The literary review of Krasopoulos and Goldstraw [1] on the outcomes of the Nuss operation seems to suggest that this innovative procedure is already proven as the ‘gold standard’ of pectus excavatum repair and the only thing we have to do is to get more experience and smoothen out a few ruffles in the technique.

Not so fast!

The Nuss procedure, a relatively new method intended to treat pectus excavatum, is now presented as a ‘minimally invasive operation’, despite the fact that it involves passing one to three massive metal rods through both pleural cavities and the narrow sternopericardial space, leaving them in loco for time periods up to 5 years, after which their removal requires a second intervention. Complications of the procedure are numerous and, occasionally, fatal. This potential persists as long as the rods are left in place. Persistent, severe postoperative pain is a major problem. Late results are generally good, but certainly do not exceed those of ‘open’ repair by experienced hands. The costs of the Nuss operation are about double that of an open repair. A large number of the Nuss procedures are performed by operators untrained in thoracic surgery, not prepared to handle the acute or chronic complications, which may occur, and who compare their outcomes to the results of the now-defunct ‘classic’ Ravitch procedure, instead of to its modern modifications, which can be performed more safely with less cost, leave smaller scars and do not expose the patient to the risks of steel bars crossing the heart for protracted time periods. Further, here is a question, which needs an explanation: Why did the number of pectus repairs increase threefold since the introduction of this new method?

The review of Krasopoulos and Goldstraw on the outcomes of the Nuss procedure is well researched and well written; however, by its nature as a literary review, it is limited to a particular field where authors seldom, if ever, publish large clinical series, which contain less than favorable results. This is a ‘built-in’ bias, which is enhanced by the fact that objective and functional evaluation of the results of repair of pectus excavatum, a condition for which many undergo surgery for cosmetic rather than physiological reasons, is a very difficult and sometimes impossible. Unfortunately, the authors did not investigate parameters such as mortality and morbidity, especially the occurrence of late complications which, after accepting the postulate that well-performed procedures either open or closed, may yield similar results, could indeed serve as a measure to compare the-then advisability of their usage. Further, the fact that the authors excluded all studies with less than 10 patients eliminated all case reports addressing serious, occasionally deadly complications, the potential of which is the Achilles heel of the controversy.

The aim of providing clinicians and patients with needed information cannot be achieved without considering the issue of potential exposure to morbidity and mortality, as well as the need for years of close monitoring and the necessity for reoperation.

Reference


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