There are various subtypes of muscle pain:

- Pain onset during exercise: may be due to exhaustion of fuel supply to the muscle, or build-up of lactic acid

- If there is a metabolic defect, or vascular ischaemia (reduced blood supply) then normal exercise may not be painful (but blood CK may be high).

- If normal exercise is painful and the blood tests are normal, then this might indicate either structural damage (muscle/tendon/joint/bone) or a Polymyalgia syndrome.

- If pain onset is hours after exercise and lasts up to 5 days, and the blood CK is raised, this might suggest a myopathy (abnormality in the muscle), especially disorders in which there is rhabdomyolysis (muscle breakdown)

- Pain unaffected by exercise may indicate: <u>Polymyalgia</u>, <u>Drugs</u> / <u>Toxins</u> or certain types of polyneuropathy.

<u>Cramps</u>: may be associated with drugs such as : Caffeine, Diuretics(water tablets),
Labetalol, Lithium, Nifedipine, Terbutaline,
<u>Tetanus</u>, Theophylline, <u>Vitamin A</u>)
They are also a very common feature of arachnoiditis.

Pain with prolonged immobility.

- Central Nervous System related: Restless legs; Upper motor neuron disorders; Dystonias (many arachnoiditis patients have abnormal muscle tone : dystonia, and restless legs syndrome is common; spinal cord involvement constitutes an upper motor neuron disorder and this is associated with spasticity: increased muscle tone)

- Fatigue syndromes: Chronic fatigue; Depression

Typical evaluation for generalized muscle pain or discomfort:

History: Precipitating factors; Nature & Location of pain.

Examination: Strength; Sensory loss; Trigger & tender regions; Endurance.

Laboratory tests

- Blood: blood count; ESR (a non-specific sign of inflammation); CK, creatine kinase: a measure of muscle inflammation; potassium; calcium; Phosphate; thyroid function; <u>Conn</u> ective tissue antibody screen (ANA)

- EMG (electromyogram) & Nerve conduction studies
- <u>Muscle biopsy</u> : if indicated by other abnormal test results.
- ? Exercise testing: Lactate after mild exercise