

# Posture and Core in Polio



# Why has my posture deteriorated?

- Post Polio Syndrome
  - New weakness
  - New fatigue
  - Loss of endurance
- Leg length discrepancy
- Scoliosis, lordosis , kyphosis
- Heavy assistive devices
- Use of mobility aides
- Fear of falling
- Weak core
- Osteoporosis
- Normal ageing process

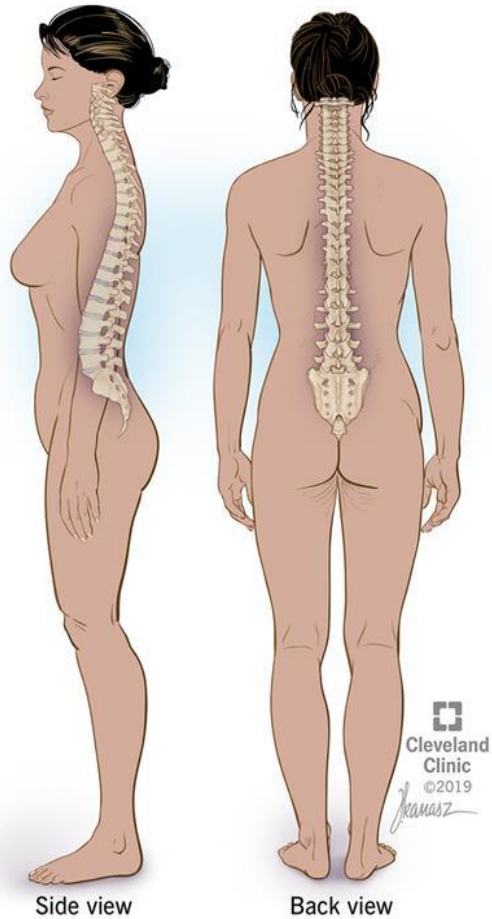


# Posture

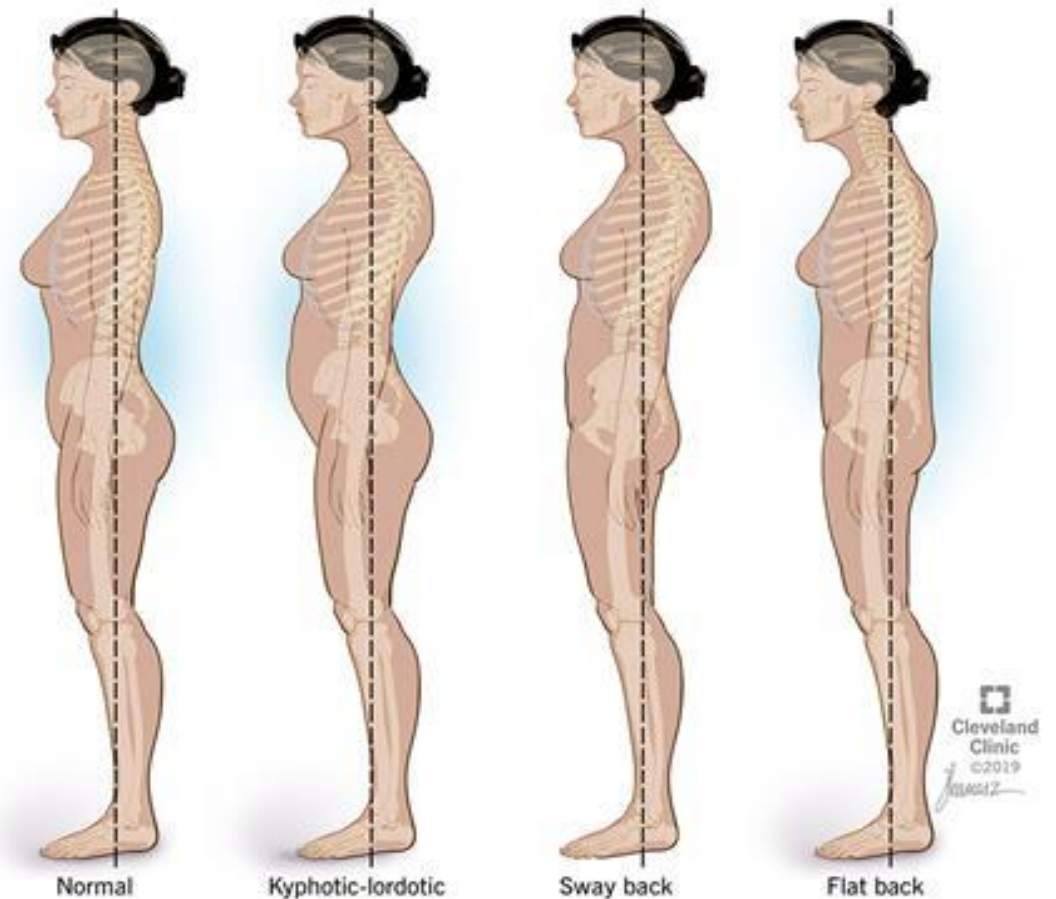
- People with neurological conditions such as PPS can find it difficult to maintain control of correct posture.
- Posture control requires the musculoskeletal and neurological systems to work together to maintain normal alignment.
- When one or both of these systems struggle we tend to compensate by overusing some muscles, leading to muscular imbalance , tightness, weakness and often pain.
- Progression of symptoms can lead to falls and a decrease in ability to perform common activities of daily living.

# Normal versus poor posture patterns

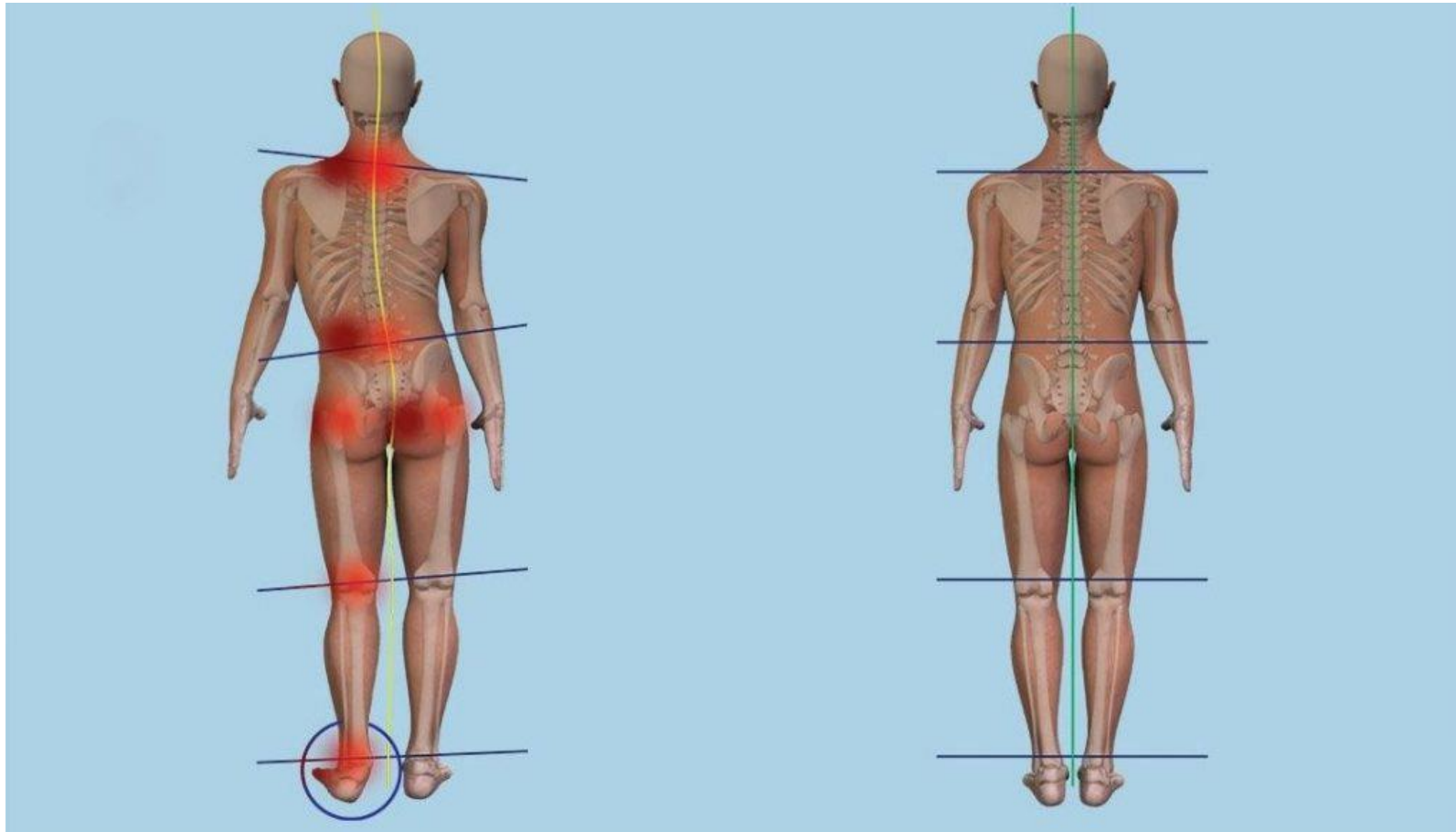
Normal Spinal Alignment



4 Common Postural Tendencies



# Effect of leg length discrepancy on posture



# What can be done to improve my posture?

- Thorough assessment of standing and sitting posture
- Correction of leg length discrepancy
- Energy conservation
- Mobility devices
- Balance training
- Core exercise
- General strengthening program for suitable muscles

# What are the core muscles?

- The core is a group of muscles extending from the ribs to the pelvis
- Think of them as like a girdle for your trunk
- They include
  - Transverse abdominus
  - Internal/external obliques
  - Rectus femoris
  - Multifidus
  - Erector spinae
  - Pelvic floor, Diaphragm, Gluteals

# Why are core muscles important?

- Core muscles support, control and move your trunk and pelvis
- Core muscles stabilize your trunk whilst moving your limbs
- Control of core muscles allow us to bend forward, backwards, sideways, and to twist.
- Working on strength and control assists in improving balance reactions, decreases energy expenditure (via decreased excess movement), improves posture and prevent pain in the lumbar spine



# Exercises for posture and core

- Should be done in consultation with a physiotherapist initially
- Performed lying, sitting or standing according to your level of ability
- Should be progressed slowly watching for signs of fatigue, such as
  - Muscle cramp
  - Muscle twitching/fasciculations
  - Increased effort
  - Fatigue the following day
- Should be done in low repetitions, moderate intensity with rests in between for muscle recovery. ie stop before you get tired!
- Mirror for feedback