

## Putting POLITE Into Practice

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First came the acronym RICE (Rest, Ice, Compression, Elevation), which eventually became PRICE (Protect, Rest, Ice, Compression, Elevation). Then in 2015, we started hearing POLICE (Protect, Optimal Loading, Ice, Compression, Elevation). This year, I've coined the acronym POLITE.

### POLITE Basics

- P is for Protect, Plan and Prevention
- OL is for Optimal Loading
- I is for Ice or Instruments (laser, shockwave, deep muscle stimulation, etc.)
- T is for Technology / Taping
- E is for Education, Eating, Exercise and Ergonomics

The "P" reminds me to tell the patient the *plan* and discuss *prevention* strategies. This includes *protecting* the injured area, *providing* education and my *prescription*. I explain my plan, and offer ideas and suggestions on how they can protect the spine or involved area. I explain the services I can *provide* to help them achieve a *positive* outcome.

The "OL" stands for *optimal loading*. This means don't overload the tissue structures, but at the same time, don't underload them, either. Movement is important. I provide the patient with corrective exercises they can do to help heal properly.

The "I" reminds me to talk about the *instruments or implements* I can and will use as part of the treatment; not just ice, but also physical therapy modalities such as acoustic shockwave, lasers, lymphatic drainage, deep muscle stimulation and other soft-tissue therapies. I also use nutrition and a body composition analysis machine, which help to guide my weight-loss programs.

The "T" reminds me to offer *Taping* (kinesiology and athletic taping). Taping is just part of the treatment right now.

The "E" stands for *exercise, education, eating and ergonomics*. Adding these components to care has a high patient value, is quality care and helps reduce the risk of future episodes.

### POLITE in Action

Ms. Jones is a 30-year-old female patient complaining of chronic low back pain without a specific trauma or cause. She has been working out with a personal trainer twice a week and on her own another day or two each week. Her workout program includes free weights, machines, and cardio (running or elliptical). She experiences pain when sitting more than 30 minutes, standing for more than 30 minutes or bending over. Back pain is a 6/10 on the VAS.

Postural analysis is one of the first steps in addressing core stability. I check the pelvis alignment by evaluating the height of the iliac crests, the PSIS, the pelvis for anterior and posterior tilt, pelvic shift and rotations. In Ms. Jones' case, I measure her pelvic tilt using a goniometer. She has bilateral anterior pelvic tilt.

Her other standard tests are unremarkable. Her core strength seems pretty good. I don't think her symptoms are related to core weakness, since isolated muscle testing is good.

At the end of the session, I explain my plan, which is to teach her exercises she needs to do at home (*the O in POLITE - Optimal Loading*) to correct the anterior pelvic tilt; as well as how to move and sit in posture neutral. I explain that on a visit-to-visit basis, in conjunction with exercise and prior to repositioning of any bone / joint misalignments, I would check range of motion, perform two or three functional tests of the core, and perform soft-tissue and joint palpation. This process gives me information that helps to know if my plan (strategy) is on course.

Performing core stability assessments and/or tests become part of the exercise programming for prevention of future episodes (*the P in POLITE - Prevention*).

Since Ms. Jones visually presents with bilateral anterior pelvic tilt, it is important to check the length of the hip flexors. The Thomas test is useful for evaluating the psoas, rectus femoris and TFL. In her case, she has overactive rectus femoris > psoas > TFL. Exercises that teach our patients to hold the lumbopelvic hip complex in neutral and prevent further anterior pelvis tilt could include hip flexor stretches and gluteal strengthening exercises. *This is part of the E (Ergonomics, Education, Exercises).*

Next, I ask her to perform 1) a fingers-to-toes touch test and observe the lumbar spine for excessive rounding and hip hinging. This test evaluates the patient's ability of the ilium (acetabulum) moving on the femurs. If the lumbar spine excessively goes into flexion, we know repetitive flexion of the lumbar spine may potentially cause disc herniations and irritate existing disc lesions.

I teach her how to perform a proper hip hinge using a dowel touching along the back of her head, thoracic spine and sacrum. Attempts at hip hinging were not hitting the benchmark, so I show her how to perform the hip hinge with a continuous-loop band and achieve the benchmark motion.

Exercises that teach patients the difference between hip flexion and lumbar flexion include hip hinging, deadlift variations and squat variations.

2) I ask Ms. Jones to raise both arms overhead (an evaluation of the GH joint, the trunk and the lumbar spine) and perform a back extension range-of-motion test with the arms kept overhead (the arms should "hide the ears").

Examples of common movement faults that occur when we observe the patient moving into extension include: a) decreased lumbar spine motion, but the knees flex to give the illusion of moving into extension; b) the extension motion only occurs in the lower lumbar segments; or c) the lower anterior ribs excessively flare to give the illusion of extension. Ms. Jones displays all three faults.

Exercise movements I use to assess if my patient can prevent and control back extension / hyperextension under load are: planks on the forearms / toes (looking for loss of neutral lumbar spine), abdominal roll-out variations on a stability ball or BOSU (looking for loss of neutral lumbar), and one of my favorites: walking with a kettlebell in various positions (I start with the farmer's walk, then the rack position and finally the overhead position).

3) I ask her to perform right and left lateral trunk bending while holding a 10-15 pound kettlebell weight (one side at a time). I am curious if she experiences pain and what the spine looks like under load. (I look to see which side the kettlebell travels lowest.)

I like to test patients with a load because this is an extremely functional test, since most people carry grocery bags and/or bags with handles. Some patients need to learn to stay in neutral spine while carrying bags in one hand - they may need to learn to prevent the low back from flexing and/or the lumbar segments from bending to the side.

Examples of exercises that will help a lateral bending dysfunction include side plank variations, [Pallof presses](#), kettlebell suitcase lifts and carries, and the farmer's walk holding the kettlebell in one hand (*more O for Optimal Loading*).

4) Lumbar rotation is approximately 3-18 degrees and can be performed in standing or sitting (to eliminate compensatory hip movement). If this movement is painful, the patient needs to learn "anti-rotation" maneuvers. Exercises to assess and train preventing rotation in the pelvis and low back include bird dogs, renegade rows, single-leg Romanian deadlifts and hip thrusts.

Ms. Jones easily passes the core strength / endurance tests I ask her to perform. These include the plank (prone bridge) and side or lateral bridge musculature test. But she was challenged to maintain ideal postural alignment during a body-weight squat, the bird dog (quadruped arm and leg reach) and the traditional hip bridge assessments.

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