Dr. Gene Desepoli
Pronator Teres Syndrome Treatment Sheet

Pathology: The pronator teres muscle becomes painful or hypertonic with potential nerve entrapment and or trigger point pain referral symptoms. Swelling and inflammation are not usually present.

Note: the median nerve runs under the pronator teres. In a small percentage of people, the pronator teres has two heads. The median nerve may pierce these two divisions of muscle which increases the odds of entrapment.

History: The patient will have a history of overuse or excessive activities involving pronation of the forearm, as with manually removing screws from wood or from putting a pronation spin on a bowling ball.

Assessment: The muscle may be tender to palpation.
Painful resisted forearm pronation; Painful passive forearm supination.
Pressure into the pronator teres may elicit paresthesia along the anterior forearm and into the wrist (pseudocarpal tunnel syndrome) as well as trigger point pain referral into the forearm, and especially to the distal radial and thenar area.
Possible positive Tinel's sign.

Bolstering/ Patient comfort: Ensure that all muscles are relaxed during treatment.

Heat/Cold Therapy: Ice is appropriate to reduce sensitivity of the muscle. Heat is usually applied over the muscle to promote tissue pliability and to increase blood flow.

General Massage: Massage of all muscles from the shoulder to the hand is appropriate.

Specific Massage: Tolerable massage is applied and designed to release the hypertonicity of the pronator teres. Specific, gentle stripping strokes interspersed with milder effleurage will promote relaxation and restoration of normal muscle length.

Evaluate / Treat TrPs: Eliminate trigger points in the pronator teres muscle and all the wrist extensors and flexors to allow normal muscle lengthening.

Stretching Exercises/ Range of Motion: Passive: The elbow stabilized and the forearm is brought into supination (keeping the elbow extended).
Active: The patient can be taught self-stretches.

Strengthening: Isometric contractions at first, followed by more active strengthening if the patient permits. The muscle is strengthened by adding resistance to forearm pronation. If the condition is not resolved and strengthening causes the return of symptoms, provide additional treatment before instituting a strengthening program. However, milder isometric exercise may be performed to prevent atrophy.

Patient Education: Self treatment including ice or heat and self- massage can be taught to the patient

Ergonomic factors: Educate the patient of proper biomechancs and to avoid overuse of the pronators.

Medical Referral It is appropriate to co-treat the patient with a doctor and/or to receive medical approval. Carpal tunnel and thoracic outlet syndrome must be ruled out.