Does an increase in active cervical rotation when sitting posture is corrected indicate the patient has a postural fault?

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In the spirit of Mythbusters, we used pragmatic approaches to investigate assumptions underlying some aspects of clinical practice. Improvement in active rotation of the cervical spine when the patient’s posture is ‘corrected’ is often considered to indicate there is a postural component to a patient’s symptoms and that the corrected position is more desirable. We set out to determine if this improvement in active movement is a normal response rather than indicative of a postural defect. Active cervical rotation was measured using a tri-axial orientation sensor in ten asymptomatic volunteers in corrected and slumped sitting postures. There was a significant increase in rotation in the corrected position (p =0.02) of 6.5 degrees (CI 0.1 to 12.9). We then had three subjects in a corrected posture maintain full rotation and tilt forward or back - as if they had flexed or extended the cervical spine prior to the rotation. Up to xx degrees of movement occurred before there was a detectable decrease in range of rotation suggesting that although slumped postures result in decreased rotation, full rotation mobility could be obtained with a variety of postures that are perhaps less than ideal. Pain responses could not be assessed in our asymptomatic population. Conclusion: Unproven. Maximum cervical rotation can occur in less desirable as well corrected postures. It is suggested that any changes in pain in a patient population would need to be greater than changes in movement occurring with an asymptomatic population before concluding that their posture is contributing to the patient’s symptoms.