

Demonstration and identification of monoclonal proteins in the urine of patients with Sjögren's syndrome

H M MOUTSOPOULOS,¹ R COSTELLO,² A A DROSOS,¹ A K MAVRIDIS,²
AND N M PAPADOPOULOS²

From the ¹Department of Medicine, Medical School University of Ioannina, Ioannina, Greece, and ²Clinical Chemistry, Department of Clinical Pathology, Clinical Center, NIH, Bethesda, Maryland 20205, USA

SUMMARY Fresh sera and concentrated urine from 17 patients with primary Sjögren's syndrome (SS) were fractionated by high-resolution agarose electrophoresis to investigate the presence of monoclonal immunoglobulins or their components. Homogeneous protein bands were found in the gamma-globulin region in 47% of serum samples and 76% of urine specimens of all patients tested. These monoclonal proteins were detected more often in patients with extraglandular SS (77% in serum, 100% in the urine) than in patients with glandular SS (14% in serum, 43% in the urine). Immunofixation electrophoresis showed that the majority of these monoclonal proteins were free kappa or lambda light chains. Fractionation of unconcentrated parotid salivas from five SS patients failed to reveal the presence of monoclonal light chains or immunoglobulins. The present findings further substantiate our previous observation that a monoclonal process coexists with the polyclonal activation in SS patients.