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LETTER TO THE EDITOR

Surgeons, surgery, surgical skills

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Dr. Kanehira's editorial and all articles focusing on the assessment of surgical skills and – more widely – on surgical training in minimally invasive surgery, published in the *MITAT* issue # 1–2, 2010 (1–7), gave rise to great interest and some reflections.

Kanehira poses crucial questions and stresses the great difficulty in assessing the quality of surgery, which is not only and strictly related to the objective evaluation of surgical skills, but is influenced by many other factors that are concerned with the human being, such as knowledge, decision making, management attitudes, or with the working environment, such as the qualification of the surgical and nursing team, the quality of the available facilities, and the performance of technologies (1).

In the same wake, Cuschieri's review on human reliability analysis (3) emphasizes how human performance depends on multiple factors (age, state of mind, physical health, positive attitude, training) and that the acquisition of surgical proficiency must be studied holding in due consideration that:

- humans are not machines which may reproduce always the same result,
- the clinical patterns of the same disease requiring surgical treatment may differ in many aspects.

Right in the same period of the present year (March – April), several papers have been published on the *Journal of the American College of Surgeons* and *Surgical Endoscopy,* focusing on both the value of surgical simulators in training basic skills in laparoscopic surgery, and on practice-based learning in surgery (8–12).

What can be said with fair certainty is that for the time being it seems that there is an evidence that training with simulators may improve performance of several surgical tasks when they are executed during the daily practice in the operating rooms (9,11). Furthermore, it does exist, nowadays, the possibility to assess the level of dexterity obtained by training with surgical simulators with reasonable accuracy (5,7).

On the other hand, practice-based learning and improvement (PBLI) competency introduced into residency curricula has been proven to enhance personal progress in residents' clinical decision-making and self-directed learning, hence resulting in quality improvement (8). The same may be obtained with specially designed "team participation training courses" as those for laparoscopic-assisted gastrectomy reported by Kinoshita (12). Those courses not only improved the skills of the attending surgeons with significant impact on operating time, but strongly influenced surgical indications and decision-making in their daily practice (especially with respect to the extent of lymphadenectomy), with consequent increase in the number of cases treated per month in 50% of the centers participating in such a training program (12).

All this induces an ultimate reflection on what is and what is meant for: good surgeon, good surgery, good surgical skills.

As a matter of fact, it is unlikely that a patient will seek and choose a surgeon because he or she is aware of his skills or that he will perform a technically exemplary operation. Most likely, patients are not conscious of the level of skills required to perform challenging surgery nor of the real meaning of doing "good" surgery, in other words of the "optimal surgical treatments" which will prompt the recovery from their own disease. Patients will merely be relying on a "good" surgeon.

As has been mentioned before, there is a substantial difference between surgical skills (high surgical skills) and surgery (excellent surgery). While the former are objectively appraisable and assessable, and this even regardless of their results, the latter requires the concurrence of technique, technologies, experience, decision-making, clinical and anatomical knowledge.

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Above all, good surgery cannot leave out of consideration good results. These results may be analyzed and evaluated objectively with great accuracy; therefore, also for "good" surgery, we have instruments for a truthful assessment.

On the opposite, when we talk about good surgeons we enter another sphere of competence. Besides being marked by high, sometimes excellent, surgical skills, and distinguished for their excellent results, good surgeons have other special gifts such as humaneness and empathy for sick people. Especially these qualities make surgeons inspire confidence and make patients rely on surgeons.

The trust a patient puts in a surgeon, which makes him calmly put his own life in the surgeon's hands, may even influence the outcome of a surgical treatment by provoking the patient's positive thinking, which nourishes hope and boosts the will to recover.

This factor, humanity, is not assessable. But it is just this factor that makes surgery be a cut above, and distinguishes good surgeons from high skilled professionals. It is this factor that still makes the surgeon's profession so fascinating, notwithstanding the many troubles that may be encountered at the present time.

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