**Peer review file**

**Article information: http://dx.doi.org/10.21037/acr-20-168**

**Reviewer A**

Major comments:

1) In your discussion, you state, "The treatment of choice for teratoma is open or laparoscopic oophorectomy." My understanding, and that echoed in UpToDate, is that ovarian cystectomy is suggested to make a definitive diagnosis and preserve ovarian tissue when possible. Please clarify your statement. (Oophorectomy is almost certainly the only reasonable treatment option in this case of a >30 cm tumor.)

Reply 1): After carefully reviewing the literature, we clarified our statement as advised. Please see Pages: 8-9; Lines: 169-178.

2) "Pathology revealed mature cystic teratoma." This must be elaborated, likely with the input and authorship of a pathologist. This case report fails to convince me that this is the correct diagnosis. Teratomas may be quite large yet are typically 5-10 cm in size. There are other ovarian neoplasms that may contain heterologous elements yet are far more likely to display clinical manifestations of virilization (eg. Sertoli-Leydig cell tumor (with heterologous components) especially; however, a Leydig cell tumor or steroid cell tumor associated with a teratoma is also a reasonable consideration). What component of the teratoma is thought to be producing the testosterone in this case? Please explain.

Reply 2): As advised, one of our pathologists (CKN) reviewed the specimen and slides: “Pathology of the tumor revealed multiple cystic and solid areas with caseous material and hair, consistent with mature cystic teratoma. The histologic examination showed the presence of skin, respiratory epithelium, cartilage, and CNS tissue (Figure 3). In addition, well-differentiated Leydig cells with uniform polygonal cells, round nuclei, central nucleoli, abundant granular cytoplasm were identified (Figures 4-6) in ovarian stroma. There were no Sertoli cells identified on the specimen.”

Changes in the text: Please see Pages 5 and 7; Lines: 99-107 and 152-154.

3) In your discussion, you state that CT and/or MRI may differentiate between mature and immature teratomas. This seems to overstate the conclusions in reference 10. Please clarify.

Reply 3): As advised, we clarified this sentence and revised it.

Changes in the text: Please see Pages 7-8; Lines: 159-166.

4) There should be additional microscopic images to support the diagnosis.

Reply 4): As advised we added additional microscopic images to support the diagnosis. Please see Figures 3-6.

Minor comments:

1) Regarding follow-up and outcome, what is the length of follow-up for this patient?

Reply 1): We followed up patient about 8-9 months but seen in person only once after 5 months of surgery. She has been lost to follow up after her last imaging study.

Changes in the text: Please see Page: 6; Lines: 119-129.

2) Reference 8 makes no reference to virilization and paraneoplastic syndromes and seems to be an article about solid ovarian tumors of all types in children rather than focused on teratomas. Could you provide additional references on hirsutism and virilization arising from pure mature cystic teratomas?

Reply 2): As advised we added multiple references regarding androgen secreting mature cystic teratomas.

Changes in the text: Please see references #8 – 17.

**Reviewer B**

1. The authors should discuss the frequency of androgen-secreting ovarian teratomas in the discussion.

Reply 1): As advised, we revised our discussion and added references.

Changes in the text: Please see “Discussion section”.

Pages: 6-9; Lines: 132-193.

2. Figure 3 should be improved. The reviewer agrees that the tumor contains (probably)

Reply 2): As advised we added additional microscopic images to support the diagnosis.

Please see Figures 3-6.