

Case Study - July

Student:

Female

Age:

45

Activity level:

Has been doing Pilates for 1 year

Activities:

Specifics unknown. Is currently doing a lot of gardening.

Injury/symptoms/Pain level:

This client is someone who really understands her body and is willing to look at it deeply. She has an s-curve: thoracic to the right and lumbar to the left with forward spiral rotation. Right shoulder and left hip hurts frequently. Side-lying hurts and her hamstrings are very tight.

Pain potential:

Has been reduced with Pilates. Could dramatically increase if the scoliosis is not attended to regularly with corrective action in and out of the studio.

Goals:

- Open and lengthen left side while recovering strength in the left waist.
- Create balance of movement and strength across pelvis and low-back.
- Open and release right shoulder/upper quarter and recover strength and balance across in entire mid-back especially right scapular movement and stability.
- Balance the body toward center.
- De-rotate the spine as much as possible.
- Reduce pain in right shoulder and left hip.

THINGS TO THINK ABOUT:

Primary movement goals:

1. Release, open, and prime the body for movement so the soft tissue can allow for boney re-alignment and the student can appropriately build strength to maintain the boney alignment without props (over time – see #3).
2. Align the bones before moving as often as possible.
3. Encourage, teach and progress the student to a point of not needing props as much or at all over time.
4. Always bring the body to center as much as possible –
 - Do this by awakening body-awareness in the student to promote self-correction.
 - Do this by helping the student to more fully understand their challenge areas/areas of focus and what corrective actions and/or homework they can practice to do this in daily life.
5. As much as possible treat the body three-dimensionally:
 - 3-D cueing
 - Integrative/whole-body movement
 - If looking to improve flexion or extension consider priming the body with side-bending and rotation – can be and MUST BE subtle movements much of the time so as not to exacerbate the scoliosis.

What to release and stretch/open:

- I would encourage overall soft tissue reorganization with balanced and symmetrical release work:
 - Roll both sides of the spine (Yamuna rolling of the spine – from the sit bone up one side of the spine to the occiput, then do the other side from the sit bone up to the occiput.)
 - Roll both sides of the upper back encouraging equal and healthy movement of the upper limbs and neck.
 - Roll both sides of the pelvis, glutes and thighs encouraging equal and healthy movement of the lower limbs.
- Roll feet, massage calves (to encourage blood pumping through the lower venous system).
- Do any necessary static release around the spine (lie on a small to medium ball using breath to facilitate release).
- Massage around the anterior sternum and ribs (particularly on the side of the ribs that may be restricted due to curvature and rotation) to alleviate limitations in the diaphragm.
- Promote opening through the ribcage three-dimensionally (side-to-side and front-to-back: getting the zyphoid process to move out of the body on inhalation rather than inward.)
- Focus on later mobility and strength.

What to strengthen:

- Always work in the most balanced way possible first, trying to create awareness of center (remember you are trying to create a new center by using wedges and props so the student can experience a “center” that is not entirely driven by the scoliotic curve).
- Focus on later mobility and strength.
- Strengthen hamstrings, inner thighs and pelvic floor. (Consider also if PFM need to be stretched and mobilized IE sitting on a roller or medium ball before activating and promoting TA – inner core).

- Work on strengthening intrinsic (spinal) muscles with balance work, single leg/arm work on unstable surfaces:
 - This can be customized to help her strengthen low back, left waist and organize in functional postures.

Be careful of/Avoid if exacerbates pain or curvature:

- Side bending and rotation:
 - Don't try to "over correct" the curvature. Release into new patterns and strengthen asymmetrically as much as possible.
 - Focus on flexion and extension as primary mobilizers until pain is reduced or adequate level of organization is achieved so that side bending and rotation are easier to achieve.