

The Role of the General Practitioner in the Management of the Late Effects of Polio

General Practitioners are ideally placed to coordinate lifetime holistic care for the individual with a history of polio. In particular the GP can assist the post-polio patient by:

- Developing an assessment and management program to address the patient's specific symptoms;
- Ensuring continuity of care;
- Helping the patient and their family understand the condition (patient education); and
- Promoting a healthy lifestyle.

Developing an Evaluation and Management Program

The development of a comprehensive evaluation and management program is essential for the post-polio patient to ensure that symptoms are addressed and the progression of symptoms is reduced. This may be achieved through:

- Identifying medical, neurological and orthopaedic conditions that could be mimicking the symptoms of LEOP;
- Managing disabling symptoms – referral to other services, pharmacological treatment, etc.; and
- Monitoring patient's symptoms through ongoing evaluation.

Although the patient may not be exhibiting late onset problems, comprehensive evaluation and the development of a treatment plan that addresses optimal health and well-being may be beneficial in minimising the impact of future problems.

Continuity of Care

Continuity of care is one of the greatest contributions that the GP can provide to the patient with a chronic condition such as LEOP. Many of these patients may develop new symptoms over time and require ongoing evaluation of their medical condition to monitor their progress. The GP, who is often the patient's first contact with the health care system can provide this ongoing evaluation and refer the patient to other health professionals and services as required. GPs are uniquely placed in the health care system to advocate for their patients because of the good rapport that can be established between patient and doctor. Good rapport in the doctor/patient relationship is important in order to:

- Provide information and support;
- Develop a comprehensive treatment plan with the patient and partner/carer; and
- Refer as appropriate to health professionals and services.

Referral to Other Health Professionals

Although the GP can provide a comprehensive service to the post-polio patient, it is vital for them to recognise the importance of specialists and allied health professionals in the management of this condition. Due to the complex nature of LEOP it is often necessary to refer these patients to other health professionals who have specialist skills and knowledge that can assist the patient to manage their often disabling symptoms.

Specialists

Specialist physicians, in particular neurologists, orthopaedic surgeons and respiratory physicians, can occupy a key position in the health care of post-polio patients.

The benefits of referring to a specialist include:

- Confirmation of a diagnosis (in particular identifying other diagnoses that may be causing symptoms);
- Establishing a shared management plan;
- Access to the specialised skills and knowledge of the specialist; and
- Access to comprehensive assessment and treatment procedures.

Allied Health Professionals

Allied health professionals have specific skills that can assist the patient with a history of polio. In particular physiotherapy, occupational therapy, and social work have been utilised in post-polio clinics throughout the world and have been found to be essential in the assessment and management of all patients with a history of polio. Therapists can be accessed through both the public and private sectors, however to provide a comprehensive service to the post-polio patient, it is important that they have a thorough understanding of this condition.

A resource manual and training package has been developed by the Queensland Department of Health and distributed to Queensland Health Districts throughout the state. These resources were developed to increase the awareness of medical and allied health staff of LEOP and provide them with the necessary information that is required to provide a comprehensive service to these patients.

Physiotherapist

Through a variety of hands-on treatments, education and exercise prescription, physiotherapists can assist the post-polio patient in maximising their level of function and minimising future deterioration.

Assessments conducted by the physiotherapist may include:

- Manual muscle testing;
- Measurement of joint range of motion and leg length;
- Evaluation of posture; and
- Analysis of activities and positions that provoke or relieve muscle and joint pains.

Treatment programs for the post-polio patient may include the following:

- Prescription of an exercise program, designed for the individual;
- Correction of postural alignment;
- Pain management;
- Application of therapeutic modalities;
- Joint mobilisation;
- Referral to appropriate services;
- Hydrotherapy; and
- Prescription and training in the use of mobility aids and/or braces.

Occupational Therapist

Occupational therapists use various methods to help their patients achieve the highest level of functioning and wellness attainable in their daily lives, and to cope with the physical and emotional aspects of their disability. Occupational therapy assessment and treatment for the post-polio patient may include:

- Assessment of home and workplace environments and recommendations for necessary adaptation;
- Evaluation of activities that produce weakness, pain or fatigue;
- Recommendations and training in the use of adaptive equipment;
- Vocational counselling and rehabilitation;
- Education of the patient regarding energy conservation, joint protection and work simplification; and
- Guidance to family members and carers in safe and effective methods of caring for the patient.

Social Worker

The social worker can provide a valuable service to the post-polio patient by facilitating ongoing adjustment to physical and lifestyle changes. This may be achieved through:

- Assessing how new health problems and functional loss impact on the patient and their family, friends and colleagues;
- Assisting the patient to identify coping strategies used;
- Increasing personal and external resources – facilitate referrals to community services;
- Providing education and support; and
- Counselling.

Other Health Professionals

Referral to other health professionals for the assessment and management of some of the symptoms experienced by post-polio patients may be required including:

- *Speech Pathologists* for evaluation and management of swallowing and speech difficulties.
- *Orthotists* for prescription and fabrication of orthoses / braces.
- *Podiatrists* for assessment and treatment of foot conditions (commonly present in patients with a history of polio).
- *Psychologists* to provide counselling, education and support in regard to psychological difficulties the patient may experience.
- *Dieticians* to provide education and management strategies regarding weight management.

Patient Education

The amount of literature that is available on this condition is increasing as clinicians develop a greater understanding of the pathophysiology of this condition and the impact it has on the post-polio individual. Patients and their families can benefit from the educational resources and support groups provided by the Paraplegic and Quadriplegic Association of Queensland (refer to the section on Support Groups for further details regarding this association).

Promoting a Healthy Lifestyle

The maintenance of a healthy lifestyle is essential for post-polio patients to limit the possible development of future problems. Patients should to be encouraged to:

- Take care of their health by eating a healthy diet, maintaining a healthy weight, avoiding alcohol and ceasing smoking;
- Listen to their own bodies – change or reduce activities (including exercise) that cause pain or excessive tiredness;
- Pay attention to their lifestyle; and
- Reduce stress.

Other Issues to Consider

Employment

Due to the symptoms of pain, fatigue and weakness, the patient may have difficulties maintaining full time or part time employment. Changes in type of employment (retraining, job relocation), changes to how work is performed, modifying work schedule and ergonomic changes to the workplace may be required. Ultimately, a patient may be required to cease employment if these symptoms cannot be managed with energy conservation and work simplification techniques. This may be difficult for some patients who have expected to have several years of working life ahead.

The GP can help the post-polio patient by:

- Considering early vocational rehabilitation;
- Discussing financial implications if the patient is required to retire. Some patients and carers may be eligible for Social Security benefits; and
- Referral to other health professionals and services to assist the patient through this process, e.g. social worker, occupational therapist, vocational counsellor.

Driving

As this group of patients ages and their potential for disability increases, the GP may be required to regularly assess their patient's ability to drive. Difficulties that the patient may experience that may affect their ability to drive include:

- Reduced range of motion in arms, legs or neck;
- Reduced muscle power;
- Impaired coordination;
- Severe joint or muscle pain;
- Impaired concentration due to fatigue;
- Respiratory difficulties; and
- Sleep disorders.

The aim of medical assessment of these patients in regard to driving is to detect those drivers who may have difficulty in controlling their motor vehicle, or a specific type of motor vehicle and to identify those drivers who may benefit from specific vehicle adaptations.

Adaptive equipment may be installed in many vehicles to enable the impaired driver to operate their vehicle safely. Physical demands on drivers from certain vehicles (e.g. bus, truck) may be substantial and should be considered by the GP.

In some cases a driving assessment by a driving assessor and/or an Occupational Therapist who is specifically trained in this area, may be required.

National guidelines in regard to driving have been developed. For further information regarding a patient's fitness to drive, refer to:

Austrroads. Assessing Fitness to Drive: Austrroads Guidelines for Health Professionals and the Legal Obligations. Sydney: Austrroads Inc. 1998.