

Reviewer's report

Title: Peri-operative Data on the Nuss procedure in children with pectus excavatum: Independent survey of the first 20 years' data

Version: 1 **Date:** 18 April 2008

Reviewer: Emmanouil Kapetanakis

Reviewer's report:

I read with interest this independent survey of the "Nuss" procedure by Protopapas and Athanasiou. The "Nuss" procedure or more specifically "Minimally Invasive Repair of Pectus Excavatum" is one of the few procedures performed by cardiothoracic surgeons for cosmetic reasons. As such it is of particular interest, however because of its applicability to a limited paediatric population awareness of the procedure among the general cardiothoracic community is small.

This report attempts to bridge this gap by collating and presenting the results from

18 reported series of the "Nuss" procedure. A total of 1949 patients are included, a significant number considering the applicable population. Peri-operative data and a break down of possible complications are presented.

Collection of available data appears thorough; the manuscript is well written, concise and succinct. It adequately examines and presents the advantages and disadvantages associated with the procedure to conclude that: "Twenty years of initial evidence suggest that the Nuss group of procedures is a safe minimal access option for correction of pectus excavatum in childhood". Therefore this reviewer feels that publication of this work would be of interest to the cardiac surgical community.

I would suggest a number of minor alterations that I feel would enhance and improve

this work. Specifically, I would suggest that the authors include a brief presentation of the variations in technique that have been utilized through time in the discussion section. Similarly I suggest including a description and

comparison

of alternative corrective procedures and possible advantages of the "Nuss" procedure

over the conventional techniques. In terms of enhancing clarity and comparability it

would be helpful if percentages of total were included in Table 3 for each complication listed.

Finally, there is one small error I would like to point out: the average age of the study population is been reported as 10.6 years in the abstract and results section

while in Table 2 it is reported as 11.6.

I would like to thank the Journal of Cardiothoracic Surgery for giving me the opportunity to review this work and would like to congratulate the authors for their efforts.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests as listed above.