ELSEVIER

CrossMark

The Spine Journal 15 (2015) 2099–2100

THE SPINE JOURNAL

IMAGES OF SPINE CARE

A case of symptomatic cervical spine calcinosis in systemic sclerosis

Osteolytic calcific lesions of the cervical spine in systemic sclerosis (SSc) are rare [1]. However, studies have shown that more than 50% of patients with SSc actually have some degree of spinal calcinosis [2], majority being asymptomatic. Herein, we present a case of symptomatic cervical calcinosis in a patient with SSc requiring complex surgical intervention.

A 62-year-old woman with Anti-Scl-70–positive SSc presented with a 2-month duration of weakness in the upper and lower limbs, altered sensation, and inability to mobilize. On examination, power was 3 to 4 of 5 with normal reflexes in upper limbs and 4 of 5 with hyperreflexia in lower limbs.

Fig. 1. Computed tomography scans showing a left-sided paraspinal and intraspinal calcific mass of C3–C4 vertebrae and accompanying soft tissues and spondylolisthesis of C3–C4 vertebrae.

http://dx.doi.org/10.1016/j.spinee.2015.04.042

Fig. 2. Magnetic resonance imaging scan showing spinal cord compression with intramedullary signal change. X-ray showing lateral mass screw fixation from C2 to C6 vertebrae.

Sensation was reduced below the right elbow and lateral and medial aspect of the right foot.

Cord compression was suspected from her symptomatology, and CT demonstrated a C3–C4 anterolisthesis, almost complete destruction of the left C3 lateral mass and severe rostrocaudal thinning of the left C4 lateral mass, which was replaced by calcification that extended dorsally into adjacent soft tissues. The calcified mass was narrowing the left vertebral artery foramen at C2. Additionally, the lamina of C4 was deficient in a number of places with some epidural calcification (Fig. 1). Magnetic resonance imaging showed cord compression with intramedullary signal change at the level of the slip and perching of the right C3–C4 facet. The patient underwent surgery that involved a C3–C4 decompression, reduction of C3–C4 spondylolisthesis, and C2–C6 posterior fusion (Fig. 2). At 2-year follow-up, the patient is fully mobile and neurologically intact, complaining only of paraesthesia and discomfort in the right hand and elbow.

References

[1] Smucker JD, Heller JG, Bohlman HH, Whitesides TE Jr. Surgical treatment of destructive calcific lesions of the cervical spine in scleroderma: case series and review of the literature. Spine 2006;31:2002–8.

[2] Ogawa T, Ogura T, Ogawa K, Hirata A, Hayashi N, Izumi Y, et al. Paraspinal and intraspinal calcinosis: frequent complications in patients with systemic sclerosis. Ann Rheum Dis 2009;68:1655–6.

Naji Al-Khudairi, MBBS, BSc[a]
Shigeru Kobayashi, MD, PhD[b]
Adam Meir, FRCS (Tr&Orth), MA, BM BCh[a]
[a]*Victor Horsley Department of Neurosurgery*
The National Hospital for Neurology and Neurosurgery
University College London
Queen Square
London WC1N 3BG, England
[b]*Department of Spine Surgery*
University of Fukui
23-3 Matsuokashimoaizuki, Eiheiji-cho
Yoshida-gun, Fukui Prefecture, Japan

FDA device/drug status: Not applicable.

Author disclosures: ***NA-K:*** Nothing to disclose. ***SK:*** Nothing to disclose. ***AM:*** Nothing to disclose.

The authors declare no competing interests, received no funding, required no ethical approval, and have no guarantor, contributorship, or acknowledgments.