

# Pain

Pain in muscles and joints is the first or second most common symptom in the majority of surveys of LEOP. Muscle pain has been reported by 43<sup>73</sup> to 80<sup>51</sup> percent of subjects in post-polio surveys, and by 61 percent of subjects in the Queensland cohort.<sup>74</sup>

Reports of joint pain in post-polio surveys have ranged from 55<sup>71</sup> to 79<sup>70</sup> percent. In the Queensland study by Lynch (2000) 79 percent of subjects reported joint pain.

As observed with fatigue, the onset of new muscle and joint pain begins insidiously and often without an apparent precipitant. The subjective nature of pain often makes assessment and treatment difficult. Gawne and Halstead (1995)<sup>5</sup> have proposed a classification system that divides pain experienced by post-polio patients into three categories. This classification system is used at the National Rehabilitation Hospital Post-Polio Clinic to facilitate the diagnosis and treatment of pain.

## 1. Post-Polio Muscle Pain (Myalgias)

- Occurs in muscles affected by polio;
- Described as either a deep muscle ache or a superficial burning pain – many individuals describe the deep muscle pain to be similar to that which they experienced during acute polio;
- Deep muscle pain is often characterised by muscle cramps or fasciculations (sensation of crawling);
- Typically occurs at night or end of day when the individual relaxes;
- Exacerbated by physical activity, stress and cold temperatures; and
- Alleviated in part by use of moist heat, slow stretching and rest.

## 2. Overuse Pain

- Includes injuries to soft tissues, muscle, tendons, bursa and ligaments, e.g. rotator cuff tendonitis, deltoid bursitis, myofascial pain (occurs most frequently in muscles of the upper back and shoulders and is characterised by bands of taut muscles and discrete trigger points) and fibromyalgia (commonly found in the post-polio population<sup>92</sup>); and
- Occurs due to poor posture or improper body biomechanics over the years.

## 3. Biomechanical Pain

- Most typical form of pain reported by individuals with a history of polio;
- Presents as degenerative joint disease or pain from nerve compression syndromes (carpal tunnel syndrome, ulnar nerve impingement at the wrist or elbow, cervical or lumbosacral radiculopathies);
- Location of pain is often related to the method used by the individual to mobilise;
- Weakness in polio affected muscles and poor body mechanics places excessive and abnormal forces on joint structures, making joints more susceptible to development of degenerative joint disease;
- Commonly associated with specific activities such as weightbearing;
- Rarely accompanied by inflammation; and
- Primarily caused by long-term microtrauma from abnormal biomechanical forces as well as by injuries resulting from falls.