### TEST

<table>
<thead>
<tr>
<th><strong>TO DIAGNOSE</strong></th>
<th>Sjögren’s Syndrome</th>
</tr>
</thead>
</table>

| **DESCRIPTION** | Small piece of each gland is excised and examined under a microscope for pathologic changes, such as lymphocytic infiltration. |

| **CONDUCT of TEST** | 1. (Salivary gland biopsy) After local anesthesia with 2% xylocaine, a small vertical incision is made at the center of lower lip mucosa, which is then separated with a mosquito clump. Yellowish minor salivary glands are exposed by themselves. More than 4 glands are excised, fixed with 10% formalin, and paraffin-embedded. Wound is sutured with 7-0 nylon.  
2. (Lacrimal gland biopsy) Eye is opened with a speculum, and the patient is asked to look to nasal inferior. A lacrimal gland is protruded at lateral upper edge of the eye. After local anesthesia with 2% xylocaine, a small incision of conjunctiva is made, and part of lacrimal gland (1-2mm) can be pilled out by separating surrounding conjunctiva and then excised. Tissue sample is prepared as the salivary gland tissue.  
3. The paraffin-embedded samples are sectioned and stained with H-E and examined under a light microscope. The samples are graded by the degree of cell infiltration, according to the standard of Greenspan, et al. If more than 50 mononucleour cells infiltrate around an intra-alobular duct (1 focus), diagnosis of Sjogren’s syndrome can be made.  
4. If necessary, the samples are processed for various immunohistochemical staining and other histopathological procedures for more detailed information. |

| **Web Video** | Not available |

| **Materials:** | 2% xylocaine  
forceps, scissors, razor, mosquito clump  
speculum (lacrimal gland)  
10% formalin, ethanol, xylol, paraffin  
Hematoxylin and Eosin  
Light microscope |

| **Diagnostic value** | This version : [NA]  
Other version: [NA] |

| **Repeatability** | Intra-observer agreement. [NA]  
Inter-observer agreement. [NA] |

| **Sensitivity** | [NA] |

| **Specificity** | [NA] |

| **Other Stats** | [NA] |

| **Test problems** | a. In older subjects, non-specific lymphocyte infiltration, gland atrophy, and fibrosis, which look similar to SS, may be observed.  
b. The procedures are invasive. |

| **Test solutions** | a. Final diagnosis should be made by the combination with serology and symptoms. |

| **FORWARD** | Although it is not possible to diagnose SS only with salivary and lacrimal |

---
LOOK gland biopsy, it is still important for the final diagnosis of SS.

References
