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Discrepancies in the Analysis of Frequency, Type of Complications and Costs of Outlying Patients in General and Digestive Surgery☆

Discrepancias en el análisis de la frecuencia, tipos de complicación y costes económicos en los pacientes ectópicos de cirugía general y digestiva

Dear Editor,

We have read with interest the article published by the authors Gómez-Rosado et al.[1] We applaud the authors for their initiative, but we wanted to make a few comments.

With their objective, we believe it is essential to obtain the complications and costs with as little bias as possible. However, for the calculation of complications, the authors used the Minimum Basic Data Set (MBDS), which records the complications during admission (secondary diagnoses) indicated on the discharge report. In a retrospective study, it does not appear that the MBDS adequately reflects all of the complications, and for instance nausea, atelectasis, poorly controlled pain, etc. should be included.[2] Our team has verified, for example, that the average postoperative cost varied from a patient without complications to a patient classified as Clavien Dindo grade I increased from €758.64 to €1106.97, respectively, in the case of appendectomy and from €379.33 to €755.55 in the case of cholecystectomy.[3]

In their study, 9% of patients had complications. In the prospective study of 1850 consecutive patients treated in a surgery unit, we observed that 27.7% presented complications. More specifically, the percentages were 10.7, 22.6, 63.5 and 71.4% in minor, moderate, major and major+ surgery, respectively.[4] As we have previously argued, we believe that complications should be collected prospectively from specifically created forms, medical progress records and nursing notes. Follow-up should be extended to 90 days.[4] Despite this, there are biases that cannot be eliminated.[4] We have verified that, when calculating the Comprehensive Complication Index on the discharge report,[5] which takes into account all the complications, physicians err in 19% of the global series and 51% when only analyzing patients with complications.[6] Impartial external auditing would be a solution.

The authors paired the subjects by Diagnosis-Related Groups (DRG); however, the difference in the number and severity of complications of a DRG with complication and/or comorbidity compared to another DRG can be very important. They should not be used for the purpose of this study. In addition, relying on the MBDS can lead us to assign a DRG without complications to patients who have had them.

It does not seem correct to calculate the expense according to aggregate costs by DRG in spite of the corrections carried out. This calculation does not fit the reality of a specific patient, which is what the paper aims to do (differentiate the results in outlying versus non-outlying patients). We believe that the hospitalization and re-admission costs, if any, should have been considered for at least 90 days. From the perspective of the hospital, these costs should include hospital stays, medication, lab work, radiology tests, radiological and/or endoscopic interventions and re-operations as a result of complications. In addition, if the expense for postoperative complications is considered, all preoperative costs and the operation itself should be excluded.[3] We should not continue calculating the morbidity of the procedures or costs with such unreliable tools.

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A Response to "Non-technical Skills in Surgery: A Pending Subject"☆

Respuesta a «Habilidades no técnicas en cirugía: una asignatura pendiente»

Dear Editor,

We appreciate the interest that Dr. Ruiz Marín et al. have demonstrated regarding our recent publication in Cirugía Española.[1] One of our objectives, as authors of this article, was to promote the discussion of non-technical skills and human factors in the Spanish-speaking surgical community.

We agree that there is a pending challenge to update the skills of surgical teams who have already been trained and are practicing surgery. We are glad that initiatives like the *Cirugía Segura* ("Safe Surgery") program already exist in Spain and have successfully involved government organizations in this task.[2] We believe that the participation of both the Ministry of Health and scientific societies is fundamental, in the same way that the Royal Colleges of Surgeons have been successful in the United Kingdom and Australia. Hopefully, initiatives like these will be replicated in Latin American countries.

We also concur that the training of medical students in these subjects is a different challenge that requires the involvement of others, such as medical schools and their regulatory entities. Universities are the ideal setting for interdisciplinary work in order to develop solutions that help provide safer surgical practices and promote research projects on this subject in our region.

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