
Comparative study between indirect immunofluorescent technique and tissue culture method in diagnosis of poliovirus

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Poliomyelitis is an acute infectious disease that affects the central nervous system. In Egypt, this disease is still a major problem and although vaccination against it had become compulsory since 1969, and practiced on a national scale, many paralytic cases have been reported till now, [Jawetz et al., 1989]. Direct detection of poliovirus or its antigens in stool can be done by isolation in tissue culture, electron microscopy, complement fixation test, enzyme immuno-assay and immunofluorescent (IF) technique. Cell culture isolation is still the most reliable method, but this technique lacks the availability in many laboratories, it is time consuming, costly, and needs specialized personnel, [Melnick, 1990]. Immunofluorescence is a rapid method and the results could be available within hours after infecting the tissue culture cells. It has been used for rapid diagnosis of rabies, influenza, herpetic keratitis, and infections due to respiratory syncytial virus and other viruses, but this procedure has not been used extensively in typing enteroviruses directly in clinical samples, [Riggs, 1979; and Pal et al., 1983].