Reviewer's report

Title: Intraoperative radiotherapy electron boost in advanced and recurrent epithelial ovarian carcinoma: a retrospective study

Version: 2 Date: 3 June 2011

Reviewer: Michael G Haddock

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Major compulsory revisions

1. Define how patients were selected for IORT in the primary disease setting. In the rare case of isolated local relapse there is a rationale for including IORT along with EBRT. However, the majority of primary stage III patients have extensive intraperitoneal involvement and there is no rationale for considering IORT in these patients. Were all primary ovarian patients treated at the institution included or do the patients represent a subset. If a subset, please describe the characteristics that suggested local control might be a problem.

2. Define what is meant by whole pelvic radiotherapy. This is not a term used in the literature. What applicators were used? What area of the pelvis was treated? What normal tissues were in the field? What were the dimensions of the applicators? Where was the radiation dose specified? What equipment was used to deliver the intraoperative radiotherapy? Where was it delivered?

3. Revise the acute toxicity section to include potential acute toxicities based on the normal tissues irradiated. It does not make sense to report on radiation induced hepatitis and pneumonitis when the liver and lungs were not exposed to radiation. How was fatigue assessed in the postoperative setting? What is meant by acute rectum failure? Was the rectum irradiated?

4. If the presacrum or pelvic sidewall was irradiated there would essentially always be peripheral nerve in the radiation field. What is meant by the statement "if the peripheral nerve had been included" and "if the nerve had not been irradiated"? What nerve? How is it possible to irradiate the pelvis with 12 MeV electrons and not include peripheral nerves?

5. Define what is meant by late cystic injury. What is meant by crura edema and how was this related to late IORT injury?

6. In the discussion section, should relate results (survival and local control) to what is reported with non-IORT approaches. What is the justification for calling this approach especially effective and associated with a survival benefit?

Minor Essential Revisions

1. The manuscript would be improved by presenting patient characteristics and results data in tabular format.

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

**Quality of written English:** Needs some language corrections before being published

**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