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Editorial

Textbook outcome: A new quality tool[☆]

Textbook outcome (resultado de libro): una nueva herramienta de gestión



The audit of results and improved quality of care is becoming increasingly important in surgery¹. Patients, hospitals and healthcare institutions need transparency in order to share the results of our interventions and their subsequent follow-up². Currently, there are several indices for determining the quality of care offered to our patients, including the measurement and analysis of postoperative complications and mortality using the Clavien-Dindo classification or the Comprehensive Complication Index (CCI®), hospital stay or readmission rate^{1–5}. In addition, there are tools to make comparisons between hospitals, such as benchmarking, although it is not often implemented in surgical services⁶. For cancer patients, postoperative results and survival rates are the measures usually used, confirming that both are related⁷.

In 2013, Kolschoten et al introduced a new concept to measure outcomes, known as the textbook outcome (TO), which is a single indicator that is obtained from the sum of several traditional surgical variables: the absence of postoperative complications, no prolonged hospital stay (<75th percentile), no mortality, and no readmission. Thus, all these parameters must be met to achieve a TO⁸. Simply put, it could be said that, for cases to reach TO, everything associated with the surgical process must go perfectly^{3,5}.

Even though the initial concept of TO was accepted because of its ease of interpretation, there has also been a series of criticisms: 1) all/nothing indicator that is not focused on the patient, as this is not the usual patient perspective^{1,4,5}; 2) TO levels in complex procedures (pancreaticoduodenectomy, esophagectomy) are low because any minimal deviation from a 'perfect' postoperative course (which is frequent in these patients) means that a TO cannot be achieved, resulting in TO rates of 25%-35% for these procedures, which could be interpreted as unsatisfactory results^{4,9,10}; 3) arbitrary specific TO, as the optimal result for specific surgeries or pathologies (liver, pancreas, stomach) has been defined by a combination of result indicators that have been selected based on expert

opinion and the results of series^{1,7}; 4) inclusion of the hospital stay in the TO, which can be affected by social and local healthcare factors; furthermore, not all studies have used the same percentile of the TO stay³; 5) inclusion of readmissions in the TO, which may depend on the early discharge policy in place¹; and 6) a certain overlap among TO parameters¹¹.

To try to resolve some of the problems of the general TO concept, TO has been defined by specific area (hepatopancreatic-biliary, colorectal, esophagogastric, retroperitoneal sarcomas, carcinomatosis, liver transplantation or bariatric surgery) with specific data for each procedure, including technical factors like fistula rate or percentage of complications that are typical for each surgery, or data related to the surgical piece, such as resection margins or the number of lymph nodes removed^{1,10,12,13}.

Furthermore, to avoid the arbitrary selection of cut-off values and the lack of adaptation to different healthcare systems^{3,7,10,13}, international consensus has been reached on the cut-off values of TO for specific pathologies^{1,3,7,11}. Therefore, correct and consensus-based selection of these TO parameters by pathology makes it possible to compare results between hospitals and could even create nomograms to aid treatment⁷. Specific parameters by procedure are more difficult for patients to understand, although they are very useful for specific surgical teams, which facilitates their use³.

The TO is used to evaluate, monitor and compare general and specific results. Therefore, we emphasize the difference in TO depending on: 1) hospital type (large vs small hospitals), as better results are observed in large medical centers, but this is more related to the volume of patients treated rather than the characteristics of the hospital^{5,6,14}; 2) social vulnerability and race, as TO results are lower in the most vulnerable patients⁴; 3) costs, as patients who do not meet TO criteria entail higher costs^{5,13}; 4) surgical technique, as it has been proven that performing a laparoscopic pancreaticoduodenectomy or gastrectomy does not change and may even improve the

[☆] Please cite this article as: Ramia JM, Soria-Aledo V. Textbook outcome (resultado de libro): una nueva herramienta de gestión. Cir Esp. 2022. <https://doi.org/10.1016/j.ciresp.2021.06.002>

results of TO^{9,15}; 5) ERAS, because ERAS protocols can increase the potential to attain TO¹⁶; and, perhaps even more importantly, 6) survival, as achieving TO is associated with increased survival^{10,11}. One could say that the results we have just commented on were expected, but the TO is able to quantify and confirm the hypotheses proposed.

In conclusion, the TO is a multidimensional result measure that is easy to interpret, although it is necessary for the surgical services that want to implement it to systematically analyze postoperative complications. For TO to become a useful measure for the evaluation and monitoring of results, an internationally accepted definition of TO parameters needs to be developed (especially for specific TO), which would make it possible to compare different surgery units easily and objectively.

Funding

This study has received no funding.

Conflict of interests

The authors have no conflict of interests to declare.

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2173-5077/

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