Reviewer's report

Title: Sagittal Jaw Position in relation to Body Posture in Adult Humans - a Rasterstereographic Study.

Version: 1 Date: 12 October 2005

Reviewer: Virgilio Ferrario

Reviewer's report:

General
The question posed by the authors is not new, but it is a still debated argument. Indeed, the relationships between teeth, occlusion, temporomandibular joint and related anatomical structures on one side, and the “rest of the body” on the other side are still not well understood (similarly to several other questions, thus leaving space for research and speculation). One of the reasons might be the use of non standardized methods and instruments on both sides.

In the present MS, the authors used what appears to be a well standardized method for the assessment of body posture (more precisely, for the assessment of the position of the trunk), while the classification of sagittal jaw position was not so accurately standardized.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
1. in the Background, the Authors state they will analyze “different skeletal craniofacial parameters”, but they limited their investigation to dental parameters (Angle classification pertains to teeth only, as well as overjet). The two classifications (skeletal, usually ANB angle, and dental) may not coincide. Please correct.
2. Please note that Angle classification does not involve overjet, but only the sagittal relationship between the molars (and the canines, which were not included in his original classification, but added later). Please note that different incisor positions (overjet) may be present with the same molar relationships (for instance, angle class II, division I or angle class II, division II). Apparently, the Authors used overjet to obtain what they call Angle class…. but they obtained something else. This could be perfectly used, just remove all references to Angle class, and change the title into “…sagittal incisor position..”. The authors could read “Treatment of the malocclusion of the teeth” by Edward Angle, Philadelphia, The SS White Dental Manufacturing Company, 1907”: from page 28 onward the dental classes according to Angle are well described and illustrated.
3. The main shortcoming of the study is that neither the number of male/ female subjects within each “Angle class”, nor their ages are reported. According to the authors, males and females had different body postures, even within each Angle class, but this cannot be controlled (no data are provided). Apparently, no statistical analysis was made to take age and gender into consideration (and to compensate for possible discrepancies among groups). A statistician could advise you on this matter.

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. In table 1, the numbers of subjects appear to change according to the measurement (eg, the lordotic angle was measured only in 17 class I persons, the kyphotic angle only in 28 class II persons), but no reason for these missing values is giving. Is this a problem deriving from the instrumentation?
2. in the same table, please add the units of measurements (degrees).
Discretionary Revisions (which the author can choose to ignore)
1. abstract, ...28 had a [space] mesial occlusion...
2. background: ... reference planes 1, 3, 5, 6, 7, 8, 10.. Solow et al..... [please note that reference number 10 is not a cephalometric study.
3. background: .... with different skeletal [not skelettal] craniofacial....
4. Methods – subjects. Please re-write the first sentence to make clear that a total group of 84 subjects was analysed, 66 patients and 18 dental students [correct?]. Current text is unclear.
5. Methods – Rasterstereographic analysis: ...In order to cover.. [not too]
6. Results: the no. of subjects does not need “%”.
7. please note that this kind of analysis is not “cephalometric” (contributions)

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: Acceptable

Statistical review: Yes

Declaration of competing interests:
'I declare that I have no competing interests'