

Post Polio Syndrome

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Polio vaccination was introduced in the UK in the early 1960s. Since 1993, there have been no cases of polio in the UK but many people contracted poliomyelitis infection before effective vaccination was introduced. According to the British Polio Fellowship, 80% of them are now living with post polio syndrome (PPS). How good are we (health professionals) in recognising and managing PPS? It is important for the PPS sufferers for their condition to be recognised and managed well as this stabilises the condition, slows down its progression and improves the sufferers' quality of life.

PPS is a neurological condition that is characterised by gradual or sudden onset of progressive and persistent muscle weakness or abnormal muscle decreased endurance, with or without generalised fatigue, muscle atrophy, or muscle and joint pain. Sudden onset may follow a period of inactivity, or trauma, or surgery. Less commonly, symptoms attributed to PPS include new problems with swallowing or breathing. This is the definition of PPS that was given by a group of experts working with the British Polio Fellowship. Their publication *Post Polio Syndrome – A guide to management for health care professionals* was published last February.

It is estimated that there are 120,000 polio survivors in the UK and about 60% of them suffer from PPS. This condition can dramatically affect their abilities, lifestyle and relationships. In fact, about 31% have had to leave or change work and about 60% need more help with the activities of daily life.

PPS follows decades of stable symptoms during which the polio sufferer has adapted to the residual disability. New symptoms appear, such as weakness, pain, fatigue, respiratory difficulties or sleepiness. The development of these new symptoms may be gradual, sudden or step-wise at onset. They soon find that coping mechanisms which have been used for years may no longer be effective, triggering sufferers to seek help through primary care.

Symptoms of PPS can be stabilised over long periods and quality of life enhanced by effective management, though there are no medications currently available that are proven to reverse muscular atrophy, improve neuromuscular strength or relieve the neuromuscular fatigue of PPS.

The experts publication make some key recommendations:

- A multidisciplinary approach is strongly recommended and should involve GPs, physiotherapists, occupational therapists, orthotists

and other allied health professionals with referral to specialist consultants as required.

- Effective assessment needs to review the patient's history and status for all common PPS symptoms and should take into account their early experiences and how these may have influenced their response to new and/or increasing symptoms, their psychological wellbeing and the symbolic meaning of assistive devices. Regular reviews are recommended to monitor symptoms and identify any progression of the condition.

- Energy management techniques can alleviate the symptoms of neuromuscular and general fatigue and reduce pain. These included:

- pacing activity (the input of a specialist physiotherapist or occupational therapist is very important)
- energy conservation by adapting, simplifying and prioritising daily tasks (occupational therapist's advice is very important)

- The mainstays of pain management is pacing, activity or lifestyle modification, energy conservation, activity reduction and assistive devices. Overuse pain on daily basis is a sign that the muscles are used maximally and activities should be reduced to a point where the muscles have some reserve.

- Experienced orthotics specialists can reduce overuse and misuse and reduce energy requirements for walking by optimising orthoses and footwear.

- Exercise and physical activity programmes can be considered once energy management techniques have been used to control the symptoms of neuromuscular fatigue and pain. These may strengthen muscles where possible and help improve cardiovascular health leading to an overall improvement in wellbeing.

- Health professionals should recognise that respiratory complications may develop insidiously in individuals who appeared previously unaffected, but are particularly prevalent in the context of factors such as respiratory infections, periods of immobility, surgery, pregnancy or obesity.

- It is important that PPS sufferers with sleep apnoea receive a full assessment and treatment.

- Mechanical failures such as worsening kyphosis, scoliosis or respiratory muscle weakness can lead to chronic respiratory insufficiency.

- PPS patients should receive annual influenza vaccination and also should be immunised against pneumococcal disease. If smokers, should be advised

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to give up smoking. Dietary advice to optimise nutritional status, and consideration of weight management may also support functional status.

- Problems with swallowing is potentially a serious problem for individuals with PPS. They may require a referral to a Speech and Language Therapist.

- Psychological therapies may be helpful in treating symptoms such as depression and anxiety. They may also enhance the efficacy of physical interventions by promoting behaviour change and improving the ability to cope with physical symptoms.

- Weight reduction may help reduce the occurrence and severity of neuromuscular fatigue and pain. Energy expenditure, limited by disability, fatigue and pain together with low lean mass will affect calorie requirements and activity capability. In such cases the help of a dietician is very important.

I would strongly recommend members and friends of the BGTHA to go through this guide of PPS management, which is specifically designed for healthcare professionals.

Acknowledgement: This article is based on the PPS guide issued by The British Polio Fellowship. The author is a member of the Expert Panel that wrote this PPS Guide.

<http://www.britishpolio.org.uk/polio-and-post-polio-syndrome/information-for-healthcare-professionals/post-polio-syndrome-guide-management/>

