Peer Review File

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Reviewer A

Comment 1: The author describes the frequency of UP as 1:3000. Is it a "rare" condition to be reported in a scientific literature? UP is rarer in my opinion. Please check the frequency of it again.

Reply 1: These numbers have been cited in the literature (eg. Holbrook and Misra, 2012; Shurtleff and Barone, 2002), but when we read the original publication (Mitre et al, 1987), we found that the 1:3000 prevalence is in the pediatric population. We therefore have taken out these numbers, because given its rarity, the true prevalence of urethral prolapse is unknown. (See Page 3, Lines 104-105)

Comment 2: Urethral caruncle was reported as a kind of partial UP. Please search a reference about it.

Reply 2: We added a reference (Hall et al, 2017) which describes urethral caruncle as partial prolapse and also revised the statement to describe how some believe that urethral caruncle is on the spectrum of urethral prolapse, while others distinguish them as two separate entities. (See Page 5, Lines 159-162).

Comment 3: The case presentation is too long as it. Most of it can be shortened.

Reply 3: We have edited the case presentation and reduced its length from 595 words to 450 words.

Comment 4: You wrote (Asymptomatic urethral caruncles and prolapse without features concerning for malignancy can be managed expectantly). How do you know that? Please improve discussion and add suitable reference.

Reply 4: We have revised this paragraph in the discussion regarding management of urethral meatal lesions. We have cited Maetzold and Takacs, 2020 "Urethral Pathology in Women," a review article that presents an expert opinion-based schema for urethral prolapse management. Although the progression of these lesions is not well-documented, the literature is clear that treatment is only required in the case of symptomatic urethral meatal lesions or those with features concerning for malignancy. In the changes we made, we also describe features that are suspicious of malignancy to guide providers reading this article. (See Page 5, Line 197).

Comment 5: Some images presenting a histopathological finding should be shown.

Reply 5: Representative histopathologic images were obtained and included as (new) Figure 4 (see Page 10).

Comment 6: The reason or mechanisms of necrosis should be discussed. Why necrosed? Similarly, the mechanism behind prolonged hypoestrogenism and prolapse should be discussed.

Reply 6: We describe the mechanism of necrosis in the discussion and have added further detail to make it more clear how necrosis can occur in the situation of thrombosed urethral prolapse (see Page 6, Line 205). We added a line about the mechanism of hypoestrogenism and urethral prolapse/caruncle in the discussion (see Page 5, Lines 162-163).

Comment 7: There are several papers available discussing delayed misdiagnosis of urethral prolapse and caruncle. Please refer to them.
Matsui H, Kato K, Kawanishi H, et al. Two cases of urethral prolapse misdiagnosed as pelvic organ prolapse. Jpn J Urol. 2019;110(3):219-222.
Abuhasanein, S., et al., A rare case of a necrotized urethral prolapse in a postmenopausal woman with acute urinary retention. Low Urin Tract Symptoms,2021.

Reply 7: We have incorporated the second reference: Abuhasanein et al, 2021 (Page 4, Line 155-157). Unfortunately, the first reference is entirely in Japanese, so I could not read the article to incorporate it into our paper. We did add the sentence "Moreover, urethral prolapse typically presents with non-specific urinary and vaginal symptoms which can delay diagnosis" to the paper as well to highlight this idea. (See Page 4-5, Lines 157-159).

Comment 8: The four-quadrant excisional technique must be mentioned when describing surgical techniques used for urethral prolapse.
Shurtleff BT, Barone JG: Urethral prolapse: four quadrant excisional technique. J. Pediatr. Adolesc. Gynecol., 15, 209-211, 2002.

Reply 8: Thank you for this suggestion. We have incorporated a description of the four-quadrant technique in the discussion (see Page 6, Lines 208-212).

Comment 9: Line 24, *prepubertal and postmenopausal women*. It should be prepubertal girls and postmenopausal women

Reply 9: In the abstract, we changed the phrasing to be "prepubertal girls" (Page 2, Lines 43-44).

Reviewer B

Comment 1: The title of the manuscript is "Management of necrotic urethral prolapse..." however, based on gross appearance and pathology, the patient only had a thrombosed urethral prolapse not actual necrosis. A thrombosed urethral caruncle requiring excision is not that uncommon.

Reply 1: We edited the title to read "Management of Thrombosed Urethral Prolapse in a Premenopausal Woman…" (see Page 1, Line 1). Although thrombosis of urethral prolapse can occur, the vast majority of cases are in postmenopausal women. Urethral prolapse in premenopausal women is still exceedingly rare, which is why we believe that this case report will add to the existing literature.

Reviewer C

Good paper. Some suggestions to improve the manuscript.

Comment 1: Literature review as describes in the title should include more that only 12 references. I suggest to include this paper as reference, as the authors performed a literature review and included a case of a reproductive age patient.

Fornari A, Gressler M, Murari JCL. Urethral Prolapse: A Case Series and Literature Review. J Obstet Gynaecol India. 2020 Apr;70(2):158-162. doi: 10.1007/s13224-019-01288-2. Epub 2019 Oct 31. PMID: 32255955; PMCID: PMC7109233.

Reply 1: Thank you for sharing this article. We have incorporated the reference into the discussion of previous cases of urethral prolapse (Page 5, Lines 174-189).

Comment 2: The authors should discuss the postoperative treatment with topic oestrogen and until how long it should be maintained.

Reply 2: We added the following statement to the discussion "Postoperatively, it is recommended that vaginal estrogen be continued to promote incisional healing for at least 6 weeks." (Page 6, Lines 220-221)