Spinal infections among patients with long-term central venous catheters (CVCs) for which clinicians must remain vigilant“ Topan et al (2017).

Abstract:

Spinal infections are a rare yet serious metastatic complication of bacteremia among patients with long-term central venous catheters (CVCs) for which clinicians must remain vigilant. We performed a retrospective review of all cases of spinal infection occurring in the context of a CVC for long-term parenteral nutrition (PN) managed in our department between January 2010 and October 2013, a cohort of 310 patients over this time period. Six patients were identified (mean age, 65 years; 5 male). One hundred percent of patients presented with spinal pain (5/6 cervical, 1/6 thoracic). Organisms were cultured from the CVC in 5 of 6 patients. In all cases, the white blood cell count was normal, and in 5 of 6, C-reactive protein was normal. All diagnoses were confirmed on magnetic resonance imaging (MRI), and in 3 of 6 cases, an MRI was repeated (on the advice of neurosurgical colleagues) to confirm resolution of changes after a period of antimicrobial therapy. There was no clear correlation between duration of PN or number of days following CVC insertion and onset of infection. The CVC was replaced in 4 of 6 patients at the time of diagnosis, delayed removal in 1 of 6, and salvaged in the remaining case. Although rare, a high index of suspicion is needed in patients receiving long-term PN who present with spinal pain. Peripheral inflammatory markers may
not be elevated. MRI should be performed and patients should be treated with antibiotics alongside involvement of local microbiology and neurosurgical teams. Multidisciplinary discussion on CVC salvage in these cases is important, especially in cases of challenging vascular anatomy.

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