

# Long-term quality-of-life assessment after laparoscopic and classic cholecystectomy

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Positive results of studies comparing the laparoscopic and classic treatment of surgical problems are always encouraging. They reinforce what surgeons believe in and they provide us with reliable scientific material that supports our point of view when we have to defend ourselves against the criticism of more conservative colleagues. Such findings also provide evidence to buttress what we observe in everyday practice—that after laparoscopic treatment patients experience more satisfaction and a better quality of life.

Therefore, the recent article by Topcu et al. should give us much reason for satisfaction [9]. However, the article fails to supply a psychological rationale for the comparison of those two methods of surgical intervention for cholelithiasis. In addition, it has some methodological weaknesses that undermine their optimistic conclusions.

First, quality of life, although very popular and in fashion nowadays, does not seem to be the most appropriate psychological parameter for a differentiation between two groups of patients suffering from a medical problem that is not likely to have a profound impact on quality of life. Although quality of life is especially important for chronic medical conditions, its relevance for acute medical conditions is moderate at best. It has indeed been demonstrated that a decrease in health-related quality of life can be observed in progressive or chronic diseases, such as chronic pancreatitis [6], chronic pain syndromes [2], and cancers [1]. Although there is no doubt that cholelithiasis may decrease the quality of life during its acute symptomatic phase, it is highly improbable that it will be significantly altered in the postoperative course after cholecystectomy, independent of the operative technique that is applied.

Second, the protracted period of $\sim$3 years that elapsed between the operation and the data collection casts more doubt on the reliability of the findings. Health-related quality of life is a dynamic psychological variable that may be influenced by many factors—such as additional illnesses that developed later or personal problems—that were not controlled by the researchers. In addition, there is reason to assume that sociocultural factors—in particular, income and insurance—also have a strong association with quality of life [3–5]. It is stated in the methods section that the patients operated laparoscopically had to pay for the operation, whereas the costs for the open procedures were covered by insurance. Given the ample body of literature supporting the wealth–health connection [3–5], it makes no sense to measure quality of life such a long time after cholecystectomy. The only way to obtain reliable and equivocal quality-of-life data in these conditions would be to measure it repeatedly—for example, every month after the operation. In addition, because there was no random assignment, the preoperative quality-of-life scores should have been determined, so as to control for possible differences in pretreatment levels. It is very likely that the reported posttreatment differences in quality of life simply reflect preexisting pretreatment differences, due to the connection of this measure with income and insurance.

The fact that significant differences were found for every aspect of quality of life also lends support to this hypothesis. We could speculate that the classic treatment might be worse in terms of cosmesis. Thus, it would be understandable if the social aspect of quality of life were impacted, but it is difficult to believe that other aspects of quality of life still show significant differences as long as 3 years after the operation.

To summarize, the study by Topcu et al. although conceptually interesting, is characterized by some methodological drawbacks that compromise its scientific value. It lacks initial measurement of quality of life, and the period between the operation and the measurement is too long. Because randomization was not possible, we would at least have expected that the authors would have controlled statistically for differences in the relevant pretreatment variables—in particular, income levels and type of insurance. In addition, more repeated measures, starting shortly after the treatment, would have provided greater insight into the dynamics of this most important outcome variable.

It should be emphasized that the study represents an important approach to the evaluation of the results of surgical treatment. This approach uses psychological parameters, such as quality of life, body image, or subjective perception of the severity of the illness, as measures to evaluate the effects of a medical procedure [8]. In addition to mortality, morbidity, and recurrence (e.g., cancer), these subjective psychological parameters

should be considered essential in determining the effect of treatment [7].

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