Medical and Research Publications
International Open Access

Research Article **Journal of MAR Case Reports (Volume 5 Issue 2)**

The Usefulness of Traditional Antibodies for the Diagnosis of Sjogren's Syndrome

Dr Melchor Rodrigo, MD*

Corresponding Author: Dr Melchor Rodrigo, MD, Professor of Neurology, Buenos Aires, Argentina

Received Date: March 08, 2022

Published Date: May 10, 2022

Introduction

It is classically known that Sjogren's Syndrome has two specific antibodies associated with it, Anti Ro SSA and Anti LA SSB. But exactly how useful are they? As research advances, we are seeing that these two antibodies are not obsolete but are indeed unreliable. It is known for example that those patients with positive antibodies have a higher incidence of lymphoma.

But are they really useful in the diagnosis of the disease? As it is well known, Sjogren's disease compromises practically every organ in the body. We also know that these antibodies are very specific but not very sensitive.

So, the question is, how many Sjogren's Disease cases are never diagnosed? The American-European Consensus Criteria for Sjogren's Disease includes the presence of at least one of these two antibodies. It has as exclusion criteria: past head and neck radiation treatment, Hepatitis C infection, AIDS, preexisting lymphoma, Sarcoidosis, graft vs host disease, current use of anticholinergic drugs.

According to this Criteria, for a correct diagnosis of Sjogren's Disease you need:

I. Ocular Symptoms (at least one)

- Symptoms of dry eyes for at least 3 months
- A foreign body sensation in the eyes
- Use of artificial tears 3 or more times per day

II. Oral Symptoms (at least one)

- Symptoms of dry mouth for at least 3 months
- Recurrent or persistently swollen salivary glands
- Need for liquids to swallow dry foods

III. Ocular Signs (at least one)

- Abnormal Schirmer's test, (without anesthesia; ≤5 mm/5 minutes)
- Positive vital dye staining of the eye surface

IV. Histopathology

- Lip biopsy showing focal lymphocytic sialoadenitis (focus score ≥1 per 4 mm2)

V. Oral Signs (at least one)

- Unstimulated whole salivary flow (≤1.5 mL in 15 minutes)
- Abnormal parotid sialography
- Abnormal salivary scintigraphy

VI. Autoantibodies (at least one)

- Anti-SSA (Ro) or Anti-SSB (La), or both

For a primary Sjögren's syndrome diagnosis:

- Any 4 of the 6 criteria, must include either item IV (Histopathology) or VI (Autoantibodies)
- Any 3 of the 4 objective criteria (III, IV, V, VI)

For a secondary Sjögren's syndrome diagnosis:

In patients with another well-defined major connective tissue disease, the presence of one symptom (I or II) plus 2 of the 3 objective criteria (III, IV and V) is indicative of secondary SS.

Something to take into account: the histopathological analysis is not only uncomfortable for the patient, but it may fail to show the classical focal lymphocytic sialadenitis with a focus score ≥1 (ie, "positive" lip biopsy), because these findings may be located somewhere else on the lip.

Something else to remember: salivary scintigraphy means radiation exposure.

The actual definite diagnosis of Sjogren's Disease can be made by simply testing for alterations in the ALDH3A2 gene.

Purpose:

To evaluate the possibility of an easier path to diagnosis, taking into account the low sensitivity of the regularly tested antibodies, and the possible errors regarding histopathological analysis, as well as radiation exposure.

Materials and Methods:

• I reviewed al 26 patients under my treatment for Sjogrens Disease and how I arrived at the diagnosis in each one of them. To my surprise, only 16 out of the 26 had at least one positive antibody. The rest had required, besides a high clinical suspicion, the use of Salivary scintigraphy, and histopathology for a correct diagnosis.

• I tested for volunteers after they had received treatment and recovered for alterations in the ALDH3A2 gene (5 volunteers).

Results:

• They were all positive for alterations in that gene.

Conclusion:

We may have a shortcut for the diagnosis of this terrible disease, that may even make histopathological analysis and nuclear medicine tests unnecessary. We need more experience in the usefulness of testing for alterations in the ALDH3A2 gene.

References

1. Medline Plus-genetics Sjögren syndrome, Genetic Testing - Sjögren syndrome, www.ivami.com

2. New Genetic Susceptibility Factors for Sjögren's Syndrome Revealed By Kirstie Saltsman, Ph.D. | March 5, 2014, NIH 2002.

3. Genetic aspects of Sjögren's syndrome Anne Isine Bolstad and Roland Jonsson By Kirstie Saltsman, Ph.D. | March 5, 2014