\$220 PRESENTATIONS

Poster 147

Thoracic Compression Fracture Caused by TASER-induced Injury: A Case Report.

Anupam Sinha, DO (Rothman Institute, Philadelphia, PA, United States); Madhuri Dholakia, MD.

Disclosures: A. Sinha, none.

Patients or Programs: A 42-year-old man.

Program Description: A 42-year-old male law enforcement agent with no significant medical history presented with a 3-week history of mid back pain after a training exercise during which the patient sustained an electrical shock from a TASER device. The patient was stunned from the front while being held up by 2 fellow officers. He recalls a forceful contraction of his midsection, with resulting pain in the mid thoracic spine. Physical examination revealed thoracic spine tenderness, without other neurologic or musculoskeletal abnormality.

Setting: Outpatient spine practice.

Results: Magnetic resonance imaging of the thoracic spine was performed and revealed T8 and T9 vertebral body compression fractures, along with bony contusion of the superior endplates of T7 and T10. The patient was treated conservatively with bracing, nonsteroidal anti-inflammatory drugs, and physical therapy, with gradual resolution of his symptoms.

Discussion: This patient was found to have multiple thoracic compression fractures as a result of TASER-induced injury, which was most likely related to the forceful hyperflexion of the thoracic spine during the electrical discharge.

Conclusions: The most common orthopedic injuries after electrocution include fractures of the scapula and humerus. Spinal compression fractures after electrical injury are rare and have been documented twice in the medical literature. We report a rare case of spinal compression fracture as a result of TASER-induced injury.

Poster 148

Delayed Presentation of Chronic Exertional Compartment Syndrome in the Bilateral Anterior and Lateral Leg Compartments in a Soldier Exposed to Multiple Blasts From Improvised Explosive Devices: A Case Report.

Andrea Aagesen, DO (University of Michigan, Ann Arbor, MI, United States); Lisa DiPonio, MD.

Disclosures: A. Aagesen, none.

Patients or Programs: A 40-year-old male soldier in the U.S.

National Guard.

Program Description: The patient presented to the physical medicine and rehabilitation clinic in the Veterans Affairs hospital for evaluation of intermittent, chronic lower leg pain that began during active combat in Iraq from 2006-2007. He was involved in multiple blasts from improvised explosive devices but did not sustain any immediate injuries during his deployment. He presented to the physical medicine and rehabilitation clinic 3.5 years after onset of bilateral lower leg pain, paresthesia, weakness, and numbness that occurred approximately 10-15 minutes after performing a brisk walk and resolved with rest. He had no other significant medical history or prior trauma. On initial examination, his lower extremities were neurovascularly intact ,with full strength and soft compartments. After performing a 13-minute brisk walk, his strength with manual muscle testing decreased to 0/5 with great toe extension, ankle dorsi-

flexion, and ankle eversion, bilaterally. The remaining strength examination was unchanged. Sensation testing to light touch and pinprick was impaired in superficial and deep fibular nerve distributions. The anterior and lateral compartments were firm and tender to palpation. Patella and Achilles reflexes remained unchanged. His strength and sensation returned to normal after resting for 20 minutes.

Setting: Tertiary care Veteran Affairs hospital.

Results: The patient was diagnosed with chronic exertional compartment syndrome (CECS) and was referred to orthopedic surgery for a fasciotomy. Activity modification was recommended to avoid precipitating symptoms.

Discussion: CECS was first described in the 1940s, and the diagnosis and treatment are now well established. The pathogenesis remains less clear. Trauma has been described as a potential factor that predisposes individuals to CECS. However, there are no reported cases, to our knowledge, of CECS precipitated by a blast injury in the literature.

Conclusions: CECS should be considered for patients with exertional leg pain and neurologic deficits, particularly among individuals with prior trauma such as blast injuries.

Poster 149

Complex Regional Pain Syndrome Secondary to Transfemoral Catheterization-related Femoral Artery Pseudoaneurysm: A Case Report.

Stephen Paulus, MD (KUMC, Kansas City, KS, United States); Raelene M. Knolla, DO, MBA.

Disclosures: S. Paulus, none.

Patients or Programs: A 34-year-old woman with AV node reentry tachycardia.

Program Description: The patient underwent AV node ablation via a left femoral vein approach for treatment of AV node reentry tachycardia. She presented 1 month later with tingling, pain, and mild edema in her left leg a duplex scan revealed a nearly thrombosed left common femoral artery pseudoaneurysm (2.2 × 2.3 cm). Several days later, she returned with complaints of more severe pain in her leg elicited by light touch, with continued local swelling and cold sensation. Pulses were intact, and repeated imaging revealed a fully thrombosed pseudoaneurysm with normal blood flow through the arterial lumen. Extensive vascular, rheumatologic, and hematologic workups were conducted and found to be negative. Throughout her course of workup, the patient mobilized with crutches due to an inability to bear weight on her affected leg. She documented the progressively mottled, glossy appearance of her left leg with daily photographs, noting particular a lack of hair and toenail growth for several weeks. After a 3-phase bone scan was ordered and exhibited reduced blood flow to the distal left leg, the diagnosis of complex regional pain syndrome was considered, and the patient was referred to KUMC Physical Medicine and Rehabilitation.

Setting: A tertiary care hospital.

Resulfs: Physical therapy was ordered for range of motion, function and tactile discrimination techniques, and desensitization modalities. The patient failed these conservative measures as well as 3 treatments of sympathetic nerve blocks and, therefore, underwent a spinal cord stimulator trial. She experienced much symptomatic improvement, with reduced pain and melioration of local edema, and was able to bear weight again. Permanent spinal cord stimulator was implanted, and the patient continues her significant functional improvements.