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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Edited version of: Clin Exp Rheumatol. 2015;33:293.
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], viz.:

1. In the study of Tagaki 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 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 positive, 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. See, e.g., the study of Yoshiura et al. 1997, in which data of 2 control groups were used with different numbers for sialography and ultrasonography [7]. Furthermore, some source studies do not report the number of true positives, true negatives, false positives and false negatives. If Song and Lee calculated the number of true positives, true negatives, false positives and false negatives on basis of the reported sensitivity and specificity of the source populations, it is essential that the correct number of participants with SS and the number of controls in the various studies is entered in the calculations [1]. Finally, Song and Lee report that discrepancies between reviewers were resolved by consensus or a third reviewer [1]. However, they fail to present who the third reviewer was (it might be that there were no discrepancies that could not be resolved by consensus, so there was no need for a third reviewer) and do not report inter-observer agreement measures.

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


