

## ATLANTOAXIAL (C1-2) JOINT

### Supine Atlantoaxial (C1-2) Rotation

**Client position:** Supine with head at top of treatment table.

**Clinician position:** Standing at head of treatment table facing client.

**Stabilization:** Client's bodyweight on the treatment table provides adequate stabilization. Clinician places distal interphalangeal joint of index finger of mobilizing hand on the posterior-lateral aspect of C2 (axis) and places palm on the occiput.

**Mobilization:** Clinician places mobilizing index finger along the length of C1 (atlas). Clinician then sidebends the head maximally in the contralateral direction of rotation to be treated. While maintaining sidebending, clinician mobilizes C1 (atlas) on C2 (axis) in direction of restriction.

**Goal of technique:** To treat a C1-2 joint restriction or pain with a technique that responds favorably to repeated mobilizations.

**Notes:** The treatment plane is essentially horizontal given the orientation of the C1-C2 articulations. Be sure to maintain sidebending during rotation and to avoid placing mobilizing thumb on client's throat.



### Seated Atlantoaxial (C1-2) Rotation

**VIDEO 4.3** in the web study guide shows this technique.

**Client position:** Sitting upright.

**Clinician position:** Standing behind client.

**Stabilization:** No stabilizing force is needed.

**Mobilization:** Using thumb-over-thumb or single-thumb placement over the posterior portion of lateral C1 transverse process, the clinician mobilizes the process anteriorly as the client rotates to the desired contralateral direction. The thumb(s) should maintain contact with C1's transverse process as the client actively rotates head in the contralateral direction (left purchase and right cervical rotation, vice versa) and returns to midline.

**Goal of technique:** To treat a C1-2 joint restriction or pain with a technique that responds favorably to repeated mobilizations.

**Notes:** The treatment plane is essentially horizontal given the orientation of the C1-C2 articulations. Do not push the client's head and cervical spine into flexion. Client maintains an upright cervical spine posture. Take care not to grasp the client's throat.



## ATLANTOAXIAL (C1-2) JOINT

### Prone Atlantoaxial (C1-2) Posterior to Anterior Glide

**Client position:** Prone with arms relaxed at side; head in neutral starting position.

**Clinician position:** Standing at head of treatment table facing client.

**Stabilization:** Client's body weight on the treatment table serves as stabilization.

**Mobilization:** Clinician palpates facet joint of C2-3 with thumb-over-thumb contact over the joint. Clinician passively rotates client's head to the ipsilateral side (approximately 30°). Light pressure only is applied initially in the direction of the mouth. If tolerated well, repeat movements and reassess.

**Goal of technique:** To treat a unilateral C1-2 joint restriction or pain with a technique that responds favorably to repeated mobilizations.

**Notes:** The mobilization is most effective when the clinician ensures the proper angle (toward the client's mouth). Therefore, the clinician will have to step to the client's opposite shoulder and lean a little toward the client's feet with the upper body and ensure to keep bilateral elbows straight. Again, the clinician should be cognizant of not increasing pressure to the purchase on the client.

