Reviewer’s report

Title: Microheterogeneity of transthyretin in serum and ascitic fluid of ovarian cancer patients.

Version: 1 Date: 2 August 2005

Reviewer: Ralph J Lellé

Reviewer’s report:

General

This is a well performed study of different aspects of transthyretin (TTR) in ovarian cancer patients compared to a control group. As the authors state, biomarkers for early detection of ovarian cancer are urgently needed. TTR, which is related to the nutritional and inflammatory status may be such a marker. However, the catabolism as well as inflammatory reactions in ovarian cancer patients strongly influence TTR levels, so that its use for cancer detection is limited. Nevertheless, these results merit publication.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. How was the control group selected? Were they matched with the ovarian cancer patients (e.g. age)?

2. Page 8, line 9: “TTR from serum and ascitic fluid of 20 representative women was prepared …” These are obviously samples from the patients group. Which criteria have been used to select these 20 patients out of the total of 48? Surely, no ascitic fluid was available from FIGO stage I and II patients. Thus, some of the measurements in table 2 are based on 20 samples instead of 48. This should be clarified.

3. Immunostaining of the tumor tissue: Have positive controls been used for each staining process (page 9, 2nd paragraph)? In the results section the authors state that “TTR immunoreactivity was previously tested in human liver sections and revealed cytoplasmic stainig within hepatocytes.” So, no positive control was included in each individual staining process? - The question of a positive control is especially important as no TTR positivity has been observed.

4. Add p-values to tables 1 and 2.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Abbreviations: It would be helpful to explain all abbreviations in brackets, at least within the abstract. The list of abbreviations (page 17) is incomplete (e.g. CRP, RBP).

2. Abstract, results section: “In ascitic fluid, levels were …” The p-value should be given for this comparison between patients and healthy women.

3. page 4, line 1: “formerly” instead of “formally”?
4. page 5, line 6 “also have”

5. page 7, line 5 “lymphadenectomy”

6. page 7, line 8 “suffering from primary …”

7. page 13, line 8 “use” or “validity” instead of “usability”

8. page 14, line 18 “inverse correlation” or “inverse relationship” instead of “negative correlation”

9. page 15, line 23 “smaller immunoreactive form of TTR”

Discretionary Revisions (which the author can choose to ignore)

none

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Declaration of competing interests:

I declare that I have no competing interests.