Reviewer's report

Title: Chromosomal aberrations and aneuploidy in oral potentially malignant lesions: distinctive features for tongue

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Reviewer: Elisabeth Bloemena

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Castagnola & Malacarne et al present in this paper chromosomal aberrations and aneuploidy in different sites of the oral cavity in oral premalignant lesions. Interestingly, they find major differences between the tongue and other sites of the mucosa.

However, their results are difficult to interpret because essential details concerning these lesions are missing. Size and homogeneity of the lesions are related to chance of malignant progression. This creates a potential bias with regard to their results. The authors state that dysplasia was recorded by an experienced pathologist (who should get credit for this). However, no details are given with regard to dysplasia. If the authors divide lesions into dysplastic/non-dysplastic, are all grades of dysplasia included in "dysplastic lesions"? Therefore, more background information should be supplied to appreciate the strength of the data.

At the tongue, the embryologic origin from the anterior part differs from the posterior. Did the authors observe difference between the anterior (2/3) and posterior (1/3) of the tongue.

The authors observed aneuploidy in some patients in oral distant fields. Did these patients also show aneuploidy in their lesions? Did the authors attempt to analyse the concordance of chromosomal aberrations in these lesions with the lesional fields?

As the authors already state in the discussion, follow-up of patients is mandatory to appreciate their results in relation to disease-progression.

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