

spinal cord edema from C5 to the conus. The patient was previously independent and was transferred to acute inpatient rehabilitation dependent in mobility, transfers, and lower body ADLs.

Setting: Tertiary Care Hospital/Acute Inpatient Rehabilitation Hospital.

Results: The patient completed a course of acute inpatient rehabilitation and was discharged to home at a modified independent versus supervision for ADLs, transfers, mobility, and self-care including clean intermittent catheterization. At 6 months follow-up, he had continued participation in outpatient therapies and had maintained his discharge functional status and has returned to school.

Discussion: This is rare case of symptomatic spinal epidural lipomatosis (SEL) causing paraplegia in a child. SEL is the overgrowth of adipose tissue causing spinal cord impingement. This disorder is most commonly associated with long-term exogenous steroid use, but has also been linked to excess endogenous steroid levels and obesity. The presentation and severity of symptoms are directly related to the level of spinal cord involvement. While uncommon, SEL can result in spinal cord edema with resultant incomplete versus complete SCI. The treatment of SEL is often dependent upon the severity of the neurological symptoms. In the setting of obesity, conservative measures including weight loss versus spinal cord decompression are the mainstay treatment options to date; however, there are no clear protocols in terms of non-operative versus operative management.

Conclusions: This case is a rare example of paraplegia resulting from obesity-related SEL in a child and highlights the crisis of the childhood obesity epidemic in America. It also raises several important questions regarding appropriate treatment and prevention of recurrence. These questions currently are without definite answers, and more investigation and research is needed to establish a clear protocol for management of children with SEL.

Level of Evidence: Level V

Poster 476

Chronic Regional Pain Syndrome in a Thirteen-Year-Old Girl Treated with a Peripheral Nerve Catheter and Inpatient Rehabilitation: A Case Report

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Disclosures: Kendall Kent: I Have No Relevant Financial Relationships To Disclose

Case/Program Description: The patient presented to the outpatient rehabilitation clinic with a 6-month history of left foot and ankle pain accompanied by vasomotor, sudomotor/edema, motor/trophic signs and symptoms and allodynia following prolonged immobilization after recurrent ankle sprains. She had a diagnosis of CRPS type I, had seen multiple specialties and had failed to improve despite trials of the usual treatments including NSAID and other analgesics, gabapentin and outpatient physical therapy. Unabating pain, inability to bear weight on her left leg, school absenteeism, depression, sleep and strained family relationships were concerns. She was therefore admitted to the inpatient rehabilitation service where she underwent placement of a sciatic nerve catheter through which she received 6cc of 0.2% Ropivacaine per hour for nine days. Within seconds after catheter placement and starting the infusion striking improvements were noted in color and passive ROM. She was able to bear weight on her left leg that day. During her inpatient rehabilitation course with intensive multimodal therapy addressing mobility, self-care and psychological needs, she was able to progress from non-weight bearing to full weight bearing.

Setting: Pediatric Inpatient Rehabilitation Unit in an Academic Hospital.

Results: On discharge, patient reported 0/10 pain. Skin color had improved and was documented photographically. Range of motion

was 10° of dorsiflexion, 40° of plantar flexion, 20° of eversion and 10° of inversion. She was ambulating independently.

Discussion: This case is presented in support of admitting pediatric patients for rehabilitation to facilitate placement of a peripheral nerve catheter and comprehensive therapies including PT, OT and rehabilitation psychology.

Conclusions: Use of a peripheral nerve catheter combined with a multidisciplinary inpatient rehabilitation program was effective in treating CRPS in this adolescent who had failed conservative multimodal outpatient management.

Level of Evidence: Level V

Poster 477

Successful Prosthetic Rehabilitation of Fibular Hemimelia without Extensive Surgical Intervention: A Case Report

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Disclosures: Shiel Jhaveri: I Have No Relevant Financial Relationships To Disclose

Case/Program Description: Patient is a 16-year-old Cuban male with fibular hemimelia. At birth, patient presented with a short left femur, tibia, absent fibula, syndactyly of digits 2, 3 and oligodactyly. Equinovalgus required Achilles tendon lengthening surgery at 50 days old. He was treated since the age of 7 with prosthetic rehabilitation utilizing a custom ankle foot orthotic (AFO) device with steel componentry, a Greisinger single axis foot, and fiberglass resin socket. Upon inspection, the prosthetic was damaged and no longer fit appropriately. A custom AFO laminar carbon fiber socket was developed using titanium componentry and multiaxial carbon foot with a split toe. These specifications allow significant weight reduction for reduced cardiovascular burden and the dynamic components enable improved vocational and avocational activities.

Setting: Outpatient prosthetics clinic.

Results: Two months post fitting, patient states he is able to walk longer distances without fatigue, change directions more rapidly, and plans to enroll in sports. He continues to demonstrate a high level of function and success in utilization of his device.

Discussion: Fibular hemimelia is a rare disorder with an incidence of 1 in 40,000 births. Historically, it has been treated with extensive surgical leg lengthening procedures or amputation preceding prosthesis fitting. Amputation of the affected limb is the preferred treatment and exhibits excellent long term results, albeit with possible surgical complications. This case affords us the opportunity to address successful noninvasive treatment of a rare condition which has traditionally been treated surgically.

Conclusions: Fatigue is one factor that influences children to discontinue walking as they age. As activities of daily living increase energy costs and mobility and speed take priority, it is important to modify equipment to maintain maximal independence. Successful prosthetic rehabilitation is possible without extensive surgery in a patient with fibular hemimelia by utilizing a custom-made device in order to achieve modified independence.

Level of Evidence: Level V

Poster 478

A Review of the Health-Related Quality of Life in Pediatric Patients with Cerebral Palsy and Associated Spasticity

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