Reviewer's report

Title: Occurrence of proptosis in contralateral eye in thyroid associated orbitopathy presenting with unilateral exophthalmos: retrospective follow-up study.

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Reviewer: Eugenie Poh

Reviewer's report:

I would like to congratulate the authors on doing this retrospective study. There are some points for additional consideration.

For a clinician, we would like to better prognosticate a patient's unaffected eye (i.e. non-proptotic eye), as well as that of the asymmetrically less affected eye. When defining these 2 entities "unilateral unaffected eye" and "asymmetric disease" clearly, as alluded to by the authors, asymmetric disease may not always mean a unilateral proptosis, but can represent cases where the disease has caused bilateral proptosis but quite asymmetrically.

Minor Essential Revisions:
Line 200: Spelling error: radiotherapy.

I do not note any mention of gender differences in relation to TAO in the results, except in the table. I think this is an important point to note and comment on in the paper. I infer that the effect of radiotherapy was not detailed in the discussion as there were too few numbers for useful comments.

Discretionary Revisions:
Line 339-340: "we considered the thyroid status during the previous 6 months prior to presentation"- were the authors referring to the point of presentation as the point when the second eye developed exophthalmos? Or was it at the point when the patient was first seen with unilateral exophthalmos? Although TAO has been known to occur under euthyroid conditions, it would be useful to know the trend of the thyroid status (from the initial point of diagnosis with unilateral exophthalmos till the point when they develop bilateral exophthalmos), as most patients would usually be made biochemically euthyroid after many years of follow-up, as they would either be on thyroid suppressing agents or thyroxine replacement after being rendered hypothyroid by thyroidectomy or radioiodine treatment.

It would be ideal if there was also a consideration of the thyroid autoantibody levels and its trend from the outset of diagnosis till the point of follow-up.

The variation of the time of reactivation of TAO in causing the second eye to be proptotic was documented. It would be additionally educational if the duration of
time for which the patients had been diagnosed with thyroid disease was also
documented.

**Level of interest:** An article of importance in its field

**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.