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EDITORIAL PERSPECTIVE

20 + Years of Enhanced Recovery After Surgery: What's Next

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By employing the evidence in the literature to form guidance for perioperative care, the ERAS® Society has set the principles developed to form Enhanced Recovery After Surgery (ERAS) and spread the concept to all parts of surgical practice [1, 2]. The Society and others have now successfully implemented the ERAS protocol with improved clinical outcomes in many units around the world. This has been achieved by having the hospitals aim at adhering to as many care elements of the guidelines as possible to reach the best possible outcomes [3]. The implementation work carried out over the years by the Society has also gained the insights that no treatment, regardless of how basic it may seem to be, cannot always be expected to be in use. In fact, many of the elements of care often regarded as basic standard of care including antibiotic, thrombosis and PONV prophylaxis, modern fasting guidelines, fluid- and temperature management are found to be either completely out of use or only given to random patients. This is illustrated by Fig. 1 showing four typical units audited for compliance to ERAS care elements before they were trained to use ERAS. What is obvious from the radar charts is that no unit is like the other, that basic elements of care are not in use or only partially in use and that most postoperative care elements are not practiced at all. In simple terms, this shows that what we may think exists—some standard of care—in fact does not. If we do not initiate the implementation locally in each unit by facing the care truly existing today, we will never aim at the right changes to achieve the goals we set out to reach, the modern evidence-based standard of care that should be given to every patient.

In the process of training hospitals worldwide in enhanced recovery, the ERAS® Society has used the same audit tool, which also serves as a common source for research. The next step is to use data from this database for national and international comparisons. This is particularly important since recent reports on global surgical outcome show far from reliable data on how common complications are after surgery (www.lancetglobalsurgery.org).

Most large scale data available today are from national quality registries, and they have served as source for many important reports over the years. But comparisons between hospitals in different countries are lacking. Differences in health care cultures, case mix and selection of patients referred to different hospitals are difficult to adjust for in analyses using data available today. In this context, the ERAS database offers new unique opportunities because it contains more than 300 variables that can be used to make more adequate comparisons by adjusting for many factors not previously recorded and thus not available. Typically, many details of the perioperative care delivered are missing. Using data collected on all patients during the entire perioperative period to drive care is what the ERAS® Society implementation program train hospitals do to improve their practice and then sustain these gains. Since the same variables also can be used to find out why differences in outcomes occur, we can improve our

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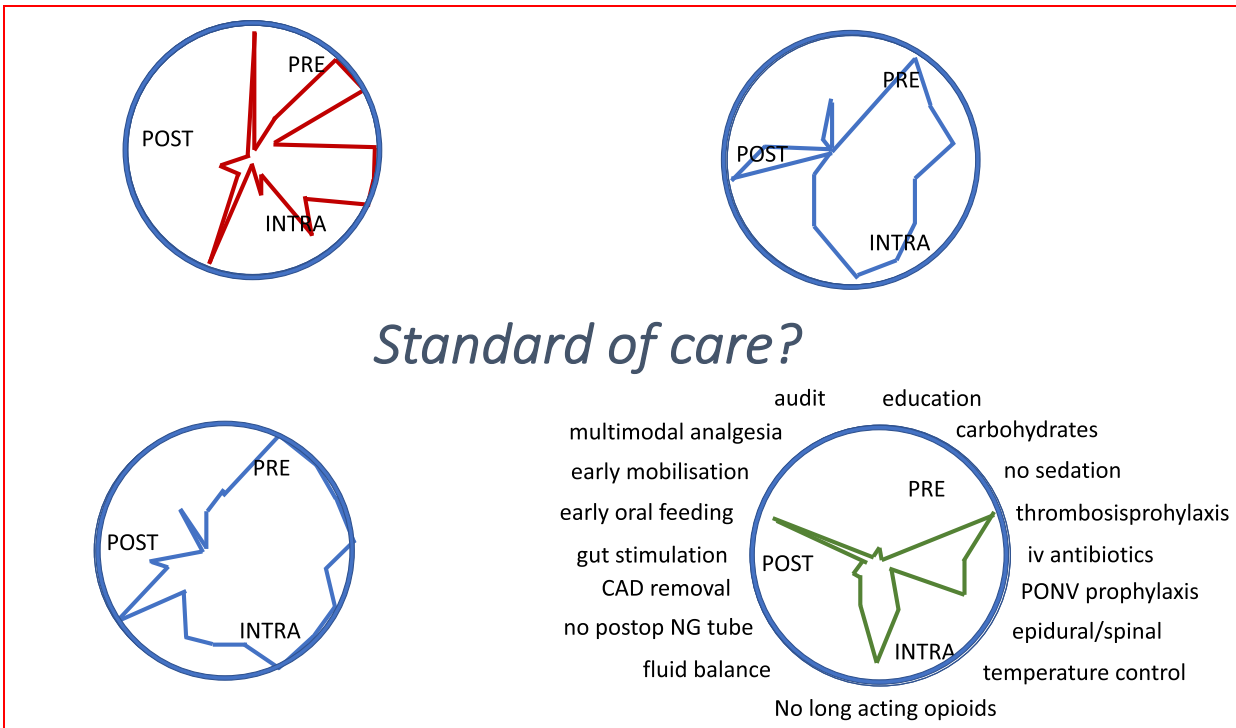

Fig. 1 Four randomly selected surgical departments audit result for ERAS® Society guideline compliance before initiating ERAS training. The round outside circle shows the ideal result with 100% compliance and the middle indicated 0% use of the care item. The text surrounding the circle shows the different care elements of the ERAS Guidelines. For each unit, 50 consecutive patient data were collected

understanding of surgical practice around the world to move toward a better global health care in the future.

An example of the use of the ERAS database as a tool for benchmarking is a comparison that was recently made between Swedish centers that register in the database. This showed large differences between hospitals regarding the use of surgical technique, perioperative care, resulting in a variation also in complications and length of stay after surgery [4]. This may come as a surprise patients and decision-makers in a country where a primary aim is to offer equal health care for all inhabitants but is likely to be the case also in other countries.

Imagine the opportunity of sharing and comparing large sets of data that are collected in the same way around the world as part of the daily routines. The data collected offer a unique possibility to develop surgery by getting the insights to many of the details that determines outcomes in surgery. To maximize the possibilities of these prospects, important steps need to be taken. These include securing data protection for patients and to set up international agreements to still allow for this type of collaboration. To move surgical research to this new level where daily practice constitutes the platform for continuous knowledge development will be the next step to Enhance Recovery After Surgery.

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