The Gemellus Syndrome was named because of its characteristic inflamed zone which appears just distal to the inflamed zone associated with the Piriformis Syndrome. It is located right over the gemellus muscle group. In fact, the Gemellus Syndrome often accompanies the Piriformis Syndrome. The pain pattern it produces is similar to both the Piriformis and the Lateral Hamstring Origin Syndromes. It is thought that the pain pattern produced by the Gemellus Syndrome is derived from pressure being exerted upon the posterior femoral cutaneous nerve, which is responsible for the S1, S2 and S3 sensory nerve distribution. Patients usually describe the pain as being centered in the central buttock region, extending down the back of the thigh to just below the knee, and sometimes into the lateral posterior calf. They usually describe it as a deep, constant “gnawing” pain. Like the Piriformis Syndrome, it is thought that it is caused by direct pressure (sitting on a hard surface).
The segmental distribution of the posterior femoral cutaneous nerve of the right lower extremity
The high skin resistance pattern associated with the Gemellus Syndrome

Treatment

The treatment of the Gemellus Syndrome amounts to breaking any adhesions that are present and eliminating any inflammation.

Application:

- Place a negative electrode over the inflamed zone and a positive electrode in the low back area. Preset an electrical stimulation unit to deliver a visible contraction, at 7 Hz. Stimulate for 10 minutes.

- Then, set the unit to deliver a medium frequency current, with a duty cycle of 10-seconds on and 10-seconds off, sufficient to produce a near tetanic contraction of the involved muscles. Stimulate for 10 minutes.

- Manipulate the soft tissues in and around the inflamed zone to break up any adhesions that are present.

- Preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.5 W/cm². Ultrasound the inflamed zone, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes.

- Have the patient sit on a vibrating plate (foot vibrator) set to produce a vigorous or mechanical vibration at 60 c/s for two minutes. If a plate vibrator is unavailable, a padded hand held vibrator, similarly set, can be utilized, for the same amount of time, to produce the same beneficial effects.

The following treatment form has also been effective.

Variation:

- Preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.8 W/cm². Ultrasound the inflamed zone, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes. This procedure is designed to soften the adhesions that may be present.

- Manipulate the tissues in and around the inflamed zone to eliminate any adhesions that may be present.
Twenty minutes after the first ultrasound, preset the ultrasound unit to deliver a 1 MHz pulsed waveform, at 1.5 W/cm². Ultrasound the inflamed zone, utilizing an effective non-steroidal anti-inflammatory as a coupling agent, for six minutes. This is performed to “cool off” the manipulated zone by effectively halting the production of prostaglandins by the stressed tissues.

Have the patient sit on a vibrating plate (foot vibrator) set to produce a vigorous or mechanical vibration at 60 c/s for two minutes. If a plate vibrator is unavailable, a padded hand held vibrator, similarly set, can be utilized, for the same amount of time, to produce the same beneficial effects.

Post Treatment Suggestions:

Treatment response is highly variable from one patient to another, but recovery seems to depend, to a degree, on the patient’s ability and willingness to sit on only soft surfaces, and for short periods (30 minutes at a time), for a period of two weeks.

It should be noted that in very chronic conditions, even after the inflammation and pain have been eliminated, the tissues may continue to produce adhesions for a short period. It may be necessary to have the patient come in for a follow-up visit to check not only for inflammation, but also for any adhesions that have been newly formed. If the inflammation has been eliminated, generally only one follow-up visit is required to break up any recurrent adhesions, though the patient should be instructed to return for evaluation if any symptoms return.

Trigger Points

The following trigger point formations may, singly or in combination, imitate or contribute to the pain associated with the Gemellus Syndrome: Multifidus (S4), Longissimus thoracis (T10-T11), Multifidus (S1-S2), Iliocostalis lumborum (L1), Caudal (lower) rectus abdominis, Gluteus minimus, and Gluteus medius.