Chapter 3B

Comment on ‘Diagnostic accuracies of sialography and salivary ultrasonography in Sjögren’s syndrome patients: a meta-analysis’ by Song and Lee (2014)

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We were wondering which numbers were entered in the statistical program to perform the meta-analysis, since these numbers influence the outcome of the study. We would appreciate if the authors could comment on the above raised issues.

With great interest we have read the recently published meta-analysis by Song and Lee [1] in your journal regarding the diagnostic properties of sialography and salivary ultrasonography in Sjögren’s Syndrome (SS) patients. A systematic review and meta-analysis on this topic has been lacking so far from the literature and, thus, eagerly expected. We would like to express some concerns regarding Table 1 of their study in relation to the study outcomes. There seems to be a discrepancy between the data shown in the meta-analysis and the data presented by the source studies [2-7].

1. In the study of Takagi et al., 2010 [2], the number of cases with SS is 188 as opposed to 177 reported by Song and Lee [1].
2. In the study of Obinata et al., 2010 [3], the number of cases with SS is 36 as opposed to 32 reported by Song and Lee [1].
3. In the study of Poul et al., 2008 [4], which is erroneously cited as Poul et al. 2009, the number of cases with SS is 45 as opposed to 32 reported by Song and Lee [1].
4. In the study of Salaffi et al., 2008 [5], the number of cases with SS is 77 as opposed to 68 reported by Song and Lee [1].
5. In the study of Yonetsu et al., 2002 [6], the number of cases with SS is 171 as opposed to 151 reported by Song and Lee [1].
6. In the study of Yoshiura et al., 1997 [7], the number of cases with SS is 24 as opposed to 23 and the number of controls is 40 and 41 depending on the diagnostic technique tested, as opposed to 21 reported by Song and Lee [1].

Additionally, summing the numbers of true positives, true negatives, false positives, and false negatives in Table 1 of Song and Lee’s paper does not add up to the same numbers [1]. It is possible that the data set was not complete for every participant in the source studies, e.g. in the study of Yoshiura et al., 1997 [7], in which data was not complete for every participant. It is also possible that there were no need for a third reviewer and data was not report inter-observer agreement measures.

Table 1: Overview of the data presented in the source publications and the data presented by Song and Lee.

<table>
<thead>
<tr>
<th>Source publications</th>
<th>Data from Source papers</th>
<th>Data reported by Song and Lee (2014)</th>
<th>Sialography</th>
<th>Ultrasonography</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SS CO SUM SS and CO</td>
<td>SS CO SUM SS and CO</td>
<td>TP FP</td>
<td>TP FP FN TN SUM</td>
</tr>
<tr>
<td>Takagi et al., 2010</td>
<td>188 172 360</td>
<td>177 172 349</td>
<td>146 31 42 141 360</td>
<td>154 50 34 122 360</td>
</tr>
<tr>
<td>Obinata et al., 2010</td>
<td>36 37 73</td>
<td>32 37 69</td>
<td>30 2 6 35 73</td>
<td>28 8 8 29 73</td>
</tr>
<tr>
<td>Poul et al., 2008</td>
<td>45 15 60</td>
<td>37 15 52</td>
<td>35 2 10 13 60</td>
<td>38 4 7 11 60</td>
</tr>
<tr>
<td>Salaffi et al., 2008</td>
<td>77 79 156</td>
<td>68 79 147</td>
<td>56 12 21 67 156</td>
<td>58 13 19 66 156</td>
</tr>
<tr>
<td>Yonetsu et al., 2002</td>
<td>171 123 294</td>
<td>151 123 234</td>
<td>149 2 30 121 302</td>
<td>130 7 41 116 294</td>
</tr>
<tr>
<td>Yoshiura et al., 1997</td>
<td>23 21 44</td>
<td></td>
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</tr>
</tbody>
</table>

SS: Sjögren syndrome patients, CO: Controls, TP: true positive, FP: False positive, FN: False negative, TN: True negative, *: 39 with nonspecific parotitis and 21 healthy volunteers, **: 19 nonspecific parotitis and 20 healthy volunteers.
References


