

Review report

BSMMUJ-17.4 – 75630

Pectus excavatum corrected by locally adapted Nuss procedure: A case report
Saha H *et al.* (heemelsaha@bsmmu.edu.bd)

REVIEW COMMENTS	AUTHOR RESPONSE
Date of submission: 23-Aug-24	
A. Mechanical review	
Date sent to author: 24-Aug-24	Date: 26-Aug-24
a. In the BanglaJoL submission platform	
1. Provide name, affiliation and email of all authors and ORCID of at least the corresponding author.	Updated accordingly.
2. Provide keywords within the limit. ¹	Keyword limits in no 3; (page 2, line 31).
b. In the Manuscript	
Title page (page 1)	
3. Provide name, affiliation (Department, institute, city, country), email of all authors, ORCID (at least for the corresponding author) and identify the corresponding author.	Provided on page 1.
4. Mention the number of figures.	Mentioned on page 1 (line 30).
Learning points page (page 3)	
5. Provide learning points in bullet points. ²	Provided in separate page 2.
Main body (page 4 onwards)	
6. Prepare an introduction including objective without a heading.	The introduction chapter has been revised, and the objective has been incorporated into the introduction.
References	
7. Provide DOI (PMID if DOI is not available) for the journal and URL for the website.	References list updated with DOI/PMID/URL
B. Technical review	
ROUND 1	
Reviewer's name: S M Rashed Ul Islam	
ORCID: 0000-0002-8164-5905	
Date assigned: 28-Sep-24	
Date submitted: 7-Oct-24	
Do you have any conflict of interest with the author/s? No	
Do you wish to be disclosed to the author? Yes	
Comments sent to author (Date: 18-Oct-24)	Date: 25-Oct-24
2. Is the title appropriate? = No 2a. The title needs to be revised as the experience of performing the Nuss technique in PE patients. The author mentioned that it is the first case in Bangladesh, while another article on this particular technique has already been published earlier. Please see the link: Zaman T, Sabur S, Ali S, Rahman MS, Bhuiyan M, Begum M. Combined correction of atrial septal defect, severe pectus excavatum and hydrocele in a	We disagree with the reviewer's comment. The references (Zaman <i>et al.</i> 2018) mentioned that the early experience in our country is not Nuss Procedure. The authors (Zaman <i>et al.</i> 2018) in their article did not strongly claim that their procedure was Nuss procedure (Ref: page 36, 4th paragraph; page 37, 4th paragraph of Description of case report and page 39, 1st paragraph of Discussion section).

¹ Maximum 5 for research article, 6 for review article, 4 for brief article, 3 for case report

² 3 to 5 for the research and brief article, 2 to 3 for the research letter, perspective, commentary, data, and letter to editor, 2 to 3 learning points for the case report, and 6 for review article.

REVIEW COMMENTS

young adult male. Comm. Based Med J [Internet]. 2018 Feb. 12 [cited 2024 Oct. 7];7(1):35-9. Available from: <https://banglajol.info/index.php/CBMJ/article/view/54803>.

AUTHOR RESPONSE

Classical Nuss Procedure is a minimally invasive procedure. Nuss used the term 'mini-invasive' to indicate that cartilages were not removed and that using a lateral incision, the surgical approach avoided any anterior scar. According to the article (Zaman et al. 2018), the procedure can be called the 'Modified Ravitch Procedure'.

Here we refer to a textbook of Thoracic Surgery: 'Operative Thoracic Surgery, 6th edition' published by the Taylor and Francis Group and edited by Larry R Kaiser, Sarah K. Thompson, and Glyn G. Jamieson (Page-17-21):

Mini-invasive repair of pectus excavatum (mirpe): This technique was described by Nuss in 1998, and since then, it has rapidly become the gold standard operation for patients with severe pectus excavatum. In the three centres most experienced with this technique (Children's Hospital of The King's Daughters, Norfolk, VA, United States; Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, South Korea; and Institute for Klinisk Medicin- Hjerte-, Lunge- og Karkirurgi, Aarhus, Denmark), more than 4000 procedures with different variations have been performed in the last 15 years.

MIRPE technique:

1. The patient is placed on the operating table, and the most depressed area of the sternal plate and the preferred entrance and exit points on the chest ridge are identified
2. On both sides, a 5mm trocar is inserted in the posterior axillary line, and carbon dioxide (CO2) is inflated at a pressure of 4 to 6 mmHg. Through these accesses, a 30-degree thoracoscope is shifted from one side to the other to verify the deepest point of the sternal depression to be able to choose the preferred entrance and exit points and visually guide the procedure.
3. Once the placement locations are defined and the bar is bent to the desired shape, 3 to 4-cm curved skin incisions are made bilaterally at the midaxillary line (in the female, an inframammary incision is preferred), and a subcutaneous tunnel is created up to the entrance points on the chest ridges. If the incision is at the level of the pectoralis muscles, a submuscular tunnel is created up to a convenient intercostal space.
4. A metal introducer is pushed through the entrance intercostal point on the right chest ridge to dissect intrapleurally a plane that separates the sternum from the pericardium, thus creating a tunnel through the anterior mediastinum. The introducer tip is then pushed out in the chosen left selected intercostal space.
5. A plastic tube is tightly attached from one side to the tip and from the other to the customised bar, and the introducer is pulled backwards, allowing the bar to pass through the

REVIEW COMMENTS	AUTHOR RESPONSE
	<p>mediastinal tunnel from left to right. The bar is inserted with the concave side up and then rotated 180 degrees around its axis, thus pushing the sternum up. Stainless steel stabilisers are routinely inserted on both ends of the bars and pushed as close as possible to the bar's entrance in the chest. Stabilisers are eventually fixed to intercostal muscles by interrupted polyglactin sutures. An additional bar is introduced at the surgeon's judgment, considering the defect's length and the chest wall's rigidity. In cases where a second bar is required, a single stabiliser is placed for each bar, one for each side.</p> <p>In a nutshell, The Classical Nuss Procedure is a minimally invasive procedure in which stainless steel bar is used to correct the pectus with the help of a thoracoscope, which we performed in our case.</p>
<p>4. Are the study objective(s) clearly stated and logical? = No 4a. The author did not mention why this particular patient required this Nuss procedure as the first experience of their surgical team.</p>	<p>Nuss Procedure is the first experience in our country. Our patient had significant symptoms. We revised the Manuscript and stated the objective and rationale of the procedure in the Introduction section in line 62 and in the Case Description and Management section in lines 71-74.</p>
<p>5. Is the rationale/justification for conducting the study clear? = No 5a. It is unclear whether this case report was prepared due to the first experience or the challenging technique performed by the surgical team.</p>	<p>Please refer to the reviewer's answer 4a.</p>
<p>9. Are the table(s) and figure(s) clear and appropriate to address the objective(s) or research question(s)? = No 9a. The figure should be re-arranged and clear. Please see the reviewer report.</p>	<p>A single figure is a combination of preoperative condition to 2-year follow-up.</p>
<p>10. Is the discussion section critical and comprehensive about the main message of the manuscript? = No 10a. The discussion section should be restructured. See the comments.</p>	<p>The discussion section was restructured.</p>
<p>12. Are the references appropriate in number and up-to-date? = No 12a. The reference needs to be from the recent past. Some references are not matched. Ex Ref 8, line 126, page 5.</p>	<p>We could not match this argument with our manuscript.</p>
<p>13. Are statements of the manuscript supported by appropriate reference(s)? = No 13a. Citations of recent articles need to be incorporated.</p>	<p>As this is a case description and the Nuss Procedure was introduced in 1987, some of our references are for procedural descriptions, and some are cited from recent articles.</p>
<p>14. Is the storytelling straightforward, clear (i.e., does not impede scientific meaning or cause confusion), and logical? = No 14a. It needs to be rewritten.</p>	<p>It has been rewritten accordingly.</p>
<p>16. Is the standard of English acceptable for publication? = No 16a. Extensive language, linguistic, grammar, and English editing are required before submitting to the journal.</p>	<p>British English is used in the Manuscript.</p>
<p>Reviewer's recommendation: Decline Submission</p>	

REVIEW COMMENTS	AUTHOR RESPONSE
Reviewer's name: Harasit Paul	
ORCID: 0000-0001-6435-5546	
Date assigned: 16-Oct-24	
Date submitted: 19-Oct-24	
Do you have any conflict of interest with the author/s? No	
Do you wish to be disclosed to the author? Yes	
1. In lines 71-72, part of reference 4 "Although no specific genetic marker exists" comment seems to be irrelevant/not pertinent to the write-up.	The lines 71-71 have been revised.
2. If possible, a few more words could be added on the advantages of the procedure.	The advantages of the procedure have been revised accordingly.
3. Except for two all of the references are a bit older, if possible, a few newer references could be added.	References have been updated.
Reviewer's recommendation: Revisions Required	
Reviewer's name: Mohammad Zahirul Islam	
ORCID: 0000-0001-8572-278X	
Date assigned: 16-Oct-24	
Date submitted: 17-Oct-24	
Do you have any conflict of interest with the author/s? No	
Do you wish to be disclosed to the author? Yes	
1. A well-written case report about Nuss procedure for Pectus Excavatum. The author introduced the topic well; however, the justification (genetic marker, line 72) doesn't match with the aim (minimally invasive repair) of the study.	There is no specific genetic marker, unlike other congenital deformities (for example, NKX2-5, GATA4, TBX5, and NOTCH1 mutations are linked with various congenital heart anomalies:), pectus deformity is observed in 35% of cases where it runs in families.
2. It would be good for a reader if there is a sub-heading such as "operational procedure".	Journal policy does not comply with such headings.
Reviewer's recommendation: Revisions Required	
Reviewer's name: Mohammad Saief Uddin	
ORCID: 0009-0007-0023-6725	
Date assigned: 16-Oct-24	
Date submitted: 17-Oct-24	
Do you have any conflict of interest with the author/s? No	
Do you wish to be disclosed to the author? Yes	
1. The topic is well written but still needs some revision. As this technique involves per-operative and post-operative stretching of ribs and sternum, post-operative pain management should be clearer, particularly in this case.	In the revised Manuscript, it is mentioned in lines 102-104.
2. In line 75 - not required to mention the SCARE Criteria.	Manuscript revised accordingly.
3. In line 132 - I do not understand the sentence " The successful execution of the Nuss procedure in Bangladesh in 2021 underscores the country's advance in medical capabilities."	This sentence is paraphrased, now in lines 127-129.
4. In line 134 - All major surgical procedure needs anaesthesiologists and nursing staff so no need to mention multidisciplinary collaboration.	We do agree that all major procedures require multidisciplinary collaboration. It is worth noting their contribution.
Reviewer's recommendation: Revisions Required	

REVIEW COMMENTS	AUTHOR RESPONSE
Editor's comments	
Editor's name: M Mostafa Zaman	
ORCID: 0000-0002-1736-1342	
1. The title provides excessive importance on the procedure's novelty. Please drop it. Claim this in the Discussion if it is at all true.	The title was changed as: A Case Report and Review of the Nuss Procedure in Bangladesh
2. The surgery was done in Al-Helal Helal Mirpur Hospital, whereas the affiliation of all authors is BSMMU. Therefore, the potential of conflict of interest cannot be overruled. I suggest acknowledging them if none qualifies to be in the author list.	Three of the five authors are from BSMMU, while the other two are from two different institutions, but they all work at Al-Helal Specialised Hospital.
Editor's decision: Revisions Required	
ROUND 2	
Reviewer's name: S M Rashed Ul Islam	
ORCID: 0000-0002-8164-5905	
Date assigned: 26-Oct-24	
Date submitted: 5-Nov-24	
Do you have any conflict of interest with the author/s? No	
Do you wish to be disclosed to the author? Yes	
Comments sent to author (Date: 10-Nov-24)	Date: 11-Nov-24
1. Page 3, Line 56: Please put citations and re-arrange the reference serial. Probably, it has been missed.	Line 56 now appeared in line 59: 'Pectus excavatum (PE), sometimes referred to as sunken or funnel chest, is a congenital deformity of the chest wall when many ribs and the sternum develop improperly, resulting in a concave or caved-in look of the front part of the chest wall and sternum.' The above statement is a general description of PE and has not been referenced.
2. On page 5 and Line 110, the sentence "Kelly et al. (2018) noted that these complications are generally manageable but sometimes require additional surgical interventions.9" But in the reference section, Ref no. 9 is "Nuss D, Kelly RE Jr. Indications and technique of Nuss procedure for pectus excavatum. Thorac Surg Clin. 2010;20(4):583-597." Please check the citation for any errors in the author's name or the year of publication.	We apologise for the unintentional error. A revision was made to the citation.
3. On page 7, mention the legends in Figure 1.	Legend has been added to the figure.
Reviewer's recommendation: Revisions Required	
Reviewer's name: Harasit Paul	
ORCID: 0000-0001-6435-5546	
Date assigned: 26-Oct-24	
Date submitted: 29-Oct-24	
Do you have any conflict of interest with the author/s? No	
Do you wish to be disclosed to the author? Yes	
1. Title Could be: 1. Pectus excavatum corrected by locally adapted Nuss procedure: A case report	The title has been changed to "A Case Report and Review of the Nuss Procedure in Bangladesh". We thought the new title would give insight into our work.

REVIEW COMMENTS	AUTHOR RESPONSE
Or 1. Locally adapted Nuss procedure for Pectus excavatum: A case report.	
2. Line 56: The word 'report' could be omitted.	This line includes the 'report' mentioned here, which is part of the journal submission criteria.
3. Line 70: 'The discussion also included bar displacement and re-operative surgery.' Could be omitted.	This line has been omitted.
Reviewer's recommendation: Accept Submission	

C. Editorial decision	Date: 11-Nov-24
Final decision: Accepted subject to editorial clarifications.	