

Spinal Synovial Cysts and Neuropathology

A Case Report of False Association

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ABSTRACT

Objectives:

The purpose of this study is to present a case in which synovial cysts appeared to cause compromise of the neural foramina and the thecal sac leading to initial improper attribution of neurological signs. Subsequent manipulative care and a specific exercise program alleviated symptomatology that was concluded to be secondary and separate from the synovial cysts. The object of this study is to present the false association and improve differential diagnosis and treatment of spinal synovial cyst and associated disorders.

Clinical Features:

A 67-year-old female patient with a history of lumbar synovial cysts previously treated by surgical means presented with recurrence of bilateral low back and leg pain along with findings of recurrence of lumbar synovial cyst as demonstrated on MRI with apparent neurological compromise.

Interventions and Outcome:

Flexion distractive therapy with home performance of Williams's low back exercises and adjunctive interferential therapy. Initial treatment (thrice weekly for 2 weeks) resulted in 50% relief. Frequency of care was progressively diminished with symptomatic

Abstract

improvement. However, there continued to be recurrence of the symptoms with episodes as severe as the initial presentation. Subsequent addition of the specific multifidi stabilization strengthening exercises to address a spondylolisthesis and instability resulted in a cessation of episodes of severe pain and improvement in functional activities.

Conclusions:

Although the distractive therapy was successful in alleviating the constant pain, the stabilization of the spondylolisthesis was more important in the long term effects on the patient. There was recurrence of the same low back and leg pain after the surgery and subsequent recurrence of the synovial cyst. Distractive therapy allowed alleviation of the symptoms without additional surgical intervention. Episodes recurred until there was sufficient multifidi strengthening to stabilize the unstable L4-5 spondylolisthesis. The synovial cyst may be an incidental finding vs a primary cause of the low back and leg pain. The presence of synovial cysts does not always result in the clinical correlation of the pathology. In the absence of correlative progressive neurological signs, surgical intervention may not be necessary. Since there is a high correlation of spondylolisthesis with spinal synovial cysts, it would be appropriate to assess the relationship of the spondylolisthesis to the presenting symptoms and consider conservative manual therapy.