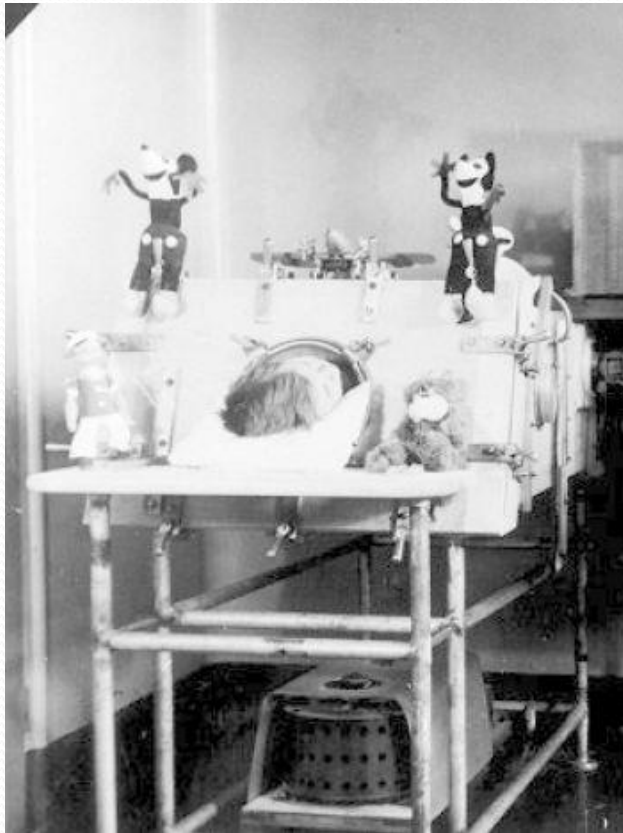


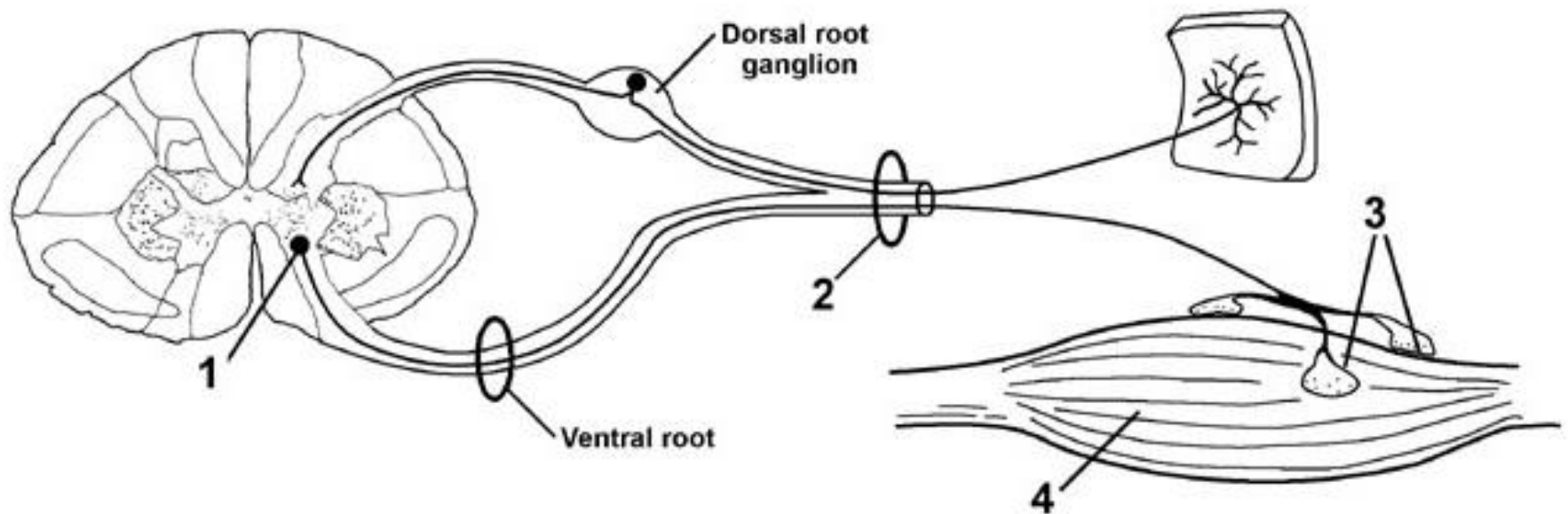
POLIO IN AUSTRALIA



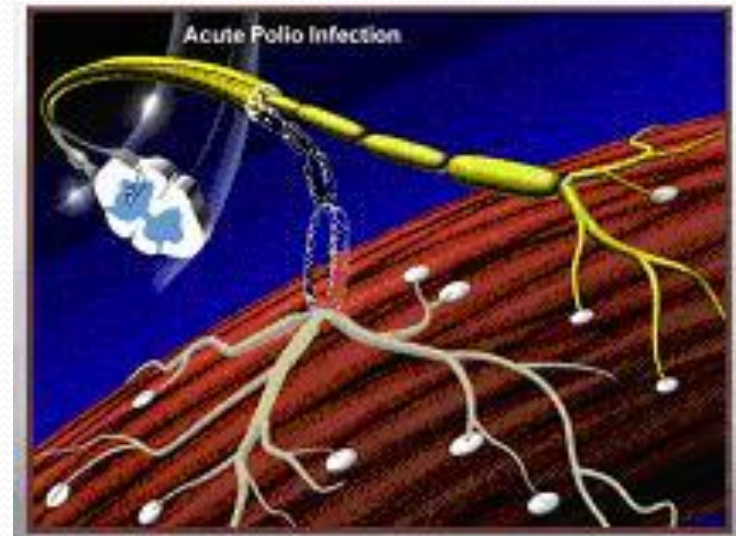
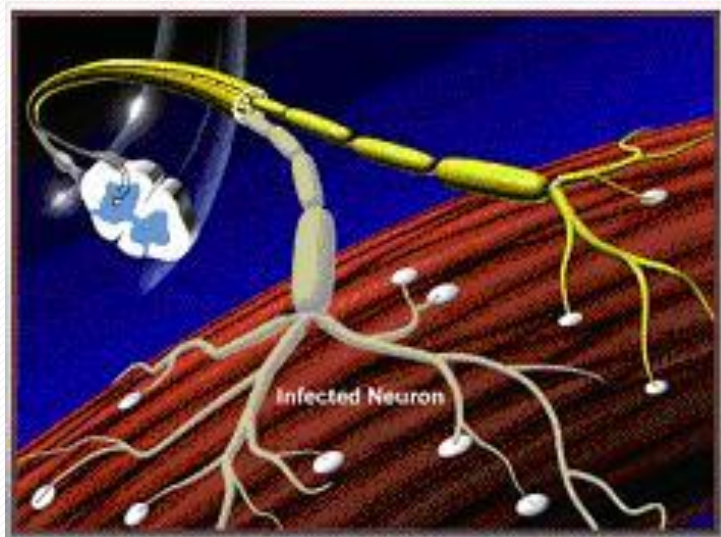
POLIO VIRUS

- Epidemic in Australia 1930's to 60's
- In 1-2% virus crosses into bloodstream and attacks CNS (20,000 - 40,000 cases in Australia)
- As it multiplies, the virus destroys the motor neurons which activate muscles
- Clinical paralysis only occurs when 50%+ motor neurons are killed or damaged
- With rise in immigration from non western nations we see increasing incidences of younger population who contracted polio overseas presenting with symptoms.

PARALYTIC POLIO

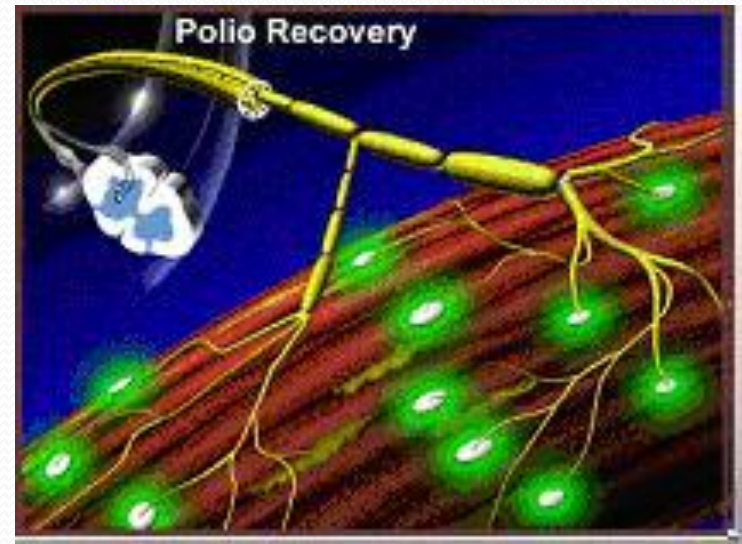
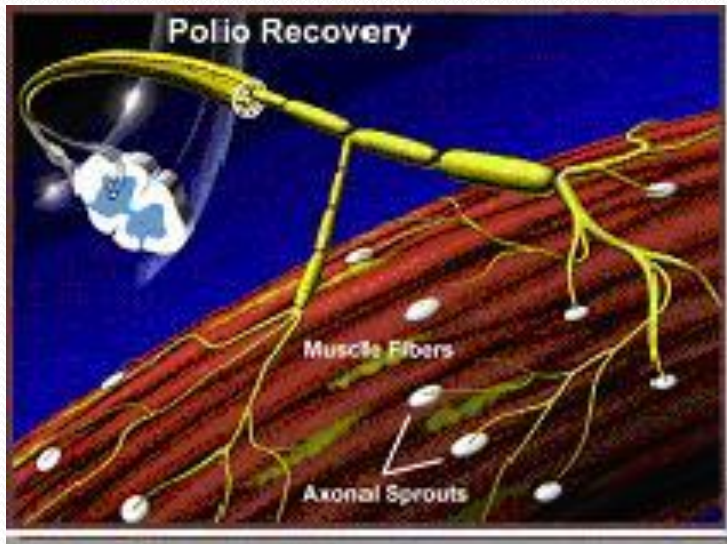


POLIO VIRUS PATHOLOGY



Diagrams courtesy of Post-Polio Health International

POLIO RECOVERY



Diagrams courtesy of Post-Polio Health International

LEoP refers to

- Symptoms attributable to damage caused by the original polio virus
- Symptoms attributable to failure to maintain the original recovery following infection e.g. new weakness, fatigue
- Secondary effects of neuromuscular dysfunction
 - Musculoskeletal features
 - Neurological features
 - Respiratory features
 - Bulbar features

POST POLIO SYNDROME refers to:

- PPS is generally considered a sub-category of LEoP
- Constellation of symptoms mentioned in the previous slide
- There is no one test for diagnosis
- Based on clinical assessment

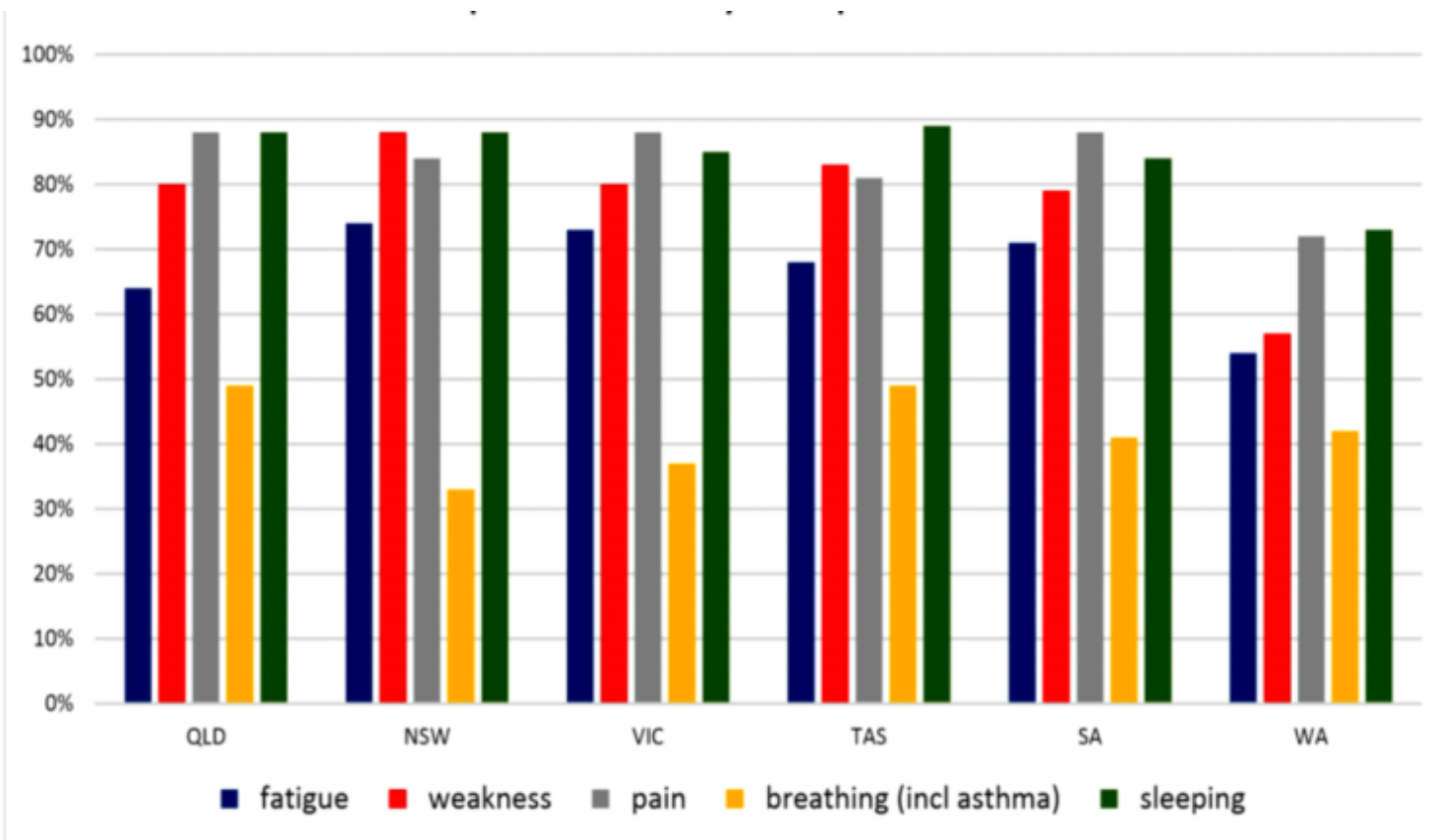
Criteria for Diagnosing PPS

1. A prior episode of paralytic polio
2. Standard EMG evaluation demonstrated changes
3. Characteristic pattern of recovery
4. The gradual or abrupt onset of new weakness in polio-affected muscles.
5. Diagnosis of exclusion

POST POLIO SYNDROME

- Degenerative changes within motor units through overuse
- Most likely to occur in people who had moderate to severe initial polio paralysis and yet made a relatively good recovery
- Various research results indicate anything from 20% to 70% of all polio survivors will experience PPS symptoms

Problems Experienced with LEOp



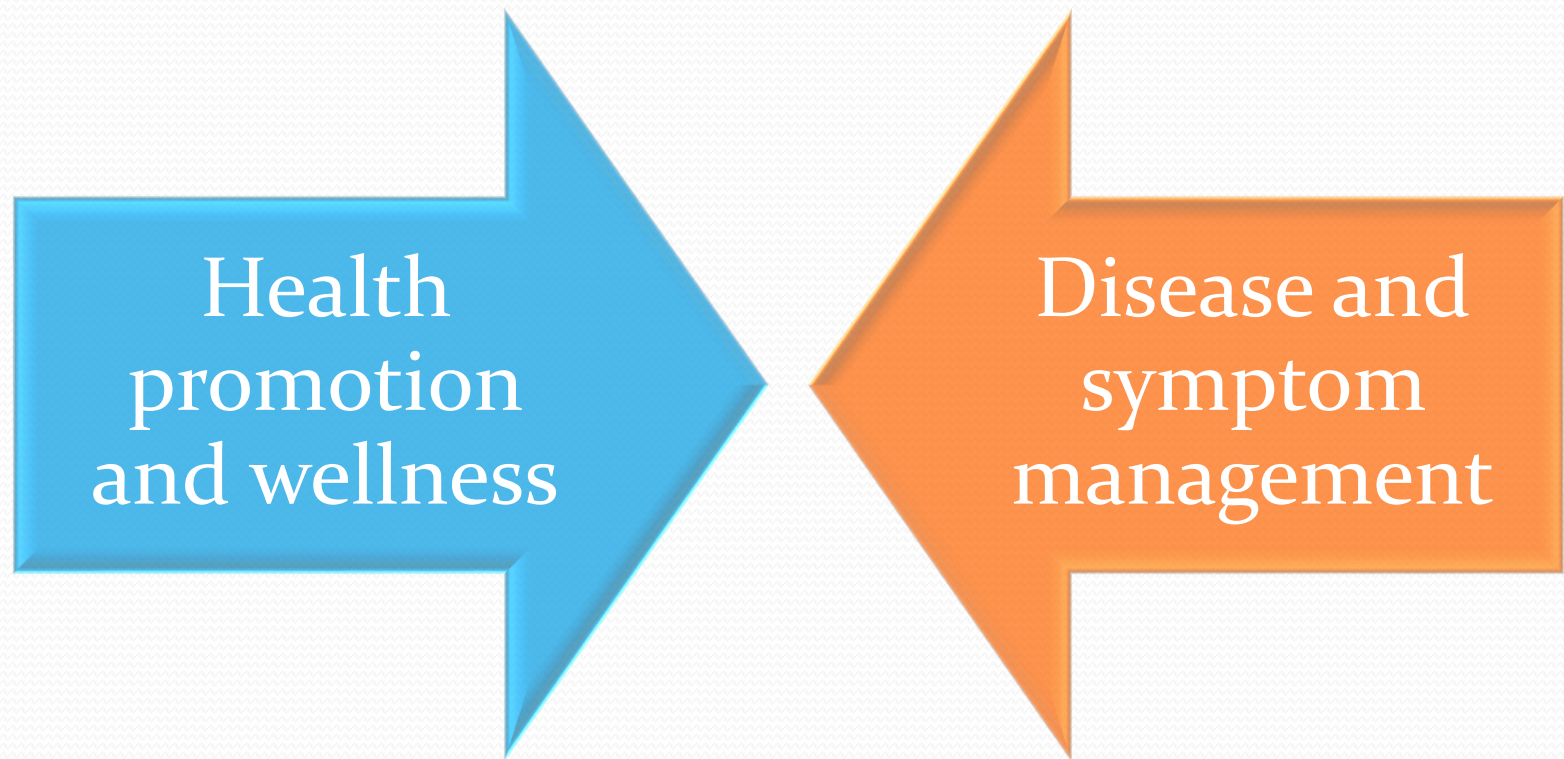
FUNCTIONAL CHANGES

- Difficulties with ADLs
- Fear of falling and history of falling
- Sleep disturbance
- Respiratory insufficiency
- Speech and swallowing difficulties
- Inefficiencies and excess energy expenditure

So what can we do now?

- Be proactive!
- Multi disciplinary approach
 - Alleviate symptoms
 - Find ways of offloading overused muscles
 - Learn how to conserve energy
 - Improve muscle strength in muscles able to be exercised
- Thorough assessment
 - Physical
 - Psychological
 - Work/home environment
 - Orthotic/ prescriptive devices

ROLE OF AHP IN LEOP



Stuifbergen et al, 2009



PHYSIOTHERAPY

- Biomechanical assessment and treatment
- Neuromuscular assessment and treatment
- Strength program
- Balance and falls prevention training
- Cardiovascular endurance and reserve capacity
- Long-term collaboration to optimise functional ability

HYDROTHERAPY

- Gentle exercise environment
- Soothing warmth for pain relief
- Preferable for cold intolerance
- Improves cardio-vascular fitness
- Eases muscle tightening and joint stiffness
- Great sense of achievement



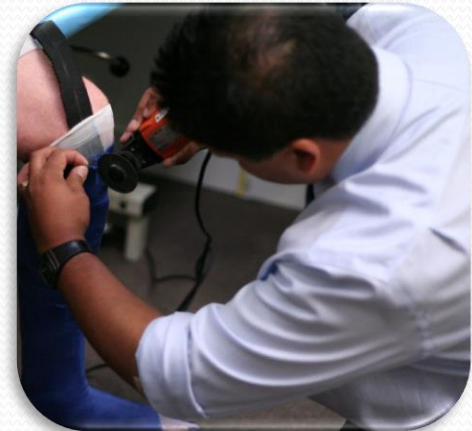
OCCUPATIONAL THERAPY

- Home Assessments
- Workplace Assessments
- Transport prescriptions
- Equipment prescription
- Functional training
- Cognitive training
- Daily activity assessment – energy conservation, pacing, delegation, fatigue management



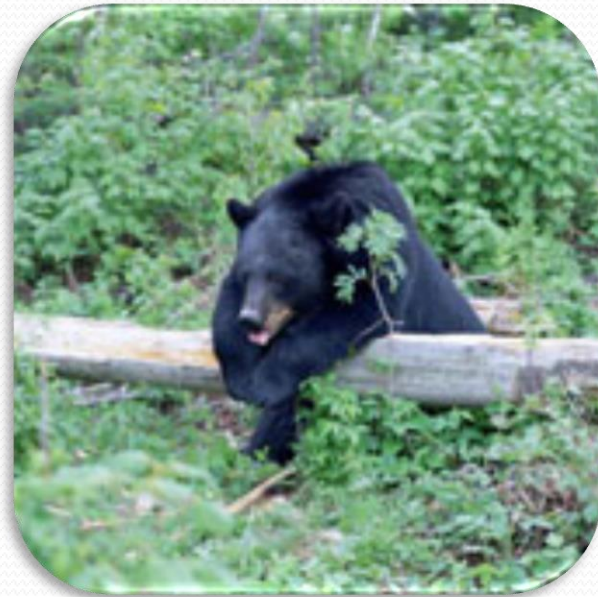
ORTHOTICS

- Specialist assessment
- Prescription, Manufacture
- Fitting & Modifications
 - Footwear
 - Trunk support
 - Customised AFO's, KAFO's
 - Stance Control



LIFESTYLE MODIFICATION

- Work Smarter, not harder
- Conserve energy
- Be selective
- Sit down, take rests
- Use assistive devices
- Avoid stress
- Avoid power lifting and carrying





THANK YOU!

For more information

www.poliohealth.org.au (for health professionals)

www.polioaustralia.org.au (general)

www.polionsw.org.au 02 9890 0946/or 02 9890 0953

www.postpolioconference.org.au