DFW Sports Medicine

www.dfwsportsmed.com

Nitroglycerin for Patella Tendinosis

Nitroglycerin patches, typically used for controlling chest pain in people with heart disease, have recently been tested as a possible avenue for treatment of Achilles tendonitis. Basic biological research into tendon healing has indicated that a small molecule called nitric oxide plays an important role in tendon healing following injury. Though nitric oxide—the molecule formed when nitroglycerin is metabolized by your body—is largely absent in healthy tendons, it is rapidly synthesized following tendon injury. Additionally, when nitric oxide production in rats is artificially inhibited, tendon healing is reduced, and when nitric oxide production is artificially increased, tendon healing increases as well. Since nitroglycerin is easily transported through the skin and converted to nitric oxide inside the body, nitroglycerin patches are a convenient method to deliver nitric acid to a particular location.

The dosing regimen is one QUARTER of a transdermal patch (5mg / 24hr) to be applied daily to the affected area of the knee. Some people may get a headache at first so put it on before bed at first.

The patches are to be left in place for 24 hours and then replaced with a new QUARTER patch.

The site of application is immediately over the area of tenderness.

Rotate the patch application site around this point with each new patch application.

Use for 12 weeks.

Please perform the patellar rehabilitation program as prescribed.

The aim of this program is to cover the current best practice management for patellar tendinopathy and involves:

(1) rest from aggravating activities in the early stages (particularly hopping, jumping),

(2) daily range of motion exercises,

(3) daily stretching of the hamstrings and hips, and

(4) a muscle strengthening program initially involving hip and closed kinetic chain isometric exercises and gradually progressing to dynamic open kinetic chain isotonic resistance exercises.

Phone: (469) 430-9380

Fax: (469) 242-9539