DISPLAY 16-9

Sample Exercise Using the Contract–Relax Technique

Goal
Holly Carson presents with chronic plantar fasciitis, which presents a challenge in controlling the inflammatory process and modifying pathomechanics. Physical therapy treatment usually involves antiinflammatory modalities, control of forces borne on the fascia, and stretching exercises. Myofascial release can be used effectively as an adjunct in this process. Muscle biasing results in part from stimulation of stretch receptors situated in the fascia. Releasing undo tension in that tissue can amplify the effects of selected therapeutic exercises by speeding tissue adaptation. Myofascial release to the plantar flexor or long toe flexor groups can be used during stretching and in conjunction with postural and gait retraining exercises to establish better muscle balance in the limb.

Implementation
- Ask Holly to lie prone on a treatment table with her toes approximately 6 inches past the table edge.
- Stand at the foot of the table with the plantar aspect of Holly’s foot resting against your thigh. By rocking forward, Holly’s ankle can be brought into graded dorsiflexion.
- To perform the myofascial technique, place both hands palm down on the distal calf, near the end of the Achilles tendon.
- Leaning from the trunk and using a stacked lumbrical grip, exert deep pressure into the posterior calf and apply a massage stroke, moving proximally.
- Progress very slowly, as if moving a wave of tissue in front of your finger pressure.
- When a thickening or increased tension in the contractile elements of the calf is noted, exert mild dorsiflexion by leaning forward from your lower trunk. At the point where moderate passive tension is noted, tell the patient, “Push your foot into my thigh; keep pushing . . . and relax.”
- The contraction phase should last about 3 to 6 seconds.

As the relaxation response is noted, pick up the slack created in the fascial tissue and the ankle dorsiflexion (Fig. 16-9). Commonly, extreme tightness can be noted in the region of the musculotendinous junction of the gastrocnemius.
- After a set of multiple repetitions (10 to 15), tell the patient, “Now, push your heel at me!” This integrates the new range of motion with an agonist contraction to the end range. Try to resist a sustained hold at maximum stretch.
- Follow-up should include closed-chain exercises that encourage talocrural dorsiflexion while controlling pronation.