Assessment of the Late Effects of Polio

Due to the complexity and nature of many of these patients' problems, it is at the health professional's discretion to select the most appropriate method of evaluation. Currently there is no definitive diagnostic test for PPS. Investigations should be problem orientated and exclude other potential causes for the patient's problems.

The most appropriate method of providing a comprehensive and coordinated evaluation that addresses the client's medical, functional, psychosocial and vocational issues is through the use of an interdisciplinary team, including physician, physiotherapist, occupational therapist and social worker. Referral to other health professionals including speech pathologists, orthotists, podiatrists, psychologists, respiratory physicians, orthopaedic specialists and neurologists is often required.

Medical Assessment

In regard to the medical assessment of the post-polio patient, Dr Pesi Katrak has written the following:

Symptoms such as fatigue and pain can be caused by a very large number of medical conditions. It is neither practicable nor cost effective to carry out investigations for all of the conditions that can cause these symptoms. One has to be guided by pointers derived from a thorough clinical assessment including a detailed history and a complete physical examination. Some clinics in North America recommend routine blood test in all patients including a complete blood count, serum electrolytes, glucose, urea, creatinine, calcium, phosphates, total protein, protein electrophoresis, albumin, magnesium, AST, ALT, LDH alkaline phosphatase, creatine kinase and thyroid function tests.

My practice is to order blood tests and other investigations only when there is some clinical indication pointing to a particular disorder which needs to be excluded. Some of the common disorders found in older adults, such as diabetes, anaemia, cardiac dysfunction, depression, sleep apnoea and fibromyalgia, should be looked for in the clinical assessment and, if necessary, excluded with additional laboratory tests or appropriate referrals. Other neurological disorders causing muscle weakness, such as spinal muscular atrophy, amyotrophic lateral sclerosis, spinal canal stenosis, diabetic/other neuropathies, entrapment neuropathy and radiculopathy, can generally be excluded on clinical assessment. Electromyography (EMG) and nerve conduction studies may sometimes be required for this purpose. Sometimes electromyography may be required to confirm a diagnosis of prior polio if the residual clinical features are unclear. EMG however does not help to differentiate between patients with new symptoms from post-polio syndrome and asymptomatic polio survivors, as similar changes of chronic denervation are seen in both groups. Sleep apnoea, which is being increasingly recognised in the general population, can lead to daytime sleepiness and fatigue, and is very similar to that seen in patients with post-polio syndrome. If the patient has a history of an irregular breathing pattern at night and tiredness or headaches on waking in the morning, I often recommend referral to a respiratory physician for consideration of sleep apnoea. Treatment of this disorder can result in significant improvement in daytime tiredness.