Title: Is annual surveillance of all treated hypothyroid patients necessary?

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Author's response to reviews: see over
Editors  
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Dear Editors,

We wish to thank the reviewers for their comments and suggestions which have been helpful. We have addressed all the issues and the manuscript has been appropriately altered.

Reviewer 1: Dr. John Lazarus

No issues identified

Reviewer 2: John Walsh

The authors have not addressed my major criticism of version 1 of the manuscript, namely that since more abnormal tests were found in the 12 month group than the 18 month group, the obvious conclusion to draw is that 12 monthly testing is more appropriate. (The authors clearly accept the logic that more abnormal results justifies more frequent testing, since that is what they recommend for patients over 60 and those on higher doses, in whom abnormal results were more frequent). I still regard that as a more appropriate conclusion than the one they have drawn.

A large proportion of patients on our thyroid register have traditionally been followed-up at 18 monthly intervals. The retrospective study was undertaken to evaluate if this was a safe practice. The study did show that the 12 monthly group had more abnormal tests requiring dose adjustment. This may be due to physician bias while allocating patients to 12 monthly follow-up taking into account factors such as compliance. It is also likely that if you check more often you are more likely to pick up an abnormal result.

We agree with the reviewer’s comment about the appropriate follow-up strategy. Clearly 18 monthly follow-up cannot be applied universally, however it may be an option in patients who are less likely to have abnormal test. Individuals who are on a stable dose of thyroxine 100-150 µg/d and aged <60 years in whom thyroxine requirement is less likely to change can be followed-up less frequently where robust mechanisms for follow-up are in place.
I am also concerned that authors appear to have deleted the data regarding the number of abnormal tests in the 12 and 18 month groups from the revised manuscript (I can’t access version 1 for comparison, but I can’t find those data in version 2).

We can confirm that no data regarding abnormal tests in the 12 and 18 monthly group was deleted. A logistic regression model was used to assess if any baseline characteristics could be applied to predict an abnormal test. The results which are summarized in table-3 shows that the 18 monthly group were less likely to have an abnormal test compared to the 12 monthly group (odds ratio 0.66, 95% CI 0.53-0.81, P<0.01).

Table.2 deals with the number of reviews and thyroid tests during follow-up. On the previous recommendation of the reviewer the table was modified. The total number of tests in each group was replaced by mean number of test per person over the duration of follow-up. Data regarding the totals number of tests in each group is now reinstated.

1. The frequency of abnormal tests in the 12 and 18 month groups should be reinstated in the results section and in Table 2.

As requested we have now included this new data in the results section and Table-2.

2. The abstract should clearly state that more abnormal tests were found and dosage adjusted more frequently in the 12 month group than the 18 month group, along with the existing statement that predictors of abnormal tests were age over 60 years and thyroxine dosage > 150 mcg/day.

The abstract has been modified.

3. In the conclusions section of the abstract “18 monthly surveillance is adequate” should be replaced by “18 monthly surveillance may be adequate”; the conclusion should be similarly revised in the final paragraph of the paper.

The sentence has been modified in the conclusion section.

4. In page 9 paragraph 2 the authors should acknowledge that one conclusion which could be drawn from the higher frequency of abnormal
results is that 12 monthly testing may be more appropriate. This can then be accompanied by their rebuttal of that argument.

This has been included in the discussion.

5. Page 7 line 6, delete “minor” (a dose change of 50 mcg is not minor)

‘Minor’ has been deleted and the sentence stands as …….‘dose alteration of 25 µg and 50 µg respectively during long term surveillance’.

6. The authors’ response to point 3 in my original review (cost effectiveness of TSH alone vs. TSH & fT4 should be put in the discussion).

This has been included in the discussion (Page 11, paragraph 1)

We have addressed all the highlighted issues and the manuscript has been appropriately revised. If you require any further clarification please feel free to contact us. We look forward to a positive response.

Yours sincerely

A K Viswanath