

Peer Review File

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Review Comments

Reviewer A:

This is a well written manuscript of appropriate length about physiology and pathophysiology of the rectum. It describes the contribution of pelvic floor structures to fecal continence. Reading is sometimes hampered by the many abbreviations, they should be reduced.

Major issue:

It is well known that different mechanisms contribute to fecal continence. The authors describe the contribution of the pelvic striated musculature which interacts with pelvic ligaments.

However, there is another mechanism consisting of the interplay of the myogenic tone of the internal anal sphincter muscle and its regulation by the recto-anal inhibition reflex. Patients with paraplegia exhibit a ballooning of the pelvic floor and a hypercontinence. This mechanism of fecal continence must be explained as well.

Reply: Thank you. We have explained this briefly.

3. Dysfunction

Damage to any part of the binary system may interfere with the binary control of all its functions to cause anorectal (and bladder) dysfunctions (Figure 3). For example, these include damage to the facilitatory or inhibitory centres of the brain or spinal cord; to the afferent or efferent nerves (for example by Multiple Sclerosis); to any part of the peripheral control system, be it muscle or ligament or the organ itself; by infection or local pressure by cancer to the stretch receptors "N" or by external

Likewise the proposed ligament repair may be a valuable contribution to the treatment of fecal incontinence. Given the above mentioned mechanism of continence, it is, however, not able to cure all forms of FI. This must be clearly stated.

Reply: Respectfully, neurological damage is not in the remit. We do mention muscle damage which is in the remit,

According to the Theory (1), however, it is the pelvic muscles which close and evacuate the anorectum (albeit by contracting against ligaments). Therefore, it is possible that failure to cure FI and ODS may have been due to pelvic muscle damage (20), which raised the question, which is the main pathogenic factor, damaged ligaments, or damaged muscles?

The legend of every figure must stand for its own. Please explain all abbreviations

(e.g. Figure 3)!

Reply: Done.

Figure 4 is redundant.

Reply: Old version Figure 4 has been removed in the revised version.

Reviewer B:

This is a valuable paper that condenses a vast amount of detailed information on pelvic floor functional diseases. I should be grateful if you could answer my comments shown below.

Major comments

This may be a collection of several papers, or it may have been written by a number of eminent surgeons working together, but the paper as a whole is inconsistent, as some abbreviated words are spelled out again, and some abbreviations are not explained in the figure legend.

Reply: Thank you. These have been corrected.

Minor comments

Puborectalis muscle was abbreviated to PRM in line 101. However, in line 245, it is again described as puborectalis muscle (PRM). Moreover, immediately after that, in line 255, it is again described as m. puborectalis (PRM).

Abbreviations are explained in the legends of Figures 1, 2, and 5. However, the legend in Figure 3 does not explain abbreviations such as LP, LMA, PCM, and CL.

Reply: Thank you. This has been corrected.

In the legend in Figure 2, “Figure 2 Perineal body (PB) The lower part of the vagina has been cut away” should be “Figure 2. Perineal body (PB). The lower part of the vagina has been cut away”.

Similarly, in the legend in Figure 8, “Figure 8 Anorectal angle If PUL and USL are competent, the opposite muscle forces, PCM, LP/LMA are in balance, and the anorectal angle “A” is normal” should be “Figure 8. Anorectal angle. If PUL and USL are competent, the opposite muscle forces, PCM, LP/LMA are in balance, and the anorectal angle “A” is normal”.

Reply: Thank you. It is now “Figure 8 Anorectal angle formation”.

SUI in line 184 may be stress urinary incontinence, but should be spelled out since it is a first appearance. Conversely, stress urinary incontinence in line 312 should be SUI.

Reply: Thank you. This has been corrected.

It is not clear whether the abnormal emptying in Figure 10 is bladder emptying, rectal emptying, or both.

Reviewer C:

A brief physiology and pathophysiology of the anorectum.

#Title:

- Number of appropriate words and is related to the objectives of the text and the development of the text. Specify that this is a literature review study.
- It is necessary to add the end point.

Reply: Thank you. The remit of this study is limited only to the Integral Theory paradigm

#Abstract:

- The main objectives of the study are described.
- The abstract does not exceed 250 words.

Reply: The abstract should be between 200-350 words according to the journal guideline. It is now 270 words.

- The most important results should be included in the abstract.

Reply: These have been stated.

#Introduction:

- Relevant background is provided to understand the purpose and importance of the study.
- The definitions used are adequate.
- Objectives are expressed appropriately.
- The type of study must be specified.
- In paragraph 97 and 98, you must cite appropriately, not the researchgate link.

Reply: Thank you. Reference (1) provided.

#Development:

-It is necessary to describe the metasearch engines used, keywords they used in the search.

Reply: The remit of this review is confined to the experimental scientific works and surgeries based on the Integral Theory paradigm.

-Figure 1 is adequately explained and integrates structural anatomy of the pelvic organs. Video 1 adequately explains anorectal function and dysfunction.

-Figure 2, is explained adequately, but does not appear in the text, it should be mentioned in the text.

Reply: See **Role of the perineal body (PB)**

The PB attaches to the distal vagina, anorectum and external anal sphincter (EAS) and acts as an anatomical support for the distal vagina, rectovaginal fascia and anus (*Figure 1*). The PB is suspended from the descending pubic rami by the deep transversus perinei ligaments (DTP) (*Figure 2*).

-If corpses are used for educational videos, approval from the ethics committee is necessary.

Reply: No corpses.

-It is necessary to check the text for typographical errors.

-The rest of the videos and figures are explained adequately.

#Conclusion.

-The conclusion coincides with the development of the text.

#References:

-Add more up-to-date references.

-The references are correctly cited in the Vancouver format and in the correct order.

Reply: Thank you. Necessary changes were made in the revised version.