

Antimitochondrial antibody detection by indirect immunofluorescence on mouse sperms

Martínez, S.

Berrios, S.

Fernandez-Donoso, R.

Brahm, J.

Cuchacovich, M.

Antimitochondrial antibodies (AMA) are characteristically present in the serum of patients with primary biliary cirrhosis (PBC). AMA detection constitutes an important step for the clinical diagnosis of PBC, the indirect immunofluorescence against cryostat sections of rat or mouse organs being the most common method used. This study presents an alternative method for AMA detection by indirect immunofluorescence using mouse sperms as substrate. Sera of 17 patients with PBC were examined for AMA using mouse sperms and frozen sections of rat kidney. With mouse sperms as substrate, all PBC sera were found to be AMA positive showing an intense fluorescent reaction on the mitochondrial sheath of mouse sperms (100% sensitivity). No false positive results were obtained with normal sera. Sera of 22 patients with collagen diseases (systemic lupus erythematosus and progressive systemic sclerosis) having defined reactivity to antigens other than mitochondrial antigens were also examined for AMA wi