

Case at a Glance

EPIDURAL CEMENT LEAKAGE DURING KYPHOPLASTY LEADING TO RADICULOPATHY

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Percutaneous vertebroplasty and balloon kyphoplasty are effective minimally invasive methods of treating osteoporotic vertebral compression fractures (VCF) (1). Though generally regarded as safe, commonly encountered complications include polymethylmethacrylate (PMMA) cement leakage into adjacent tissues, paravertebral vein embolism, intradiscal PMMA leakage, and intraspinal PMMA leakage (2). In a study of 1100 vertebroplasties, nearly 50% developed complications; however, fewer than 5% of which produced clinical symptoms. A single intraspinal leakage of PMMA cement was reported (0.8%), which required surgical decompression (2). Similarly, in a prospective study of 100 patients receiving kyphoplasty, a cement

leakage rate of 61% was reported, though only 1 incidence of intravascular leakage required further surgical management (3). Our patient is a 84-year-old female, status post T7 kyphoplasty who presented with upper back pain radiating into her left scapula. She also reported abdominal radicular pain as well. Subsequent computed tomography (CT) imaging (Fig. 1) demonstrated epidural leakage of implanted PMMA cement, requiring surgical decompression. PMMA cement leakage is a common complication of balloon kyphoplasty and vertebroplasty. Though rare in presentation, cement leakage into the epidural space may occur requiring urgent physician recognition and management.

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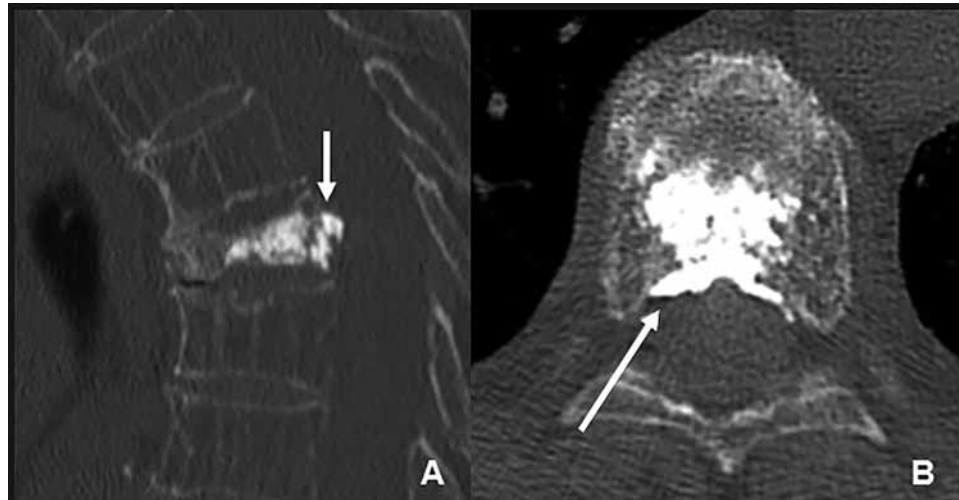


Fig. 1. Sagittal (A) computed tomography (CT) image demonstrating protruding epidural leakage of polimethylomethylacrylate (PMMA) cement used during kyphoplasty of an atraumatic vertebral compression fracture causing axial back pain. Axial (B) CT image demonstrating bilateral epidural spread of PMMA cement leakage.

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