



Figure 1. The exercise regimen: the axis represents progression and pictures illustrate selected exercises. An experienced physiotherapist supervised the self-management neck/shoulder exercises weekly with individual follow-ups including instruction and, if needed, manual guidance. Progression, assigned individually, was based on observed progress towards neck/shoulder movement quality.

Nonpostural exercises: **A**, Low-load active craniocervical flexion at 5 pressure levels (22–30 mm Hg), held isometrically for 10s, repeated 10 times, subject trying to focus on maintaining surface neck flexors relaxed. Resistance was given from an air-filled analog pressure sensor placed suboccipitally between neck and bench; head resting on folded towel. **B**, Isometric shoulder/scapulas held against gravity for 10s, repeated 10 times, at a retracted (max- and midmotion range) in prone. Positions were achieved by emphasizing shoulder retracting dynamic movement control.

Postural situated exercises: **C**, In seated position, isometrically held at five pressure levels as in A, i.e., holding 10s, repeated 10 times. **D**, Dynamic synergy exercises: neck rotation to end range with simultaneous scapular retraction to midmotion range and active craniocervical flexion, repeated 10 to 15 times on each side.

Endurance-strength exercises: **E**, Controlled dynamic shoulder retraction following a rowing exercise movement, and **(F)** dynamic scapular retraction with weight load over long moment arms in “rowing” exercises in regular pulls, emphasizing shoulder retraction in the initial concentric phase and upright trunk postures in the inner range, 3 sets of 15 repetitions (elastic bands were used to replicate the exercises at home and/or outdoors). **G**, Dynamic neck rotation exercises in upright posture against moderate resistance using elastic bands. These exercises were initiated with a short craniocervical flexion, short neck extension and then neck rotation; 15 rotations to each side, repeated 3 times.

REFERENCE Ang BO, Monnier A, Harms-Ringdahl K. [Neck/shoulder exercise for neck pain in air force helicopter pilots: a randomized controlled trial.](#) Spine (Phila Pa 1976). 2009 Jul 15;34(16):E544-51.