

Review of: "Embryological Development of Anorectal Malformations: A Hypothesis"

Sameh Shehata¹

¹ Alexandria University, Egypt

Potential competing interests: No potential competing interests to declare.

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The submitted manuscript aims to present a novel hypothesis on the embryological development of anorectal malformations (ARMs), supported by radiological studies and a reinterpretation of existing anatomical and surgical data. While the topic is clinically significant and theoretically intriguing, the article exhibits significant scientific and methodological shortcomings that preclude its acceptance in its current form.

Major Issues:

1. Lack of Original Empirical Data

While the author references radiological studies and manometric assessments, no new, independently collected data or experimental findings are presented. The hypothesis heavily relies on reinterpretations of existing literature without providing robust experimental or clinical validation. This diminishes the article's contribution to advancing the field.

2. Inadequate Literature Integration and Methodology

The author critiques widely accepted classifications and surgical approaches (e.g., Krickenbeck classification and Peña's techniques) without systematically analyzing the full scope of relevant literature. The arguments appear selective and lack the rigor needed for a comprehensive re-evaluation of current knowledge. Moreover, the methods employed for hypothesis formulation (e.g., radiological reinterpretation) are inadequately described, limiting reproducibility and transparency.

3. Theoretical Contradictions

The manuscript proposes that ARMs, except for true cloacas, are low-type defects based on the presence of a functioning anal canal. This contradicts established embryological evidence suggesting that ARMs span a spectrum of anomalies, including high-type malformations. The hypothesis oversimplifies the complex interplay between embryological processes and anatomical outcomes.

4. Overgeneralization of Findings

The manuscript extrapolates conclusions about ARM classifications and surgical outcomes without considering the heterogeneity of these malformations and their clinical presentations. For example, the assertion that most surgical interventions are "mutilating" is overly broad and not substantiated with balanced evidence.

5. Ambiguity in Proposed Classification

The proposed alternative classification system lacks practical clarity and fails to provide a clear advantage over

existing frameworks. Without a demonstrated improvement in diagnostic or therapeutic outcomes, such a reclassification adds little value.

6. Editorial and Structural Issues

The manuscript's structure is dense and lacks coherence, making it challenging to follow the central arguments. Figures and tables are insufficiently described and integrated into the text, reducing their utility in supporting the hypothesis.

Minor Issues:

- The language and tone are occasionally polemic, particularly when discussing alternative viewpoints. This undermines the scientific neutrality expected in peer-reviewed publications.
- Certain terms and concepts (e.g., "true cloaca," "fistula preservation") are not adequately defined, leading to potential confusion.

Conclusion:

Although the manuscript addresses a crucial topic in pediatric surgery and embryology, the lack of robust data, methodological rigor, and balanced interpretation significantly limits its scientific merit. We recommend resubmission only after addressing these critical issues, ideally with new data and a more comprehensive literature review.