.

These quotes are from the first book on surgical techniques in Hungary. This book has a special value to me as I got it as a present from my mentor, *Géza Jakó (Fig.5.151, C)*, who lived in Boston, and was an innovative, experimenting professor of oto-rhino-laryngology.

In addition to university students, this textbook is also recommended to surgical residents and young specialists. The chapters of “Animal Experiment Planning” and closely related to this the “Ethical Aspects of Animal Experiments” also discuss the increasingly strict aspects of animal protection. We hope that these chapters will be particularly useful for colleagues who work in the field of research and animal experiments. It may be surprising, that this book includes a chapter on “Functional anatomy and perioperative care of experimental animals”, yet we believe that this should be part of the knowledge of the experimenting surgeon. Knowledge of the anatomy and behaviour of animals helps in selecting the appropriate subject for an experiment. Precise knowledge of anatomy is essential part of practicing certain surgical techniques.

With my colleagues, we have written the book with the firm conviction that it will provide a reliable, understandable easy-to-use basic guideline for those interested in the current aspects of operative surgery and for those who practice it.

Healing is impossible without compassion for the suffering man and without the sacred humility for the profession. We should treat our patients, who entrust us with their lives, as our own relatives or as we would treat ourselves. Then we have compassion for their pain and sufferings, and we will do our best to alleviate them. To

do our best means to the best of our knowledge. The medical profession requires daily study and in the manual fields of medicine this interprets to continuous technical training and practice.

One of the serious problems of medical education is the incomplete practical training. Students have very few possibilities to test their manual skill during the curriculum, and the assessment of intellectual skill ability is almost ignored. A newly qualified doctor will soon realize that the theoretical knowledge he learned during the studies at university alone is not enough for treating patients, and that practical knowledge is also essential.

Remembering, as a young resident, how clumsy I felt, when I searched for my place in the operating room, despite spending a lot of time as a medical student in surgical care. The first suture and then the first operation was a great experience. Now I know that their success was primarily due to the patience of experienced colleagues at first, the nurses and the patients as well.

Practical knowledge and manual dexterity are a prerequisite for routine patient care. These are necessarily complemented by the ability of managing dynamically emergency and critical situations, making the correct diagnosis on complex cases and making the right decision on alternative treatment etc. A successful operation requires even more: perfectly coordinated, goal-oriented and economic coordination of operative movements. The sophisticated technique of treating tissues with the skill of doing so. These can be acquired with a lot of practice, which a good surgeon continually improves with the daily surgeries.

Intellectual skill is the ability of proper decision making during critical cases (see more in CHAPTER 11.). As in somatic disorders, where psychological issues may worsen a patient's condition; tension, due to anxiety or insecurity deteriorates a surgeon's performance. "Everything is decided in the head".

As with the technical skills, continuous refinement of intellectual knowledge is also necessary. Warming up is essential for different sports or physical activities; therefore, it would be logical to warm up before an operation as well. This is especially true for complex movements requiring laparoscopic interventions. It is a known fact, that pelvitrainer practice (warming up) improves surgical performance.

To achieve the right intellectual condition, top level athletes often use mental training. From my own experience, I know that this technique is very effective. Just before the surgery, we should concentrate only on the operation: we should list the steps of surgery in detail, think of the possible technical difficulties and potential complications, and recall our experiences in similar cases. During the operation, any unexpected event or major bleeding may cause confusion and hurry-scurry. Even in these cases we must remain calm and with a wise self-control we must impress the staff about self-control. It helps to think of the command: "*festina lente – if in a hurry, slow down!*"! *We must assess consciously our capabilities and see our limitations: there should be no delay in calling for help, if necessary!*

During surgical intervention in teamwork- just like - as is usual in all areas of medical activity - intellectual skill has particular importance and plays a significant role in patient's safety. It is well known that inappropriate coordination of teamwork, poor communication or a wrong decision often is a common cause of failure.

With these thoughts I start our work, I wish you all to turn the pages of this book with as much enthusiasm and love as we did.

Budapest, Summer of 2020
György Wéber MD, PhD
Professor of Surgery

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TRANSLATIONS AND TRANSLATORS

Dear Readers

Before you begin to read the English translation of this book, originally written in Hungarian, we would like to make a few comments.

First of all, this book has been translated by medical doctors and not by official translators. They have passed altogether six specialist exams of various surgical specialities. Both of them have specialty certificate in traumatology. Dr. Frenyo also has specialty certificate in orthopaedics and hand surgery while Dr. Toronyi in general surgery and maxillo-facial surgery. They both had the chance to work for a significant length of time in the United Kingdom, and passed difficult and complex exams, with both medical and language sections, in order to be qualified to work there. This time in the UK widened their scope in their specialties and also, their knowledge of English (especially medical English) improved significantly.

It was an honour for both of them to be asked by the editors of this book to undertake the translation. They both teach German speaking and Hungarian students at the Department of Surgical Research and Techniques, so for many years they have been involved with this subject. They pointed out, that translation of this book was challenging and sometimes a struggle and it often required updating their knowledge, yet they found many subjects in the book fascinating, the historical sections being especially unique.

The translators would like to say an extra thank you to the medical student-friends from the English-speaking course. They were always ready to help to find the most appropriate words, and the most suitable expression.

Both the authors and the translators hope that the readers will find this book interesting and helpful for their training as well and read it with the same enthusiasm, as it has been written and translated.

Budapest, 22nd June 2019.

Éva Toronyi MD, PhD

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*“Actual operative skill cannot be gained by observation,
any more than skill in playing the violin can be had by hearing and seeing a virtuoso
performing on that instrument.”*

A.O. Whipple, American surgeon, 1958)