

PATELLAR RIDGE SYNDROME

Of all the syndromes that we are exploring here, the *Patellar Ridge Syndrome* may be the most peculiar. It was found completely by accident, while exploring a rather unusual knee pain problem. The patient had been suffering from knee pain that had developed while he had been playing basketball over a year ago. From that time, he had been unable to jump, run or climb stairs without pain. As a consequence, he had given up playing basketball, which was a shame because he considered it his hobby (he was over 40 years old). He had seen several orthopedists and orthopedic surgeons, but X-ray, MRI, and manual evaluations had failed to discover anything really wrong with the knee joint.

During a routine DSR survey, to explore the possibility of an osteoarthritic condition of the knee, an inflammatory pattern was only found on the anterior aspect of the knee when the knee was flexed to 45°. The inflammation pattern wasn't found over the knee capsule with the knee flexed to 90°, or over the patellar tendon with the knee fully extended. In the posterior, a zone of high skin resistance was found to be present, approximately an inch-and-a-half above the posterior knee crease (as illustrated below).

Subsequently, it was found that in several cases where patients with knee pain complaints had improved, but had failed to have the condition completely resolve, they were, in fact, suffering from this new syndrome. The real problem was figuring out how to treat it. It didn't seem to respond to the regular approach.



The inflamed zones associated with the Patellar Ridge Syndrome, anterior and posterior views (the anterior flexed to 45° and the posterior fully extended)

Treatment

Rather than bore the reader with the trial and error process we went through, the successful treatment program we worked out is detailed below.

Application:

- Manipulate the tissues in and around the inflamed zones, and all the edges around the patella, to eliminate any adhesions that may be present.
- Preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.5 W/cm². Ultrasound each of the inflamed zones, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes. The knee should be flexed to 45° when each component is ultrasounded.
- Place a pair of negative electrodes, split-leaded, over each of the inflamed zones and a large positive electrode (approximately the combined size of the two negative electrodes) over the rectus femoris. Preset an electrical stimulation unit to deliver a visible contraction at 7 Hz. Stimulate for 20 minutes.
- Just proximal to the patella, mechanically vibrate the proximal patellar tendon with a hand vibrator, for two minutes, with the knee flexed to 90°.

Encourage the patient to purchase a hand vibrator and to vibrate the proximal patellar tendon for two minutes, twice a day. The knee should be fully extended. When applying the vibration, have the patient hold the vibrator in the contralateral hand to avoid inhibiting his, or her, own reflexes.

Generally, there is a marked improvement in the patient's condition between the first and second treatment session. Complete resolution may take many sessions.

Trigger Points

The following trigger point formations may, singly or in combination, imitate or contribute to the pain associated with the *Patellar Ridge Syndrome*: Gluteus minimus, Adductor longus, Biceps femoris, Vastus medialis, Gastrocnemius, and Anterior tibialis.