

**Discussion:** Peroneal nerve injury typically occurs as a result of trauma or compression at the fibular head. Patients may present with weakness of the ankle dorsiflexors. In this case, the patient developed peroneal nerve injury due to compression from an immobilization boot for plantar fasciitis. Based on the electrodiagnostic findings, the nerve injury must have occurred at the level of the ankle prior to the innervation of the extensor digitorum brevis.

**Conclusions:** There have been a few reported cases of peroneal nerve injury due to ankle injuries and surgeries. We present a rare case of peroneal nerve injury due to ankle immobilization. Clinicians should be aware of this mechanism of injury and should consider electrodiagnostic studies for further evaluation.

### Poster 261

#### **Electrodiagnostic Findings in a Young Woman With Weakness Following "Bath Salts" Intoxication: A Case Report.**

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**Disclosures:** D. Mortimer, No Disclosures: I Have Nothing To Disclose.

**Case Description:** The patient, a female in her early 20s, was brought to the hospital with wildly fluctuating levels of consciousness after inhaling crushed "bath salts" (BS). Her early course was marked by periods of extreme agitation necessitating sedation and mechanical ventilation. She was also treated for pneumonia. Three weeks later, she was awake, calm and medically stable. However, she was diffusely weak and unable to wean from the ventilator.

**Setting:** Academic Health Center.

**Results or Clinical Course:** Electrodiagnostic testing was performed. Sensory nerve conduction studies (NCS) and repetitive stimulation studies were normal. Motor NCS revealed normal latencies with reduced amplitudes. Electromyography revealed many short duration, small amplitude, polyphasic motor units with early recruitment but no membrane instability. These findings were consistent with generalized myopathy, attributable to critical illness plus deconditioning. There was no evidence for rhabdomyolysis.

**Discussion:** "Bath salts," a group of designer drugs of abuse, are potent central nervous system stimulants. Their active ingredients, including 3,4-methylenedioxypyrovalerone (MDPV) and 4-methylmethcathinone (mephedrone), block catecholamine and dopamine reuptake. Since BS first appeared in the US in 2008, there have been hundreds of descriptions of intoxicated individuals with bizarrely delusional and even violent behavior. There have also been widespread reports, including a 2011 front page New York Times article, linking BS to muscle problems like rhabdomyolysis. The pathophysiological connection between BS and muscle damage has not been elucidated. This is the first report, to our knowledge, of electrodiagnostic findings in an individual with BS intoxication. This case demonstrates that the effect of BS on muscles is not a direct one. Instead, the muscle pathology is caused by BS intoxication sequelae, such as myopathy related to critical illness or rhabdomyolysis following agitation-related exertion.

**Conclusions:** When muscle pathology follows "bath salts" intoxication, clinicians must identify the specific etiology, since BS do not appear to affect muscles directly.

### Poster 262

#### **Treatment of Severe Rotator Cuff Calcific Tendonitis With Ultrasound Guided Percutaneous Tenotomy With and Without Prolotherapy: A Case Report.**

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**Disclosures:** A. Ehsan, No Disclosures: I Have Nothing To Disclose.

**Case Description:** A 67-year-old African American man with severe chronic right shoulder pain and limited range of motion after a long history of repeated injuries during military training and combat was confirmed to have right supraspinatus full thickness and length calcific tendonitis by magnetic resonance imaging, x-ray, and ultrasound. The patient was interested in non-surgical treatments only and received tenotomy therapy with a 19-gauge needle under ultrasound guidance and local anesthesia. After six months, the patient underwent the same procedure with the addition of dextrose-based prolotherapy.

**Setting:** Outpatient musculoskeletal clinic.

**Results or Clinical Course:** 48 hours after initial tenotomy, the patient experienced up to 50% improved shoulder range of motion with a continued pain relief of 3- 4/10 on the pain visual analog scale, down from an average of 7/10, after the procedure. After 6 months, the patient presented with recurring symptoms, and the same tenotomy was performed, with the addition of dextrose-based prolotherapy. This resulted in symptom relief as in initial treatment, but with longer lasting symptomatic relief by 3-4 months.

**Discussion:** This case report illustrates the potential synergistic effect of combined percutaneous tenotomy and dextrose-based prolotherapy.

**Conclusions:** Ultrasound guided percutaneous tenotomy combined with dextrose-based prolotherapy is a safe and effective non-surgical treatment to induce lasting symptom relief from severe calcific tendonitis of rotator cuff tendons.

### Poster 263

#### **Case Report: A Manual Medicine Approach to Sacroiliac Dysfunction in a Patient with Steroid Myopathy.**

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**Disclosures:** D. J. Kohns, No Disclosures: I Have Nothing To Disclose.

**Case Description:** A 59-year-old woman with acute myeloid leukemia following blood stem cell transplant was treated with high-dose steroids for a gastrointestinal graft-versus-host disease reaction and developed proximal weakness from steroid myopathy. The patient's acute inpatient rehabilitation was impacted by the development of a new onset left sacroiliac dysfunction. A patient-focused manual medicine approach was able to assist the patient in maximizing their function.

**Setting:** A university based acute inpatient rehabilitation center.

**Results or Clinical Course:** With the patient's sacroiliac symptoms well controlled, the patient was able to continue to progress her rehabilitation program. At discharge she was able to transfer independently, ambulate greater than 200 feet with a wheeled walker and perform all activities without limitations from sacroiliac pain.

**Discussion:** Long-term steroid use has a well-documented risk of myopathy that imposes functional limitations on the patient and challenges for the medical provider. Proximal weakness from steroid myopathy affects support structures about the pelvic girdle and likely predisposes patients to somatic dysfunctions including sacroiliac pain. There are few if any prior reports in the literature to guide a manual medicine approach for patients with steroid myopathy.

**Conclusions:** The proximal weakness seen in steroid myopathy necessitates special considerations for a manual medicine approach to address sacroiliac pain.

#### **Poster 264**

##### **Critical Illness Myopathy: A Case Report and Review of the Literature.**

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**Disclosures:** T. Reilly, No Disclosures: I Have Nothing To Disclose.

**Case Description:** A 37-year-old woman with past medical history of asthma and hypertension presented to the Emergency Department (ED) with tachypnea, cyanosis, hypoxemia, hypercapnia, and acidosis. She was diagnosed with status asthmaticus, intubated, and transferred to the Intensive Care Unit (ICU), where she was treated with intravenous methylprednisolone and vecuronium. Numerous attempts to wean the patient off the ventilator failed. After 3 weeks she was successfully extubated and transferred to the floor. On the floor, exam revealed severe muscle weakness in all four limbs, muscle atrophy, and hyporeflexia. Serum levels of creatine kinase were mildly elevated and signs of myopathy were evident on electrophysiological studies. Critical Illness Myopathy (CIM) was suspected and confirmed by muscle biopsy.

**Program Description:** Montefiore Medical Center, Jacobi Medical Center.

**Setting:** University Hospital.

**Results or Clinical Course:** After a two week stay in acute rehab the patient made a full recovery and was discharged home at her preadmission functional ability.

**Discussion:** CIM usually presents as flaccid weakness, which tends to be diffuse, involving all limb muscles, neck flexors, and the diaphragm. The electrophysiological studies in CIM typically show the presence of normal sensory nerve action potentials (SNAP), small compound muscle action potentials (CMAP), small, brief, polyphasic motor unit potentials with a good interference pattern despite muscle weakness, and inexcitability of muscle to direct electrical stimulation. On muscle biopsy, light microscopy commonly shows angulated atrophic myofibers that are predominantly type 2, with basophilic cytoplasm on hematoxylin-eosin stain. Electron microscopy may show widespread loss of all filaments but often reveals selective loss of myosin filaments with relative sparing of actin filaments and Z discs.

**Conclusions:** In patients with status asthmaticus that require prolonged intubation the suspicion of CIM should be high. CIM develops in at least one third of ICU patients treated for status asthmaticus. The clinical diagnosis of CIM is challenging, and there are few distinctive features, other than electrodiagnostic studies and muscle biopsy, that help to distinguish it from other causes of myopathy.

#### **Poster 265**

##### **Abnormal Uterine Bleeding in a Postmenopausal Female Following Intra-articular Knee Injection with Triamcinolone: A Case Report.**

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**Disclosures:** L. James, No Disclosures: I Have Nothing To Disclose.

**Case Description:** A 71-year-old woman with left knee pain secondary to osteoarthritis. The patient received a triamcinolone injection in the left knee secondary to knee pain from osteoarthritis. A mixture of 3 mL of 1% lidocaine and 40mg (1mL) triamcinolone was injected into the joint capsule with a 25 gauge 1.5 inch needle from a superior-lateral approach using ultrasound guidance. 2 weeks following the injection, the patient reported vaginal spotting for 5 days that resolved spontaneously. The patient had a history of abnormal vaginal bleeding 1 year prior to the injection and was found to have a benign endocervical polyp that was removed at that time. She denied vaginal bleeding for 1 year prior to the injection, following polypectomy.

**Setting:** Multidisciplinary Clinic.

**Results or Clinical Course:** The patient's knee pain had improved significantly at 2 month follow up, and no further knee injections were warranted. Follow up with OB/GYN 8 months after her vaginal bleeding resolved, the patient was found to have no evidence of recurrent polyp on exam or recurrent episodes of vaginal bleeding.

**Discussion:** There are case reports of patients with abnormal uterine bleeding following epidural steroid injections. However, there are no specific cases described, to our knowledge, of abnormal uterine bleeding following knee injections with glucocorticoids. A proposed mechanism would be the potential effect of corticosteroids on the hypothalamic-pituitary-ovarian axis.

**Conclusions:** Abnormal uterine bleeding is a rare side effect of glucocorticoid injection in the knee of a postmenopausal patient.

#### **Poster 266**

##### **New Phenotype of Parsonage-Turner Syndrome involving Radial and Proximal Median Nerve: A Case Report.**

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**Disclosures:** M. B. McAuliffe, No Disclosures: I Have Nothing To Disclose.

**Case Description:** A 74-year-old woman with left shoulder pain and left hand weakness.

**Program Description:** A 74-year-old woman developed sudden left shoulder pain described as a tingling, burning, pins and needle sensation that radiated past her elbow into the volar and palmar aspect of her hand with sparing of the 4th and 5th digits. One month later, she developed left hand weakness that progressively worsened. Two months later, her pain started resolving. Physical exam demonstrated weakness in the left shoulder external rotators, triceps, extensor carpi radialis, FPL, FDP (index), flexor digitorum superficialis, and APB. Decreased sensation at the posterior and lateral forearm, dorsum of the thumb, index, long fingers, and palmar thumb, index and long fingers. Previous work-up included an inconclusive EMG/NCS, subclinical abnormalities on MRI of left