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Editorial

Improving safety in the operating room reduces hospital mortality

Mejorar la seguridad en el quirófano reduce la mortalidad hospitalaria

"Remedies often make diseases worse."

Aphorism CXXXVIII on the art of letting things alone.

The Art of Worldly Wisdom.

Baltasar Gracián, 1647.

In all health care systems, the importance of surgery is becoming more apparent. Clinical problems that require surgical treatment are increasing year after year. Currently in the world, it is estimated that every year approximately 234 million surgical interventions are performed under general or local anaesthesia or deep sedation.[1] In many cases surgery is the only option to cure an illness, alleviate its developmental complications and reduce mortality; however, we also take into account that, paradoxically, surgical procedures can lead to serious complications including death. The mortality rates and perioperative complications in developed countries following surgery with hospitalisation are between 0.4%-0.8% and 3%-17%, respectively.[2,3] And these figures most likely increase in other environments.

Another contradiction is that a great part of these complications is thoroughly documented in medical literature and well known by the healthcare personnel as well as the general population. In spite of this, complications appear over and over again and it seems that appropriate preventative measures are not being taken. Many complications are considered inevitable, (the result of uncontrollable factors connected to the disease's nature or the general state of the patient[4]) while others are simply left to the experience of professionals who participate in the surgical procedure.[5,6] It is unquestionable that the surgeon's experience, as well as that of the surgical team, is a crucial factor in reducing these errors; nevertheless, a great deal of evidence shows that many of said errors could be avoided if adequate measures and regulation were instituted.[7,8]

Within this context, the 55th World Health Assembly, sponsored by the World Health Organization (WHO), in 2002 urged the establishment of programs geared towards guaranteeing patient safety in the health care system. Two years later, at the 57th Assembly, the World Alliance for Patient Safety was born and subsequently launched in October 2004. As part of this initiative, in January 2007 the program "Safe Surgery Saves Lives" was established with the aim of improving safety linked to surgical procedures.[9]

This is the first time that experts from different fields have confronted together the challenge of improving patient safety. These specialists have identified 4 areas in which efforts should be concentrated: surgical infection prevention, safety during the use of anaesthesia and the perioperative stage, and establishing a standard system of evaluation for surgical practice that permits comparison, and follow up of implementation of possible improvement measures.

One of the expert recommendations was to create a "Surgical Safety Checklist."[9] This list was publicly presented almost a year ago in Washington with the intention of promoting worldwide use. This is not an official document of obligatory use, it is meant only as an easy-to-use practical guide for all those interested in improving patient safety and reducing a substantial part of surgical complications. The list contains 19 questions pertaining to 3 critical phases of the surgical procedure: before induction of anaesthesia, before skin incision, and when patient leaves operating room. In each phase, the list verifies with the entire surgical team that all crucial aspects have been completed, and if not, the reasons why they have not been completed. The validity or convenience of some of the questions on the list is debatable. The WHO itself encourages modifications in accordance with prior experience and local practices. Many of the steps indicated are obvious and several of them are already monitored nowadays; however, it is also true that on very few occasions verification of all steps is carried out systematically.

The checklist has already proven its value to the industry, since professionals from different fields are involved in the same process. In aviation, these checklists are the standard. Aviation authorities require pilots to complete checklists prior to take off and landing, and they leave nothing up to the memory or experience of the pilot. Some of these checklists have already been adopted by the medical practice, especially in the field of anaesthesia,[10] and in surgery certain proposals have been adopted from the American College of Surgeons' National Surgical Quality Improvement Program.[11]

A recent article has shown that the use of the WHO proposed checklist significantly reduces complication rate (from 11% to 7%) and mortality rate (from 1.5% to 0.8%).[12] However, the most noteworthy aspect of this study is that all participating centres (from different countries and fields of reference) contributed to this reduction. In other words, the checklist is useful in all environments.

Numerous organisations have supported the use of this list. The Spanish Ministry of Health, some regional health ministries, the Spanish Association of Surgeons and certain health centres, have also notably joined the initiative. Nevertheless, it should be understood that implementation of the list requires (beyond the support of organisations) a commitment on the part of surgeons, especially those in charge of units, sections, services and departments, together with anaesthesiologists and surgical nurses who must face the challenge of putting patient safety first. Perhaps the most important aspect is not implementation of the list itself, but rather that it implies team effort, greater participation, communication and sense of responsibility on the part of all surgical team members as well as changes in personal attitudes.[5,13,14] Scepticism is understandable; one could view this list as an added task, and even as obvious and unnecessary. However, this does not constitute an excuse for continuing with a situation that is clearly unsustainable.

Any patient undergoing surgery expects that their surgical team will apply all their knowledge and understanding in order to avoid errors which may result in serious health consequences. This will benefit not only surgeon and patient satisfaction, but also a society that will appreciate cost cutting as well as reduction of accompanying complications.[15]

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