Lydia Fisher, BS, pre-med  
University of Pennsylvania, Penn Presbyterian Medical Center  
“Sjögren’s syndrome research database”  

This Student Fellowship was made possible by the SSF Philadelphia Chapter to be awarded in the Philadelphia area.

Abstract:
A database will be compiled using over 400 Sjögren’s syndrome patients evaluated at the Penn Sjögren’s Syndrome Center and diagnosed according to the American-European Diagnostic Criteria. The database will contain information such as symptoms, diagnosis (primary vs. secondary), physical examination findings, results of salivary scintigraphy, laboratory studies, dry eye tests, and salivary tissue histology. I will extract information from patient charts. I also will query the database to determine the frequency of certain disease manifestations and extraglandular complications. A subset of patients with lymphomas will be identified to determine the clinical and laboratory features associated with this complication. The database will take approximately four months to complete. Continuous queries will allow the medical center to analyze the validity of data formatting and answer clinical questions.

The purpose of the database is to determine the frequency of disease manifestations and extraglandular complications such as lymphomas and central nervous system involvement in Sjögren’s syndrome. This information will provide the foundation for future clinical studies. Key disease features will be explored in relationship to various other clinical and laboratory parameters. Society may benefit from a greater understanding and recognition of the extraglandular manifestations of Sjögren’s syndrome and the clinical correlates of these manifestations.

Extraoral and extraglandular manifestations may include fatigue, malaise, fevers, epistaxis, otitis media, conduction deafness, recurrent sinusitis, esophageal dysmotility, esophageal webs, reflux, atrophic gastritis, autoimmune pancreatitis, liver disease, vaginitis sicca, interstitial cystitis, anemia, recurrent bronchitis/pneumonia, lymphocytic interstitial pneumonitis, pulmonary fibrosis, bronchiectasis, BOOP, peripheral neuropathy, cranial neuropathy, central nervous system involvement, interstitial nephritis, hyposthenuria, renal tubular acidosis, arthralgias, polyarthritis, myalgias, myositis, Raynaud’s phenomenon, xeroderma, purpura, urticaria, vasculitis.

Laboratory studies will include CBC with differential and platelets, urine analysis, ANA, anti-SSA, anti-SSB, rheumatoid factor, SPEP, anti-CCP, ESR, CRP, serum beta-microglobulin, IgG, IgM, IgA levels, hepatitis C, vitamin A and cryoglobulins. Salivary scintigraphy results will be recorded using a semi-quantitative scale. The results of Schirmer’s testing, ocular surface staining, and
fluorescein tear breakup time will be recorded. Biopsy findings including histologic descriptions and focus scores will also be recorded.

The initial study will compare clinical and laboratory parameters in a group of Sjögren’s syndrome patients with lymphomas compared to a group of Sjögren’s patients who do not have this complication.