CANCELING ELECTIVE SURGERY – AN OLD PHENOMENON OF THE MODERN OPERATING ROOM

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Introduction

This lecture deals with a very well known and disturbing aspect of our operating rooms' (OR) activity, namely canceling surgery for reasons that could usually be avoided and prevented.

It is important to emphasize the fact that we are speaking only about elective surgery, which is defined as an elective surgical procedure for which the patient can wait at least three days without sustaining morbidity or mortality.

Canceling elective surgery is not a rare event. According to literature, it happened in some 15% of cases, and in half of them the announcement comes less than 24 hours before the scheduled time for the operation.

This means that in many cases there would be no chance to replace the postponed or cancelled case with another one.

Canceling surgery is a situation that affects our daily activity as anesthesiologists, since in many parts of the world we are in charge with the OR administration. Canceling a surgical procedure could negatively influence the OR income and also the relations between members of the surgical team.

At the same time one has to be realistic and understand that 100% utilization of an OR is almost never achievable; rather 75–85% is to be considered the optimal attainable efficiency rate of an average OR.

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Is each member of the surgical team equally affected by a cancelled case?

The answer is obviously not!

The surgeon is the member of the team in charge of scheduling a surgical procedure and he is directly connected to the patient and his/her family.

A nurse or an anesthesiologist could easily cope with a case that was not done, because their relation to the patient is superficial, loose, and sometimes even nonexistent before the patient's arrival at the OR.

Postponing and rescheduling the case might present difficulties related to the OR daily activity and also to the patient and his/her family's availability.

One interesting aspect of the OR activity is the fact that young surgeons are very interested in accumulating experience and for this reason each canceled case reduces their chances to learn more and gain more experience.

These are only a few reasons why surgeons are more interested in avoiding cancellation of elective surgery. The discrepancy between the surgeon's and other OR team members' interests might create an improper atmosphere that needs to be avoided by any means.

Why is an elective surgical procedure cancelled?

The literature suggests that in some cases the patient does not show up for the surgical procedure! In one study (Lira, Brazil 2001) it happened in more than 40% of cancelled cases.

But not too often, the patient is found on the very morning of surgery to be unfit to have the surgical or the anesthetic procedure. This could happen because the time lag between the pre-operative visit and scheduled surgery is too long, and many things could happen during this interval.

Sometimes the patient was given a pre-operative treatment that did not produce the expected results and the treated condition needs a change of management.

And sometimes the patient did not respect the surgeon's and/or the anesthesiologist's prescriptions and the result is that on the day of surgery he/she is found unfit to be operated on. One typical example is the indication for fasting, which is either ignored or misunderstood.

A good part of the reasons for canceling surgery is related to the OR activity. Some reasons are bad luck and others are a result of bad management.

It might happen that an earlier case encountered some difficulties, surgical or anesthetic. In this case it would become obvious that the next patients' surgeries are under a heavy question mark.

But some other reasons are a result of OR inefficiency. An initially overcrowded schedule would inevitably lead to canceling cases at the end of the day. A too long turnover time would reduce the time allocated for performing surgery.

Lack of manpower could be another reason for avoidable postponment or even cancellation of a procedure.

How much does it cost to cancel a surgical case?

Let's first speak about the negative effects of canceling elective surgery.

It creates a bad reputation for the medical institution and a reduction in its budgetary capabilities.

It is bad for the patient and also for his/her family, not only from the psychological point of view but also financially.

It also affects the staff, producing dissatisfaction and demoralization.

Canceling a case could worsen the patient's medical condition, a situation that would bring more medico-legal complaints and a demand for higher premiums from the insurance companies.

Finally, a non-efficient way of managing the OR generates a real financial loss.

United States' reports from the last decade of the 20th century calculated the OR team salaries (except the surgeon's) and it reached $8–10 US/minute. In other words, the hourly loss for not using the OR would be as high as $600 (Dexter, 1996). This figure does not take into account fixed expenses, such as lights, phones, equipment, etc. One can figure that the real cost today is much higher!

Are there any proposed remedies?

The literature that deals with this negative aspect of OR activities proposes some solutions for avoiding cancellation of an elective surgical procedure.

The first is related to the importance of the preoperative and pre-anesthetic outpatient clinic. Van Klei in 2002 reported a 50% reduction in the number of cancelled cases due to the opening of preoperative anesthesia and surgical clinics.

Among other things, authors propose separation of elective from emergency surgery in the OR, in order to avoid urgent cases interfering with the elective schedule.

They also propose the „stick and carrot" policy towards those surgical departments and surgeons who do not respect the OR timetable.

Allocating more surgical time to those who have shown respect for the OR schedule seems to be a proper incentive for assuring efficient activity.

Some data in the literature recommend special attention to both over- and under-utilization of the OR since in both cases money is lost.

Finally one question remains practically unanswered: do we have to fine a patient for not showing up on time for the scheduled surgical procedure?

Conclusions

It seems that canceling elective surgery is a phenomenon that characterizes most of our operating rooms.

Its explanations are multiple and they include bad management and an inefficient surgical schedule.

The busier the OR, the more cases are cancelled or postponed.

The OR administration has to behave professionally and the surgical departments have to understand that the OR does not belong to them but to the hospital administration.

The role of the pre-operative and pre-anesthesia outpatient clinics cannot be overemphasized.

Finally, it is clear that only a proper team work atmosphere could significantly reduce the percentage of cancelled cases.

REFERENCES:

1. Dexter F, Macario A. Applications of information systems to operating room scheduling. Anesthesiology 1996;85:1232-4.
2. Lira RP, Nascimento MA, Temporini ER, Kara-José N, Arieta CE. [Reasons for cataract surgery cancellation.] Rev Saude Publica 2001;35:487-9.
3. van Klei WA, Moons KG, Rheineck-Leyssius AT, Kalkman CJ, Rutten CL, Knape JRT, Grobbee DE. Validation of a clinical prediction rule to reduce preoperative type and screen procedurec. Br J Anaesth 2002;89:221-5.