Colour Plate 68

Plate 68 Clinical Applications: Electrophoresis  Multiple sclerosis test. Electrophoresis test result performed on cerebrospinal fluids (CSF) of a patient with multiple sclerosis. Two traces are seen, black (right) and blue of the same patient. Dark bands in each trace are produced by migration and separation of particles in CSF through a gel; the large band (lower frame) shows albumin protein; two smaller protein bands are at upper frame; at the top is a long band containing smaller bands that include gamma globulin (immunoglobulin). Gamma globulin in CSF confirms multiple sclerosis. Multiple sclerosis is a nervous system disease which produces symptoms such as slurred speech, muscle weakness, disability and paralysis. (Reproduced with permission from James Stevenson/Science Photo Library.)