AEC Inter-professional Spine Assessment and Education Clinics

Flexion Aggravated Lower Back Pain: Don't just sit there!



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Most of us have heard or read that sitting is considered the new smoking. Many patients will spend the majority of their day sitting at a workstation, during their commute to and from work, and during

leisure activities. The average person spends about 9 hours of their day in a seated position. Studies have shown that individuals who sit for more than six hours a day are at greater risk of developing diabetes, high blood pressure, depression and low back pain. Even more alarming is that the risks of developing the above conditions do not diminish even when a person performs 3-4 hours of moderate to vigorous

exercise per week. For a patient with low back pain aggravated by flexion (i.e. sitting), this means that exercises and core strengthening alone will not resolve their symptoms. These patients need changes to their behavior that specifically interrupts long durations of sitting, and reduces the amount of time their spine is in a flexed position. The best way to accomplish this is with movement into lumbar spine extension and frequent changes in posture. This solution seems simple, however, most patients do not know how to accomplish this during their workday.



Here are some recommended strategies that can help:

- To interrupt sitting during the workday, I suggest setting an alarm and keeping track of steps taken. I encourage a 5minute walk around the office every hour and challenge patients to frequently move and gradually accumulate the recommended 10, 000 steps per day.
- 2. Most patients with back dominant pain aggravated by flexion will report an improvement with symptoms after the sloppy push up exercise. As such, for this population, I recommend increasing the frequency of performing the exercise. Perform 10 repetitions, 2 sets, every 2-3 hours. This exercise promotes lumbar spine extension and counteracts the flexed posture of sitting. If a patient anticipates prolonged hours of sitting, I recommend they increase the frequency of this exercise even more and perform the sloppy push-up before, during and after the sitting activity when possible. This exercise can also be done in standing.



- 3. Some patients report it difficult to take a break from sitting every hour due to the nature of their work. For these patients, I highly recommend a sit to stand workstation. This workstation allows a patient to alternate between sitting and standing without disrupting the task that they need to complete. I usually recommend a cycle of 30-45 minutes of sitting and 10-15 minutes of standing.
- 4. During activities where it is difficult to interrupt sitting (i.e. long car ride or when sitting at a theatre), I recommend the use of a lumbar roll. The roll, when placed at the level of the belt line, will help to passively maintain the lumbar spine in a position of lordosis (relative extension). I also prescribe an exercise called slouch-overcorrect in sitting. This exercise moves the lumbar spine from a position of flexion to extension and gets the spine moving when you are unable to stand up and change positions.

The above solutions are quite simple for the management of low back pain aggravated by sitting. They are easy to implement and most patients will report more control over their symptoms with these proposed changes.