Reviewer's report

Title: PRIMARY MELANOMA OF THE PROSTATE

Version: 4 Date: 26 January 2015

Reviewer: Ritva Vyas

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Major compulsory revisions:
1: Conclusions in the abstract (lines 52-54) and main body (152-154): the recommendations on treatment based on a single case report are overstated. The authors would be better placed to emphasis multidisciplinary care of the patient, early imaging to rule out other possible metastases and early exams to look for a primary; particularly skin and mucosal.
2: Clarification of imaging used (lines 90, lines 96): the authors needs to spell out exactly what imaging was used at which time point. For e.g. CT with contrast of chest abdomen and pelvis in April 2012. CT may not have been sensitive enough to pick up subtle metastases whereas PET/CT may have detected hyper metabolic lesions.
3: Timeline is contradictory (lines 96 vs lines 97): The prostatic melanoma was diagnosed in April 2012, he was operated on in June 2012 and then metastatic pulmonary lesions were found in October 2012 which is six month after diagnosis. However in line 96 authors state that 'One year after surgery the patient was completely continent and reported a normal erectile function. Additionally, follow-up imaging did not show any recurrence in the small pelvis'.

Minor essential revisions:
1. Comment on improved survival (lines 143): Again comment on improved survival based on one case report and compared to another case report is overstated.
2. Consistency with writing of the dates: 08/2004 vs August 2004, pick one style and stick to it.

Discretionary revisions:
the following suggestions may enhance the educational aspect of the case report, for a predominantly urological audience who may not necessarily have exposure to melanoma.
1. Melanoma arising in viscer al organs are much less likely to be BRAF or NRAS positive. Primary melanomas of the prostate are indeed very rare and most cases can be attributable to the prostatic urethra (subtype of mucosal melanoma). Mucosal melanomas are more likely to have ckit mutations and if positive can benefit from targeted therapies such as sunitinib. In disseminated metastatic melanoma it has been reported that the prostate may be involved in 3% of autopsies.
2. lines 133-135: management of primary melanoma is more complex than the line seems to suggest. Initial management after biopsy is directed by the depth of tumor, and presence of ulceration and dermal mitoses and may involve wide local excision with margins ranging from 1 to 2 cm plus/minus sentinel lymph node biopsy, and adjuvant interferon or immuno-oncologic therapy depending on final staging.

3. lines 139-142: systemic therapeutic options for advanced melanoma have substantially increased over the last several years. They are mainly divided into targeted therapies such as BRAF, MEK, C-kit inhibitors which target the tumor or immune-oncologic treatments such as CTLA4 antibody and anti-pd-1 agents which manipulate the immune system. Current trials are addressing various combination therapies to improve overall survival.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests