N. is a lively 60-something year old retired female who takes care of her four grandchildren three times a week. She is very energetic and likes to feel strong and capable. She has recently been experimenting with Handstand because it gives her a sense of accomplishment.

PROBLEM

N. complained of recurring lower back discomfort that she experienced on both sides of her lower spine. From reading my blog posts she suspected that it had something to do with her sacroiliac joints, but was puzzled why she would feel it on both sides of her spine, instead of just one. She noticed that she felt increase in pain after sitting for extended periods.

INVESTIGATION

N. described her most recent flare up. She said that it happened after she had gone to the concert of one of her grandchildren. She spent the whole concert sitting on a very hard surface and bouncing her 18-month old grandchild on her lap. She was in a lot of pain the next day.

During our movement evaluation, several factors became clear:

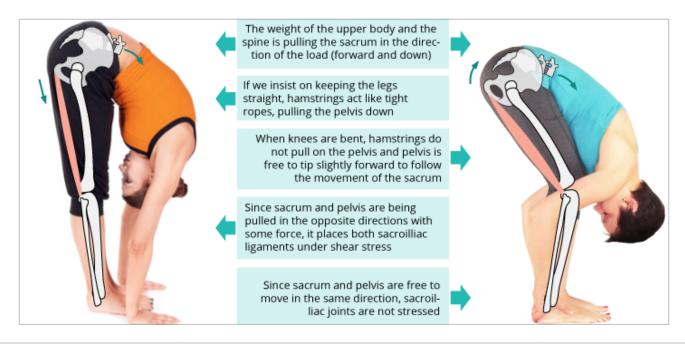
- 1. She had a posterior tilt in her pelvis, so her tailbone was usually tucked under.
- 2. Her gluteus maximus muscles were underdeveloped, she did not have a lot of flesh in her buttocks.
- 3. In a seated position, it looked as if she was sitting directly on top of her tailbone.

STAND-OUT FACTOR

I asked N. to demonstrate her usual way of bending forward in a standing position. It looked like she was determined to keep her legs straight as she pulled her chest toward her thighs in Uttanasana. She confirmed that she had been keeping her legs straight in all forward bends for years, because this is what she had been taught in other yoga classes.

HYPOTHESIS

I suspected that N. might have been experiencing occasional shear stress on her sacroiliac joints. Shear stress happens when the spine (along with the sacrum) and pelvis get pulled in the opposite directions (the sacrum slides up and the pelvis slides down). It can happen if the sacroiliac area becomes destabilized due to consistent deep forward bending with legs straight.



This would explain her discomfort in seated positions. Since she had a flattened lower back curve and tucked her tailbone under in seated position, sitting on top of her tailbone probably pushed her sacrum upwards. The situation was made worse by the fact that she did not have a lot of flesh in her buttocks, it got worse on firmer sitting surfaces, and it got even worse if she bounced up and down while sitting, irritating her sacroiliac ligaments.

COURSE OF ACTION

My general recommendations included the following:

- To gently encourage the lower back curve in poses like Chakravakasana or Virabhadrasana 1 while still maintaining abdominal support;
- To tip her pelvis slightly forward in seated positions and stay on her sit bones instead of her coccyx;
- To develop more tone in her buttocks with poses like Salabhasana and Vimanasana;
- To keeping her knees slightly (or even generously) bent in all forward bends;
- To refrain from bouncing in seated positions.

RESPONSE

N. stopped straightening her legs in forward bends and her episodes of lower back pain decreased in frequency. She wrote to me: "I have found that when I manage to have a natural curve in my lower back (instead of being flat), it is easier to tighten the whole core, maintain the corset, keeping strong legs." N. continues to experiment with positioning of her pelvis, since it doesn't come naturally. She also implemented my other recommendations in her regular home practice. She reports back that "My back is feeling much stronger and I don't have as much discomfort as before."