

## Exploring Side-Lying Arm Reaching 11/16 Dec 1

**Table sidelying. Knees comfortably bent. Organized shoulder facing ceiling. Shoulders stacked directly over each other. Head fully supported (as its position in standing.) Use foam or towel or roller for complete upper arm and shoulder blade support. At rest, there should be nothing creating forward pulling on the ribs or vertebrae or shoulder blade**

**Function: To explore arm-reaching by varying intentions, angles, trajectories, with awareness of the whole body response especially the softening of the chest and the clearer connection to the pelvis.**

Three possible hand positions at barriers:

- A. Allow spine to have more extension: when pull arm, how far body responds? Hold at fingers/elbow, one hand each. Using both hands on wrist/elbow/upper arm, to traction to barrier (“simple pull”).
  - B. Two hands, equal traction from both hands, one tractions arm (elbow hold), other behind shoulder blade or on ribs or T1, or lower vertebrae. (Intention: non-differentiated pull from your pelvis.)
  - C. One hand tractions arm to barrier, then second hand added on blade, vertebrae or ribs, or T1 or lower, to assist further. The intention is more traction from second hand!
1. **2 tests: A) connection from pelvis to head** - Compress bottom of ceiling side pelvis toward head. **B) connection from traction of arm to chest and pelvis** -
    - a. Make sure head is clear to roll. No crunching of bottom shoulder.
    - b. Remove arm roller and support ceiling arm by draping it across your own forearm, your hand gently supporting elbow and upper arm just above elbow. Help table find comfortable position for bottom arm. Remind they can shift bottom arm as needed. Find way to make your own body comfortable. Always keep front of your chest (heart) and/or pelvis) lined up with direction of pull as much as possible.
    - c. Start with traction. By flexing your low back and pelvis, gently and slowly traction Table’s arm (Stool’s 2 hands are at Table’s elbow and wrist) toward you to barrier. Wait. Then assist passive return to neutral. **Note extent of movement in order to compare at end of lesson.** Direct table’s attention to first barrier. When retesting this move, use same two hand holds.
  2. Spine inclusion (lumbar and thoracic spine). **Stool sits behind Table’s spine.**
    - a. Ceiling-side spinal groove - move each rib head ceiling ward/ lateral (and when appropriate, also **Superior**).
    - b. Table-side spinal groove -repeat. Can you also add slight forward roll?

- c. End with 2 thumbs on either side of spinal groove from L5 to T1. Anterior & Superior. Encourage extension.

### 3. Explore

- a. Traction to shoulder barrier (include into neck). Explore internal rotation of arm.
- b. Traction to shoulder blade barrier. Free-hand fingers explore around scapula (an example of #C) or use equal pull from edge of scapula and from arm (an example of #B).
- c. Traction to ceiling/side rib/vertebrae barrier. Free-hand fingers explore down spine (#C), and use equal pull from both locations. (#B) From C7/T1 down to lumbar. The vertebral bodies may move superior as well as anterior as well as rotate toward the tractioned arm. You are encouraging extension.
- d. Table-side same as (c).
- e. Explore different arm trajectories.
- f. Explore with arm in pushup position. Palm on table, or fingers over edge of table. Explore A-E with stool's palm and elbow in push up position.

4. **Local (gentle but firm) rib compression.** Along the ceiling-side of rib cage, use backs of both hands (fingers) spaced a few inches apart. Connect with ribs and then decrease the distance between your hands. Do not slide skin. The bones of your fingers and of Table's ribs are one. Also SB into extension from hand placement closer to spine (Anterior push as SB) Do from front also (optional).

5. a. **Stabilize the arm back on the support.** You now have two free hands. Place fingers of one hand on table-side spinous processes of cervicals and roll toward you, one at a time, then all with cupped hand. Then add second hand on T1 or lower and repeat roll. Then cup occiput, roll nose toward table. Feel base of skull move before upper cervicals.

b. **Stabilize neck by hand on temple, traction arm.** Then traction arm allowing neck roll. Allow guided almost-passive returns to neutral.

6. **Push arm posterior to barrier, humeral head packs into shoulder socket (glenoid fossa) so it moves ribs backward.** Support Table arm on Stool arm. Gently traction forward and return to neutral. Now both arm & neck posterior.

7. **Seated at head.**

a. Roll just neck from C7/T1 area. **THEN with two thumbs on either side of spinal groove - from C1 to L5 - COMPRESS Anterior, and you get to mid thoracics add a little Inferior to encourage slight extension**

b. Take out head support. Let head and neck sidebend down to table. Repeat the neck roll without support.

**THEN c, SIDE BEND CEILING EAR TO CEILING SHOULDER (to first barrier)**

**THEN d. PLACE FREE HAND ON R1 AND WITH BOTH HANDS EQUAL PRESSURE AS ONE - NONDIFFERENTIATED - SIDEBEND THE NECK AND MOVE R1 DIAGONALLY DOWNWARD AT THE SAME TIME. THAT WHOLE QUADRANT WILL SWEETLY AND EASILY MOVE DIAGONALLY DOWNWARD.**

8. Replace head support. **INTEGRATE WITH ONE NECK ROLL C1 TO T1**

9. **Pelvis inclusion (from behind ceiling hip)**

a. Internal/external rotation exploration of ceiling hip from

1. pelvic ear

2. thigh (femur)

3. gently raising lower leg (foot to knee) toward ceiling, tracing the trajectory up the spine

b. (from front) Support arm, other hand on top of hip, move together (undifferentiated)

c. Stabilize hip, bring shoulder forward, add slight diagonal up

d. Stabilize hip, push shoulder back

e. Alternate

10. Side integration.

a. Both hands on ceiling shoulder, make circles -engage shoulder blade and ribs. Stool and table feel ease and connection.

b. Ischium push up, then from whole hip - feel trajectory up spine toward head.

c. R1 push down - feel trajectory down spine toward pelvis

d. Retest arm traction. Does movement reach farther down toward ceiling hip?

11. **REDO 2 TESTS** **A.** Compress bottom of ceiling side pelvis toward head. How has the kinematic linkage improved? **B.** Arm traction will eventually move more **Superior**. How much of the pull engages the pelvis now?

12. **On back**

- a. Table feels differences between both sides and reports. Stool directs attention to further differences.
    - 1. Hand under each shoulder to demonstrate difference of how surrendered to table
    - 2. R1 push/compression down worked side first, then down non-worked side.
  - b. TRANSFER
  - c. Check R1 push each side, then alternate, then both.
  - d. Head integration/Wt bearing/Seated integration/Walking Integrations
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