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Editorial

Ethics and Surgery in the 21st Century☆

Ética y Cirugía en el siglo xxi

Surgery is an ethical practice, and each surgeon should have a moral compass in their armamentarium to effectively guide their actions.[1] A prior, essential requirement is the diligence and surgical competence that all surgeons should display in their medical and academic activities. Basically, surgeons should be skilled in the art and science of surgery and be trustworthy from an ethical and moral standpoint. A surgeon should be an ethical model for fellow colleagues, surgeons in training and the society in which he/she works.

Surgery embodies several unique characteristics:

- Surgery hurts before it heals.
- It is invasive and penetrates the patient's body.
- Surgical decision-making is generally done under uncertain circumstances.
- It is subject to error, risks, accidents, complications and consequences.

Questions related with "how to treat" are questions of medical science, while those related with "why to treat" are ethical matters based on the principles of moral philosophy.

Although the surgeon–patient relationship is considered contractual from a juridical and legal medical standpoint, the connection between the two should be based on trust and is, therefore, a fiduciary relationship. Maimónides (1135–1204) expressed this in his prayer: "Almighty God, . . .Grant that my patients have confidence in me and my art and follow my directions and my counsel".

The ethical concept of the medical surgeon as a fiduciary agent of the patient can be defined as "a person who is trusted or who, as he is trustworthy, is entrusted with important assets over which he, acting on good faith and with proven benevolence, exerts authority, clearly giving priority to he who had trusted him". It was John Gregory (1724–1773), a Scottish physician and model of the Enlightenment, who introduced these concepts and was responsible for the transformation of Medicine from a business into a profession. He defined Medicine as the "the art of preserving health, of prolonging life, of curing diseases, and of making death easy". He also established the grounds for Medical Ethics, as we know it today.

In this medical pairing, the surgeon plays the role of authority and the patient should respect this position of authority, which is founded on training, capability, proven experience, knowledge and concern for the patient. The surgeon should demonstrate *techne* (technical skills), *epistēmē* (knowledge) and *phronēsis* (practical wisdom), which represent the sources of a surgeon's power in the Greek myth of Asclepius. Nevertheless, it is the patient who has the authority to accept the treatment proposed by the surgeon. Thus, it is for this reason that both concepts of authority are not opposing, but complementary.

What makes a good surgeon is more closely linked with Surgical Ethics than strictly with questions of technique. Ethics are at the heart of professional competence. Professional excellence is the true manifestation of Surgical Ethics, and a requisite is the quality of introspection, or the analysis of one's own mistakes. These classic challenges continue to hold true in the 21st century.

One of the fundamental areas of Surgical Ethics is the demarcation and the limit between questions of choice and individual responsibilities and those that concern society as a whole.

Is there a set of ethics that are strictly surgical? McCullough et al. were the first to examine the scope of Surgical Ethics. They defined it according to the procedural nature of surgery and its ability to generate physical and psychological damage, which are both circumstances that modify general ethical considerations, such as virtue, consequences, rights, justice and equality.[2]

Little explored the concept of Surgical Ethics and identified 5 moral pillars of the "surgical" relationship between patient and surgeon. The first 4 are experienced by the patient and are represented by: rescue, proximity, suffering and sequelae.

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The fifth is the presence of the surgeon during this entire journey, an ethical standard that makes a difference and justifies the category of Surgical Ethics.[3]

On a daily basis, surgeons are exposed to and confronted by ethical conflicts which, unlike ethical dilemmas, require a solution, appropriate or not. Tools should therefore be developed to provide solutions and included in training programs.

Although Surgical Ethics, as mentioned above, touches on all aspects of surgical care, there are some aspects in which ethical implications take on a special dimension. These are unnecessary surgery, futile surgery, surgical treatment for terminal patients and the implementation, development and adoption of new technologies.

This latter aspect poses ethical concerns about surgeon training and abilities, potential harm to patients, patient autonomy, influence on therapeutic decision-making, fair distribution of healthcare resources and conflicts of interests.[4] In this context, the incidence of iatrogenic bile duct injury substantially increased after the immoderate adoption of laparoscopic surgery with 4 trocars; similar data have been reported about single-incision laparoscopic cholecystectomy, although in a more controlled manner.[5,6]

Innovations in the surgical arena tend to be a process more than an event. Laparoscopic cholecystectomy, which was an important innovation in the 1990s, can now be considered a standard procedure as its adoption is almost universal. Nonetheless, many other procedures remain in the innovation stage for long periods and never acquire the status of standard procedures. Ideally, all surgical interventions should be controlled. When a new procedure is involved that has not been reliably tested, the determination of the real value of the procedure should be considered imperative.[7]

Currently, robotic surgery is a cutting-edge field in surgical innovation. After its approval by the Food and Drug Administration in 2000, the technology was used in around 292 000 cases in 2011 and 367 000 the following year. Although it is considered an important therapeutic advancement for patients and added technology for surgeons, recent reports have raised concerns about the safety, cost-effectiveness and marketing by certain surgeons and institutions. The authors have also commented on the limited evidence about the superiority of this technology, questioning proper care standards.[8] More recently, a group of researchers from Johns Hopkins have reported 245 adverse events related to the use of robotic technologies.[9] This situation highlights the role that professional societies should play to guarantee the common good of the community, while displaying the principles of Surgical Ethics: beneficence, non-maleficence, respect for autonomy and justice.

Given that Surgical Ethics is based on the acknowledgment of the rights of patients requiring surgery, conditions that require surgery merit strict analysis.

The ethical obligations of surgeons should not only be to their patients, but also to their colleagues, professional institutions and society as a whole.

In conclusion, to paraphrase Dunphy: ''Surgeons have a collective responsibility to seek the benefit of humanity;...the autonomy of each individual surgeon is conditional but feasible in the measure that society recognizes that surgeons' actions benefit humanity;...surgeons should have some type of professional authority to ensure compliance with certain standards of professionalism''.[10]

Conflict of Interests

The author has no conflicts of interests.

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