

Management of Post Polio Syndrome
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1. General Issues -
 - a. Healthy behaviors – diet, weight, smoking, exercise.
 - b. Routine health maintenance medications – cancer, cardiovascular etc.
 - c. Specific areas - thyroid disease, depression, cholesterol, sleep apnea
 - d. Chronic disease management, - diabetes, heart disease etc.
 - e. Pain medications for PPS
 - i. “regular pain” acetaminophen (tylenol); NSAIDs (non-steroid anti-inflammatory drugs – ibuprofen, naprosyn, celebrex); Opioid and opioid like (hydrocodone, oxycodone, tramadol, morphine).
 - ii. “neuropathic pain” or muscle – nerve pain. gabapentin (neurotin); lyrica (pregabalin); amitryptaline (elavil); topomax; tegretal. Capacain Cream (chilli peppers); and antidepressants (Cymbalta and Effexor).
 - f. Medications for fatigue (not proven effective in rigorous studies; each has side effects)
Pyrosigmine (mestinson); Modifinal (provigil); Ritalin (stimulants).
2. Rehabilitation Interventions
 - a. Activities of Daily Living (ADLs – OT)
 - i. Functional exercises
 - ii. Assistive devices – splints, reachers, openers, dining utensils
 - b. Mobility and Transfers (PT)
 - i. Functional exercises
 - ii. Braces – ankle foot orthosis (AFOs); Wrist Hand Orthosis (WHOs)
 - iii. Canes, crutches, and walkers
 - iv. Scooters
 - v. Wheelchairs – manual and electronic
 - c. Swallowing and Language (SLP)
 - i. Swallowing problems (dysphagia)
 - ii. Speech changes (dysarthria)
3. Counseling and psychotherapy
 - a. Depression and coping
 - b. Pain Management
 - c. Care giver stress
4. Coping and Adaptations

Observations on coping and adapting to PPS

While the characterization of post-polio syndrome as increasing pain, fatigue, and new weakness in individuals with a history of paralytic polio is accurate, this description does not capture the full impact of the condition. PPS sneaks up on polio survivors. In an insidious manner, they come to realize they can't keep up with their peers – even with that extra push which they do unconsciously. Some of this is understandable and associated with normal aging. It's the other part which proves to be a challenge. They can't keep up with peers – spouses, friends, and professional colleagues. They try harder, push themselves more and still do not quite hit the mark. They hit the proverbial wall (or experience decreased endurance of PPS) as they try to maintain their activities. Slowly, the effects of this decreased endurance becomes more apparent. Typically in the early stages, their spouses, colleagues and friends do not understand why the individual (the polio survivor that is) lags behind. The whole process can be subtle and drawn out.

Many polio survivors have a hard time admitting the decreased abilities to themselves and in articulating their loss with those closest to them. Consciously or subconsciously, this experience may remind them of physical and psychological vulnerabilities they experienced at a young age with the initial infection. This is what I mean when I borrow a phrase from my youth to say that PPS does a “head trip” on polio survivors. As a medical professional who has been seeing individuals with PPS for twenty years, ones ability to express their abilities – and hence disabilities – is pivotal to successful coping.

1) Pacing

Pacing is a major contributor to the experience of PPS. Individuals with the flexibility to alter their physical activity congruent with their capabilities have an easier time. One common experience I see is when a patient makes a major decision to reduce work, retire or to acquire a scooter, they have a burst of energy. They are more in control with what they want to do and seem happier.

Factors which impact on one's ability to pace themselves include financial (usually employment), personality, self-image, “locus of control”, and gender.

2) Gender – Men and Woman

Gender differences exist in the manifestation of PPS. While more boys were infected with polio than girls, women dominate PPS clinics and support groups. We could speculate on a myriad of explanations for this difference from physiology (hormonal differences), lower levels of physical conditioning, pain perception, capability to express emotions to social role differences.

For the polio survivors who are gainfully employed – particularly the primary bread winners of their household - the crucial aspect of coping with PPS may be altering the physical demands of work. Historically speaking, this is more commonly an issue with men.

Work place adaptations – environmental modifications and work schedules
Semi- Retirement / Retirement.

Women with PPS face different challenges. There may be no clear-cut event which alters the physical work demands and expectations. Many of my female PPS patients are uber-volunteers (community, church, social and civic groups). Their social role expectation as mother, grandmother, spouse, neighbor, and friend can be deep-seated and hard to slow-down.

My hypothesis is that social and psychological factors are the prime determinants in successful coping with PPS. Being able to articulate one's abilities (and limitations) is crucial to successful management of and coping with PPS. Certainly, medical and rehabilitation management of pain, fatigue, coping, and functional activities can play an important role. Here again, I strongly recommend that individual with PPS assume meaningful engagement with health professionals and others in terms of these interventions, and that they develop a vocabulary and means to express their status.

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