

CASE SERIES: THORACIC INTRAMEDULLARY VASCULARIZED LIPOMAS

Joseph M. Horrigan, DC, DACBSP, Soft Tissue Center at DISC, Marina del Rey, CA; Robert S. Bray, Jr., MD, Diagnostic and Interventional Spinal Care (DISC), Marina del Rey, CA; Melissa A. Nagare, DC, LAc, Soft Tissue Center at DISC, Marina del Rey, CA.

History: Five patients presented with various symptoms of the spine and lower extremity. These symptoms included knee pain (n = 2), knee erythema and pain radiating down the anterior leg (n = 1), thoracic pain (n=1). All (n = 5) reported having balance difficulties. Two cases reported falling. The history of balance difficulties and falling were obtained upon direct questioning during the history process. None of the subjects volunteered having balance difficulties or falling as a chief complaint. All cases were recreational athletes participating in basic fitness activities. One case had competed in high school volleyball and basketball. The age range is 20 to 32 with a mean age of 26.6 years. The sex distribution is four female, one male. Three of the cases were in one family.

Physical examination: Case 1: Examination revealed a normal knee except medial patellar facet tenderness and 4+ patellar reflexes bilaterally and 1-beat clonus. Case 2: Examination revealed a normal knee and 4+ patellar reflexes and 1-beat clonus. Case 3: asymptomatic with 3+ patellar reflexes and 1-beat clonus. Case 4: Normal cervical and thoracic examination however 4+ patellar reflexes and 1-beat clonus were present. Case 5: Normal cervical and thoracic exam, 2-beat clonus, 4+ patellar reflexes, 3+ Achilles reflexes. Hoffman's reflex was not present in any of the cases. MR scans of the thoracic spine revealed multi-level intramedullary vascularized lipomas best viewed on T1 weighted images. The lipomas ranged between four and five level lesions. The lipomas compressed the spinal cord against the posterior vertebral bodies.

Outcome: Case 1 had the longest history of falling and fell frequently. This case underwent 5-level microsurgery with one of the authors (RSB) and had a successful outcome. Case 2 and 3 are being monitored for any sign of progressive cord compromise. Cases 4 and 5 are surgical candidates at the time of this conference.

Discussion: The intramedullary vascularized lipoma is believed to be a rare finding. This rarity makes the appearance of five cases in one clinic within a six month period even more unusual or more concerning. The question at hand is whether this is a statistical anomaly or if these lesions are more prevalent than previously believed. However, there is a familial link for three of the cases, which may contribute to the increased incidence.

This case series demonstrates two key clinical issues: 1) patients cannot be expected to volunteer critical neurologic information such as balance difficulties or falling. The physician must directly obtain this information. 2) patellar hyper-reflexia and clonus in the absence of Hoffman's reflex suggests that the thoracic spinal cord be scanned for intramedullary space occupying lesions.

Podium presentation

2008 ACBSP Chiropractic Sports Sciences Symposium
Weston, FL