Styloid process sensitivity in a patient with low back pain and radicular syndrome: A case report.
Dwight Shaneyfelt, RN, DC, Charles L. Blum, DC, David Taylor, DC
Sacro Occipital Technique Organization - USA

Purpose and Background
The styloid process (Figure 1) projects down and forward from the inferior surface of the temporal bone, and serves as an anchor point for several ligaments and muscles associated with swallowing and vocalization. In the 1950s DeJarnette identified a relationship between styloid process sensitivity and the ipsilateral 5 lumbar vertebra. He found that with L5/S1 decompression there commonly would be an associated reduction or elimination of sensitivity at the ipsilateral styloid process.

Results
As treatment was provided, the sensitivity to the styloid process was rapidly eliminated. Concurrently the right sciatic pain and related muscle tension in the right thigh significantly diminished. Diminished tension in the plantar fascia along with a visualized reduction in clubbing of the right foot was noticed. On standing following treatment, a marked decrease in antalgic position relative to the initial plumb line findings was observed.

Case History
A 57-year-old right-handed white male, presented in our offices with a chief complaint of acute sudden onset left jaw pain. The patient gave a history of a 3-day episode of jaw, neck and ear pain, with no known cause. The patient had a very high pain threshold and rarely complained of pain. There was concern, due to the nature and degree of irritation, that he might possibly have an infective process therefore, dental x-rays were obtained. They were reported as negative for any local infection in the styloid process or from a nearby tooth.

Conclusion
In this single subject case report of a patient presenting with acute styloid process sensitivity, differentiating the patient’s presentation was essential. Further studies are needed to determine what subset of the population has this relationship and to facilitate greater communication between professions treating this entity. The temporal nature of the changes to the styloid process’s pain and improvement of the patient’s low back presentation was noteworthy.

Intervention/Methods
Palpation found marked sensitivity of the left styloid, left first rib (scalene muscle attachments), and to the left sternocleidomastoid. The paraspinal muscles throughout the lumbar spine were painful to palpation, with profound guarding and muscle rigidity most specifically within the posterior right lower quadrant.

A positive straight leg raise at 45 degrees was noted with exquisite sensitivity along the right sciatic track. Tenderness to palpation was noted in the plantar fascia as well as clubbing of the five toes on the right foot, but not on the left foot. Lumbar ranges of motion were also markedly decreased in all six directions.

Sacro Occipital Technique (SOT) analysis was performed and based on the findings, the patient’s left psoas and diaphragm muscles were released. The patient was treated with category three orthopedic blocking, which utilized the left styloid process as a guide for treatment of L5/S1 discopathy associated sciatic nerve irritation.

Clinical Implications
With styloid process sensitivity and low back pain the dental profession might want to consider collaborative care in the absence of any specific local dental findings. Ruling out ascending myofascial imbalance from the lower back causing styloid process sensitivity could facilitate improved differential diagnosis.

References
DeJarnette MB. Sacro Occipital Technic of Chiropractic. Privately Published: Nebraska City, Nebraska. 1952: 53-252.