

LEG DISORDERS IN THE ATHLETE

Problem	Classification	Etiology	Predisposing Factors	Patho-mechanics	Location of Symptoms	S&S at Rest	S&S with Exercise	S&S after Exercise	Diagnostic Testing	Treatment of Choice
Stress Fracture	Non-traumatic overuse	Overload vs overuse	Multi-factorial	Tibial bending	Commonly Mid to distal tibia Distal fibula	Yes	Yes	Yes	X-ray Bone scan CT/MRI	Conservative
Chronic Tibial Fasciitis	Non-traumatic overuse	Overuse	Multi-factorial	Fascial tension vs tibial bending	Tibial crests	Yes	Yes	Yes	Bone scan vs MRI Diagnostic injections	Conservative
CCS	Non-traumatic claudication	Increase in compartment pressure	Constricting non-compliant fascia	Decrease A-V gradient	Leg compartments (anterior > posterior)	No*	Yes	No*	Compartment pressure measurement	Surgery
Arterial Claudication	Non-traumatic claudication	Anatomic abnormality	None identified	Stenosing arteriopathy	Leg compartments (posterior > anterior), arch of foot, thigh, gluteal	No*	Yes	No*	Non-invasive vascular study Arteriogram	Surgery

SYMPTOMS WITH EXERCISE

Problem	Pain	Tightness	Weakness	Tingling/Numbness	Difficulty Walking
Stress Fracture	Yes	Probably	No	No	Probably
Chronic Tibial Fasciitis	Yes	Possibly	No	No	Possibly
CCS	Yes* (severe)	Yes	Yes	Yes	Yes
Arterial Claudication	Yes* (severe)	Yes	Yes	Yes	Yes

SIGNS WITH EXERCISE

Problem	Pain on Stretch	Pain on Palpation	Induration	Swelling	Pulse Alteration	Muscle Herniation	Neuro Abnormality	Strength Deficit	Antalgic Gait
Stress Fracture	No	Yes	Probably	Probably	No	No	No	No	Probably
Chronic Tibial Fasciitis	No	Yes	Possibly	Possibly	No	No	No	No	Possibly
CCS	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Arterial Claudication	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

*Symptoms typically last for seconds to minutes in Arterial Claudication and minutes to hours post-exercise in CCS.