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Comment on: parotid gland biopsy compared with labial biopsy in the diagnosis of patients with primary Sjögren's Syndrome

SIR, We read with interest the report of Pijpe *et al.* [1] comparing parotid gland with labial biopsy in 35 patients with Sjögren's Syndrome (SS).

We agree with the authors about the difficulties arising from the use of labial gland biopsy in the diagnosis of SS, particularly related to the histological evaluation of focus score (FS), requiring skilled pathologists. Although Greenspan and Daniels standardized the methodology in assessing FS [2] and many authors evidenced its importance in the diagnostic evaluation [3, 4], its reproducibility at different section levels within the same sample seems to be low, probably because of the unhomogeneous distribution of the inflammatory infiltrates in the gland and of the sample's size [5].

To overcome this problem, in a recently published study [6], we proposed the application of a multi-level analysis of labial gland specimens to maximize the number of foci, the glandular area and the technical quality of the material. We studied 120 labial gland biopsies from patients with suspected SS; less-than-optimal area (<4 mm²) specimens were not excluded provided that at least one normotrophic glandular lobule was present. After evaluation of the FS according to Greenspan and Daniels, the slides were recut at 200 µm intervals from each. A cumulative focus score (cFS) on three slides for each sample was analysed. Patients were evaluated by clinicians blind to the re-evaluation and classified as having or not SS according to the American–European consensus group (AECG) criteria set [3]. The cFS was then substituted to the baseline FS in the criteria set. Statistical analysis using receiver operating characteristic curve evidenced that the diagnostic performance of the AECG criteria significantly improved, when cFS was entered in the criteria set: the specificity was increased by 9.8% without affecting sensitivity. The improvement was mostly due to the increased specificity in biopsies with FS between 1 and 2, historically the most critical cut-off. Moreover, this method allowed the evaluation of smaller samples of labial glands. In our opinion, it should be of great interest to compare multi-level analysis of labial biopsies with parotid biopsy.

The second point we would like to address is related to the morbidity of labial biopsies. We read the comment by Friedman and colleagues [7] and we found many analogies with our personal experience. From August 1998, we performed 502 consecutive minor salivary gland biopsies (MSGB) as part of an evaluation for suspected SS or other oral infiltrative diseases (such as amyloidosis). All patients gave their informed consent for surgical procedures according to the local Ethical Committee recommendations. All MSGBs have been performed by two rheumatologists of our Operative Unit adopting a simple technique similar to that described by Friedman [8]. In our experience, a small incision (2–3 mm) was sufficient for collecting glands. Adverse events were

recorded by an independent clinician immediately and 7 days, 14 days and 6 months after the procedure with the aid of a questionnaire. The procedure was well tolerated in all cases: no major adverse events were observed, 12.7% of patients complaint transient adverse events lasting less than 14 days. Only one patient (0.2%) still complains local paresthesia after 2 years. Owing to the fact that such scarcely-invasive technique might provide insufficient material for the histological evaluation for SS, we extensively adopted the multi-level examination. We observed that, due to the application of the cFS, only 1% of samples did not provide adequate material and the percentage of false-positive biopsies was lower (1.6%) than reported by Pijpe and colleagues [1].

In our opinion, these data confirm the need for further large comparative studies, in order to find out the best diagnostic tools for histopathological evaluation of SS, taking in mind that while parotid gland biopsy requires specific surgical experience, MSGB may be performed directly by rheumatologists [1].

The authors have declared no conflicts of interest.

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Comment on: parotid gland biopsy compared with labial biopsy in the diagnosis of patients with primary Sjögren's Syndrome: reply

SIR,

We would like to thank Dr. Morbini and co-workers for their valuable remarks on our study comparing parotid gland with labial biopsy in Sjögren's syndrome (SS) [1]. Morbini and co-workers addressed an important topic regarding the validity of salivary gland biopsies in the diagnosis of SS. In their well performed study regarding multilevel examination of labial gland biopsy specimens in the diagnosis of SS, they showed that the