Calcifying posterior longitudinal ligamentum and posterior osteophytes in case of anterior cervical corpectomy with titanium cage reconstruction

Dear Sir,

Anterior cervical corpectomy with titanium cage reconstruction is one of the effective methods of cervical spine reconstruction.[1-3] A 58-year-old male patient who was operated 2 years back for cervical disc disease was apparently doing well. Now, he presented with burning sensation and persistence of paresthesias. There was no history of weakness. There was no history of bowel and bladder disturbances. On examination, the motor and sensory systems were normal. Deep tendon reflexes were normal. Planters were bilateral flexors. His cervical spine X-ray showed titanium cage *in-situ* with good fusion [Figure 1a]. However, there was ossification of the posterior longitudinal ligament with osteophytes. Magnetic resonance imaging of the cervical spine confirmed the ossified longitudinal ligament with mild thecal compression [Figure 1b]. In the absence of features of myelopathy, the patient was planned for conservative management and regular follow-up.

The major advantages of titanium cages are immediate stability, restoration of foraminal height and alignment, restoration of anatomic cervical lordosis at the intervertebral segment, and less operative time.[4-6] At present, the patient had good fusion as per the criteria described on plain radiograph (segmental movement in the lateral flexion-extension view should stand within 2°, formation of trabecular bone between allograft or cage and adjacent vertebral body and disappearance of the adjacent vertebral body endplate, effacement of bony spur, and remodeling of graft bone).[6-10] Although titanium cage has good outcome, there are few limitations: (1) their high modulus of elasticity contributes to subsidence and kyphotic deformity of the involved segment,[6,10-15] (2) cage malplacement,[3] and (3) cage extrusion.[6] Although clinical outcomes of the stand-alone cage have been shown to be encouraging, cage subsidence is a major concern as its complications [Figure 2].[15] If a patient with titanium cage *in situ* and radiological evidence of good fusion requires a revision surgery, it can be extremely

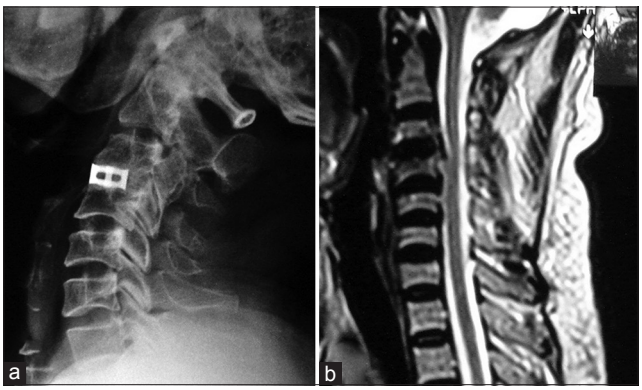

Figure 1: (a) X-ray of the cervical spine lateral view showing titanium cage *in situ* with good and solid bony fusion at C3–C4 level, note the posterior osteophytes and ossified ligamentum, (b) Magnetic resonance imaging T2-weighted image showing mild cord compression and calcified ligamentum

Figure 2: X-ray of the cervical spine lateral view of another patient showing titanium cage subsidence

difficult.[16] The cage extraction from a corpectomy site also requires a significant amount of drilling of above and below vertebral bodies.[16] In contrary to the problem of cage subsidence, the present patient had ossified posterior longitudinal ligament and posterior osteophytes (although may not be responsible for his symptomatology). As he did not have deficits related to the involved segments, he was counseled accordingly and managed conservatively.

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Conflicts of interest

There are no conflicts of interest.

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