**A NEW SCREENING ALGORITHM FOR SJOGREN'S SYNDROME IN A RHEUMATOLOGY SETTING (SSQR)**

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**BACKGROUND:** Sjogren’s syndrome (SS) is an autoimmune disease characterized by dry eye and dry mouth, with potentially serious systemic complications. Primary SS patients of Chinese descent may have more severe disease and a higher frequency of major organ involvement. Diagnosis of SS is often delayed due to nonspecific symptoms, calling for better screening tools.

**METHODS:** The SSQR (Sjogren's Screening Questionnaire for Rheumatologists) was developed using data from 974 patients referred by a rheumatologist to the Sjogren's International Clinical Collaborative Alliance (SICCA) study. Patients answered questions on symptoms, medical history, and demographics, and underwent ocular exams for dry eye (Schirmer's and tear break-up time (TBUT)). They were later classified as SS or controls following standard ACR/EULAR classification criteria. Univariate and multivariate logistic regression were conducted to identify questions most predictive of SS, for inclusion in the SSQR. A likelihood scoring system was created to approximate a patient's likelihood of SS given their SSQR responses.

**RESULTS:** Five questions were identified as being most predictive of SS: 1) Can you eat a cracker without drinking a fluid/liquid?; 2) How would you describe your dental and oral health in general?; 3) During the last week have you experienced tearing?; 4) Are you able to produce tears?; and 5) Do you currently smoke cigarettes? (AUC = 0.78 with eye exam data, 0.65 without). Without eye exam data, SSQR likelihood score >=17 (possible range 0-11) was able to distinguish SS from non-SS patients with 64% sensitivity and 58% specificity. With eye exam data, SSQR likelihood score >=13 (possible range 0-18) distinguished SS from non-SS with 78% sensitivity and 67% specificity.

**CONCLUSIONS:** The SSQR is a simple, easy-to-use, and evidence-based questionnaire to screen patients for Sjogren's syndrome in the rheumatology setting. Prospective validation of SSQR in rheumatology clinics is in progress.

**CONTENT CATEGORY:** Epidemiology

**KEYWORDS:** *Sjogren's syndrome, dry eye, SICCA, screening*