Epidural Lipomatosis Causing New Debilitating Back Pain in a Pregnant HIV Patient on HAART

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Introduction: An HIV patient on Highly Active Antiretroviral Therapy (HAART) developed debilitating back, hip and thigh pain during the third trimester that prevented ambulation. She was diagnosed with spinal epidural lipomatosis (SEL), a potential complication of HAART. Neuraxial analgesia for her labor was contraindicated.

Case: An HIV-positive primagravida on HAART was hospitalized at 35 weeks gestation with incapacitating lower back, hip and thigh pain and associated weakness of two months’ duration. She needed a cane to ambulate and a wheelchair for greater distances. She denied bowel or bladder difficulties and had no prior neurological pathology. Of significance, a new protease inhibitor was added to her antiretroviral regimen two months previously. As part of her evaluation, an MRI of the entire spine was ordered. Per that study she was diagnosed with SEL. After a week of physical therapy and multimodal pain control, she was discharged home with a slightly improved ability to ambulate. She presented in labor at 39 weeks gestation, but because of her evolving neurologic status she was not a candidate for neuraxial anesthesia. Her labor pain was managed with a fentanyl PCA. She had an uncomplicated spontaneous vaginal delivery. By two weeks postpartum her pain had intensified, further restricting ambulation, but by six weeks postpartum her pain had receded enough that she was able to ambulate without assistance and no longer required opioids.

Discussion: SEL is a rare condition of hypertrophy of adipose tissue in the epidural space. This causes neurologic symptoms by nerve root or spinal canal compression. Back pain is the most common presenting symptom, and lower extremity weakness accompanied by sensory changes is the most common physical finding. Unsteady gait and urinary retention are less common. SEL is most frequently attributed to long-term steroid use, but has also been attributed to other endocrinopathies, most notably obesity. It has also been described in several patients on protease inhibitors (PIs). Our patient’s antiretroviral regimen included two PIs, one of which had been added two months prior to presentation. Antiretroviral medications are known to cause disorders of fat deposition, characteristically peripheral lipoatrophy and central lipohypertrophy. About half of patients on antiretrovirals will experience some form of lipodystrophy(1). Because of the increased adipose tissue and decreased compliance of the epidural space in SEL and our patient’s evolving neurological changes, we considered neuraxial techniques to be contraindicated. Our literature review uncovered reports of undesirable neurological outcomes with both spinal and epidural injections in patients with SEL(2,3).

References: