

# Dr. Gene Desepoli

## Dupuytren's Contracture Treatment Sheet

<b>Pathology:</b>	<p>The palmar fascia and connective tissue of the forearm becomes tight and inflexible. Slowly the fingers are drawn down toward the palm or wrist. This action is caused by the connective tissue in the palms and fingers becoming too shortened and thick to allow free movement of the fingers.</p> <p><i>Note:</i> Various sources attribute a muscle contraction/hypertonicity to be the cause, however connective tissue/myofascial release work is the most appropriate treatment for this condition.</p>
<b>History:</b>	<p>This condition is associated with diabetes, high fatty diets, alcoholism or from other idiopathic causes. Celtic whites have the highest incidence.</p>
<b>Assessment:</b>	<p>Flexion contracture of the fingers, especially the 4<sup>th</sup> and 5<sup>th</sup> digits. Pain may be present when attempting to straighten the fingers. The most common first sign is a fleshy nodule in the palm, usually located at the base of the ring or small finger in the crease where the finger joins the hand. The nodule may be painful or itchy, and may grow to ½ " diameter.</p>
<b>Bolstering/ Patient comfort:</b>	<p>Ensure that all muscles are relaxed during treatment.</p>
<b>Heat/Cold Therapy:</b>	<p>Heat is used over entire forearm to promote pliability of the connective tissue. However, treating a "cold" forearm may provide additional benefits as it may break adhesion bonds that treatment to a warmed forearm may not address.</p>
<b>General Massage:</b>	<p>Massage of all muscles from the shoulder to the hand is appropriate.</p>
<b>Specific Massage:</b>	<p>Myofascial release of varying depths is used along with friction massage from the elbow to the digits. Digital friction is applied to each finger to loosen stiffness and promote increased circulation.</p>
<b>Evaluate / Treat TrPs:</b>	<p>Eliminate trigger points in the wrist extensors and flexors to allow normal muscle lengthening.</p>
<b>Stretching Exercises/ Range of Motion:</b>	<p>Passive: The elbow stabilized and the wrist and fingers are extended mildly to patient tolerance. Active: The patient may actively perform the same movements.</p>
<b>Strengthening:</b>	<p>Applied selectively to regain muscle strength from disuse atrophy.</p>
<b>Patient Education:</b>	<p>Self-treatment including heat application and friction massage can be taught to the patient. Hands soaks, several times a day for &gt;20 minutes followed by manual manipulation is helpful.</p>
<b>Ergonomic factors:</b>	
<b>Medical Referral</b>	<p>It is appropriate to co-treat the patient with a doctor and/or to receive medical approval. Other more serious conditions may be overlooked.</p>

Dupuytren's contracture:

Flexion deformity in the hand due to palmar fascia fibrosis. Usually associated with alcohol or may be a hereditary disease. In this elderly lady it was neither - making it idiopathic.



BELOW: Profile of folded hands: The patient cannot fully extend the hand. This gives folded hands this appearance. It is obvious why it is also called the PRAYER sign. This sign is present in patients with RA too (but without the Dupuytren's).

