

**Design:** Prospective, randomized, case-control study.

**Setting:** Tertiary care and teaching hospital.

**Participants:** 180 patients of both the sexes in age group of more than 18 years satisfying the inclusion and exclusion criteria were randomized into three groups.

**Intervention:** Patients in group A were given one injection of PRP by anterior approach with home exercise therapy. Patients in group B were given one 2 ml injection of Corticosteroid injection by anterior approach with home exercise therapy. Patients in group C were given Ultrasonic Therapy for 7 minutes for 7 sittings with home exercise therapy.

**Outcome measures:** Patients were assessed in terms of improvement in Range of Motion, VAS, SPADI and DASH scores. The indices were measured at 0 weeks (pre-treatment); 3 weeks, 6 weeks, 12 weeks (follow-up).

**Results and outcomes:** The statistical analysis of the study shall be done and the results will be presented at the conference.

## O26

### Effect of suprascapular nerve block with lignocaine under USG guidance in periarticular shoulder on pain & range of motion

Simmi

**Objective of the study:** The effect of suprascapular nerve block with lignocaine under USG guidance in periarticular shoulder on pain & range of motion.

**Method used:** Patients with idiopathic periarticular shoulder attending PMR OPD from 1/November/2011 to 31/August/ 2012 were assessed for pain and restriction of range of motion with standard scales (goniometry and visual analog scale). These were measured subsequently on weekly basis for 1month, then, once in 2 weeks for second month. The results were analyzed and discussed.

**Results :** Three major groups of patients were those with - Rotator cuff disease, Stroke and Idiopathic. Earlier illnesses responded satisfactorily to SSNB, while late patients showed lesser response. Even in the latter group the favorable response was statistically significant.

**Conclusion:** SSNB under US guidance is a good interventional option in periarticular shoulder.

## O27

### Hydrodilatation in adhesive capsulitis of shoulder

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**Study Design:** Prospective study

**Objective:** To study the efficacy of USG guided hydrodilatation in case of adhesive capsulitis of shoulder.

**Materials and Methods:** 22 patients with adhesive capsulitis of the shoulder, not responded to 3 months conservative treatment (SPADI<10) were recruited for study after taking informed consent from patient. Patients were divided in to 2 groups. First group were

treated with USG guided hydrodilatation (by Normal saline & Bupivacaine) and followed by physical therapy and second group with physical therapy only. We were prospectively followed-up and clinically assessed at 2, 6 & 12 weeks. SPADI, disability index, pain index and passive ROM were used as outcome measures.

**Result:** Hydrodilatation produces faster resolution of pain and disability than physical therapy only.

**Conclusion:** From this study it is concluded that hydrodilatation with physical therapy produce fast recovery in adhesive capsulitis of the shoulder as compared to physical therapy only. From this small study, hydrodilatation is proved as a safe and effective treatment option for refractory case of adhesive capsulitis.

**Keywords:** Physical therapy, Hydrodilatation.

## O28

### Non surgical management of rotator cuff tear

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Rotator Cuff tears are amongst the most common pathological condition affecting the shoulder. Supraspinatus tendon is most frequently torn. Rotator cuff tears increase in incidence with age and less frequently they occur due to trauma. Sudden trauma or chronic overuse with repetitive overhead motion with internal or external rotation is probably mechanism of injury. A study was conducted in Sambhunath Pandit hospital and SSKM hospital Kolkata in the department of Physical Medicine and Rehabilitation (PMR) from March 2010 to august 2011. Two sample groups were selected, each having thirty seven subjects. The study was undertaken to evaluate the efficacy of nonsurgical rehabilitative management in rotator cuff tear. Also we have evaluated the effect of therapeutic exercise versus therapeutic exercise and ultrasound therapy. Rehabilitation in rotator cuff tear is aimed at managing impairment and minimizing disability. As a physiatrist, we have tried to provide a cost effective non surgical physiatric management so that residual disability is minimized and quality of life is improved. Regarding the incidence, bilateral involvement is more common. Also equal incidence is noted in both sexes. Housewives are affected most commonly but farmers, carpenters and manual labours are also significantly affected.

**Keywords:** Rotator cufftear, Supraspinatus tendon, Physiatric management, Ultrasound therapy(UST), Therapeutic exercise, Quality of life (QOL).

## O29

### Prolotherapy versus corticosteroid injections for the treatment of plantar fasciitis: a randomized controlled trial

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Chronic plantar fasciitis is a degenerative tissue condition and one of the most common causes of foot pain requiring professional care among adults. In this study we have compared improvement in pain and foot function in patients with chronic plantar fasciitis following P2G (prolotherapy) versus Triamcinolone acetonide injections.

**Methodology:** A double-blind randomized controlled trial was performed at Department of PMR, AIIMS, New Delhi with 10 participating adults with at least 3 months of refractory plantar fasciitis. The participants were randomized to either group using random number tables. Prolotherapy group received injection of 1ml P2G solution (phenol 1.2%, glycerine 12.5%, and dextrose 12.5% in sterile water). Steroid group received 1ml Triamcinolone acetonide injectable suspension 10mg/ml.

**Outcome Measures:** The primary outcome measures used were resting heel pain (0–10 Likert scale) and foot function index. Secondary outcome measure used was tablet count chart. Each was recorded at baseline, 4 and 12 weeks.

**Results:** The subjects who received prolotherapy reported to have improvement both in pain scores ( $7.32 \pm 1.1$  and  $4.08 \pm 1.0$  versus  $7.32 \pm 1.2$  and  $5.75 \pm 1.0$  at baseline and 4 weeks, respectively) and foot function scores ( $48.21 \pm 14.9$  and  $16.65 \pm 5.6$  versus  $40.98 \pm 12.1$  and  $26.85 \pm 3.4$  at baseline and 4 weeks, respectively) as compared to steroid group. Wilcoxon rank-sum (Mann-Whitney) test revealed a statistically significant improvement ( $p < 0.05$ ) with prolotherapy injections alone as well as in comparison to steroid group among both outcome measures at 1 month. The prolotherapy subjects also reported to have reduced analgesic tablet intake ( $p < 0.05$ ) as compared to steroid group. Results at 12 weeks are still awaited.

However, in both the treatment group there were no adverse events seen.

**Conclusions:** Prolotherapy with P2G solution was more effective in decreasing heel pain and improving foot function in subjects with refractory plantar fasciitis as compared to Steroid injections.

### O30

#### ALS functional rating scale, pulmonary function tests and speech like tasks – a follow up study on 17 patients with sporadic amyotrophic lateral sclerosis (ALS)

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**Introduction and Objective of the Study:** Sporadic ALS is a progressive neurodegenerative disease wherein dysarthria is a common symptom. This study looks at a few measures related to speech in these patients in due course of the disease.

**Method:** 17 adults with ALS (11 spinal onset and 6 bulbar onset; revised El Escorial criteria) out of 76 patients came for a follow up for a period of one year. 10 parameters i.e. Speech related subdivisions of ALS Functional Rating Scale (ALSFRS-Speech, Salivation, Swallowing and Breathing), Pulmonary Function Tests (Forced Vital Capacity and Maximum Voluntary Ventilation; %) and Measures of maximum performance of speech like tasks {Diadochokinetic rate (syllables/sec): DDK [pa], [ta], [ka] and [pataka]} were assessed at entry (baseline) and during each of their follow-ups.

**Results:** Statistically significant difference ( $p < 0.05$ ) between the baseline assessment (b/l) and the follow-up, with the follow-up having lower score, was observed on two parameters i.e. Speech score on ALSFRS and DDK [pataka]. The speech score on ALSFRS showed a significant difference ( $p = 0.041$ ) when the performance at b/l was compared with performance after 12 months. On the task of DDK [pataka], two comparisons showed a significant difference i.e. in Comparison between b/l vs. 2 months post b/l ( $p = 0.026$ ) and

in the comparison between b/l vs. 12 months post b/l ( $p = 0.011$ ). Although statistical significance could not be established for the rest of the parameters, in most of them, the mean at any of the follow-ups was lower than at the b/l.

**Conclusion:** Reduction in DDK [pataka] rate suggests progression in dysarthria. Lesser score of speech on ALSFRS on follow up suggests that alternative and augmentative communication would be the need in due course for these patients as the relentless disease progresses.

### O31

#### Indwelling catheter related pressure ulcer in groin in a tetraplegic patient: a case report

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Ulcer prevention and its management has been a challenge in the practice of Rehabilitation Medicine and more so, with the tetraplegic subjects. We herein report a case of a 42 year old tetraplegic male, who presented with multiple pressure ulcers and atypical Grade-II ulcer in the right groin due to mismanagement of indwelling urethral catheter. The primary aim of this report is to highlight an unusual and potentially preventable complication of indwelling urethral catheter in patients with SCI. Groin is extremely an unusual site for ulcer and no similar case has been previously reported with an ulcer in the groin in a spinal cord injury (SCI) patients. This case highlights the importance of proper positioning of indwelling urethral catheter, its care, and prevention of medical devices related (iatrogenic) complications in patients undergoing treatment.

**Conclusion:** An improperly positioned indwelling urethral catheter may result in ulcers from pressure or constant soiling over the thighs in patients with SCI. Absence of sensation, weakness of both the legs and lack of knowledge about indwelling catheter care contributed to this ulcer formation. Hence it is important to properly position the indwelling urethral catheters.

### O32

#### Functional outcome of a new rehabilitation approach in severe cerebral palsy (GMFCS IV and V)

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**Objectives of Investigation:** Children with Cerebral Palsy (CP) with Gross Motor Classification System (GMFCS) levels of IV and V are non-ambulatory and at a greater risk of complications such as osteopenia, low energy fractures, hip displacement and musculoskeletal pain. Prevention of these complications requires that these children are made ambulant with or without support. However, the recommended rehabilitation strategy at present for these groups is wheel chair aided mobility leading to a “Catch 22” situation. The purpose of the study was to find out the outcome of Single Event Multilevel Lever Arm Restoration and Anti Spasticity Surgery (SEMLARASS) and rehabilitation in children with CP with GMFCS levels IV and V.