# The Post-Polio Shoulder: A Case Presentation

Post-Polio Syndrome (PPS) is a complex medical condition that afflicts individuals with a past medical history of polio. Polio, while thought to have been eradicated in the United States in the 1970's following epidemic breakouts of the disease in the 1940's and 1950's, is making itself known throughout the world as survivors develop eerily similar neuromuscular and physiological maladies, which are now being diagnosed as Post-Polio Syndrome.

Polio, a highly contagious disease, is generally transmitted via the oral-fecal route. Once the virus enters the body one of three outcomes is seen in the patient; 1) the virus is destroyed in the intestinal system with no outward signs or symptoms being seen, 2) the virus enters the blood stream, resulting in flu-like symptoms, minimal neuromuscular effects and immunity, and 3) the virus crosses the blood-brain barrier destroying specific cells in the brain, brain stem, and spinal cord, resulting in paralysis or paresis of specific body regions. The primary effect of polio is seen in the destruction of motor nerve cells, most specifically the anterior horn cell. Destruction of the nerve pathway is limited to the motor component, leaving the sensory pathway relatively unscathed.

While treatment of the post-polio patient is multifaceted, the purpose of this presentation is to review physical therapy intervention on a 67 y/o female polio survivor presenting with loss of right upper extremity function. The patient, who presented with significant loss of right upper extremity function, is being seen regularly at this time with ongoing functional assessment.

The case study presentation will include an overview of the effects of polio, discuss the patient's past medical history as well as, current complaints, and intervention employed in the patient's treatment, as well as final functional outcome attained through regular completion of the Upper Extremity Functional Index (UEFI) scale will be presented assessing the efficacy of treatment program design.

Key words: postpolio syndrome (PPS), late effects of polio, polio sequelae