

Cost-Benefit Study of Ventral Hernia Repair and My Problems With Arithmetics[☆]



Estudio de coste-beneficio en la reparación de la hernia ventral y mis problemas con la aritmética

Dear Editor:

We have read with interest the article by Dr. Fernández Lobato et al.¹ and their cost-benefit analysis of open versus laparoscopic ventral hernia repair. Their conclusion is that the final cost of laparoscopic repair per patient was €1260 less expensive than the open technique. The authors consider that the cost per patient and day, either with or without complications, was €566 and €575, respectively.

We noticed that some of the costs broken down in Table 7 are not the same as those shown in other tables. For instance, the cost of the prostheses in the open group is €13,727 in Table 7, while in Table 4 it is €11,811. Furthermore, the cost of €11,811, obtained by adding the items in Table 4, is incorrect and should be €10,811. In another example, the cost of surgical material for the open group calculated in Table 5 is also incorrect and should be €4870 instead of €4920.

Once again, we noticed that, when calculating total hospital stay by means of the product obtained by multiplying 70 (patients in each group) by the respective mean stay that appear in Table 3 (2.15 days in the laparoscopic group and 5.28 in the open group) the result is 150 and 369 days, respectively. These results are discordant with the total hospital stay in days shown in Table 6 (131 and 439 days, respectively), which are used by the authors to calculate hospitalization costs in Table 7.

Therefore, we recalculated the costs for Table 7 using the total hospital stay data obtained from the mean stay from Table 3, also including the corrections of the errors seen in Tables 4 and 5, as previously mentioned. In the case of the laparoscopy group, we would have a total of 150 hospital stay days, at a cost of €566 per day (the best case scenario, considering that none of the stays included complications), with a total hospital stay cost of €84,900. When we also add the costs of the prostheses and disposable materials (€75,740 and €50,489), the total cost of procedures in the laparoscopy group is €211,129. In the open group, the 369 days of hospital stay at a cost of €575 per day (the worst case scenario, considering that all the stays included complications) equal a total hospital stay cost of €212,175. When we add the costs of

prostheses and disposable materials (€10,811 and €4870), the total cost of procedures in the open group is €227,856. This represents a savings of €238 per patient if the repair is laparoscopic, which is much less than the amount indicated by the authors.

In summary, we must warn the authors that the multiple discrepancies that we have pointed out may raise doubts about the credibility of the results presented by the authors.

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Conflict of Interests

The authors declare having no conflict of interests of any type.

REFERENCE

1. Fernández Lobato R, Ruiz de Adana Belbel JC, Angulo Morales F, García Septiem J, Marín Lucas FJ, Limones Esteban M. Estudio de coste-beneficio comparando la reparación de la hernia ventral abierta y laparoscópica. *Cir Esp.* 2014;92:553–60.

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