

internal fixation. 4 months later metatarsophalangeal arthrodesis is performed for management of hallux flexion deformity. Also no binding was found in 3rd metatarsal fracture and reduced plate being fixed. It was decided not to apply internal fixation of fractures of the second and fourth metatarsal as they are aligned in the anterior-posterior and lateral plane. Five months later is assessed by orthopedics where the patient indicates pain. Radiographs confirm delayed union of the fracture of the second metatarsal and hallux is referred to physiatry for service management. A total of 6 sessions of shock wave therapy on hallux and second metatarsal each session apply 3000 LPM to 14 Hz and a 2 bar intensity with 1-month intervals initially and then every week are made. **Assessment/Results:** At 4 months post-shock wave therapy the patient is assessed by orthopedics again; four months later new x-ray evidence of healing of hallux and the second metatarsal and clinically without pain at the forefoot. **Discussion:** This is the first reported case to our knowledge of shock wave therapy in the treatment of delayed union in forefoot. **Conclusion:** The shock wave therapy seems to be an option for the management of non-unions however more studies should be conducted to assess the effectiveness and risks of these treatments.

No. 349 Effectiveness of Individualized Physiotherapy Program of Exercise on Functional Capacity in Community-Dwelling Elders.

Abigail Flores Díaz; M. María Cristina Enríquez-Reyna; Rosa María Cruz Castruita; Hugo Aguirre Zuazua.

Objective: To evaluate the effectiveness of individualized physiotherapy program of exercise with therapeutic microwave diathermy (MD) and functional electrical stimulation therapy (FES) on functional capacity in elderly people of the community. **Design:** Prospective intervention study with a before and after design. **Setting:** Community elders from a senior center in a community at Torreon Coahuila Mexico. **Participants:** A total of 26 elder people of the community with functional pain were included in this study. Participants were separated into 2 groups (n= 13). **Interventions:** Individualized physiotherapy program included thermotherapy, MD and/or FES by 25 minutes and after that 30 minutes of assisted and functional therapeutic exercise. Experimental group took part of an individualized physiotherapy program with therapeutic MD or FES and functional exercise. An hour session was lead by physiotherapists two times weekly for five weeks. Control group received standard care by the senior center. The program ongoing with functional passive and assisted active movements-taking account individual joint restrictions-towards progressively increase of the range of motion and flexibility; and finally relaxation exercises for 5 minutes. Therapeutic MD was with a stimulation frequency of 1 MHz (80 watts/10 minutes) and FES was used when it was determined that the patient needed assistance. **Main Outcome Measures:** Movement range with goniometry, manual muscle test, and Tinetti performance oriented mobility assessment. **Level of Evidence:** Level 2 research results addressing clinical outcomes using some method of scientific investigation. **Results:** Participants in experimental group had significant improvements in shoulder range of movement (from 116° to 146° t = -3.083 p = .009), level of pain, and functional capacity when compared with their initial status (p < 0.05). There were no statistically differences in control group. **Conclusions:** The exercise program with therapeutic MD and FES may be preferable for a better functional capacity than exercise alone.

No. 350 Syndrome de Pellegrini Stieda: Reporte De Un Caso. Gil Chang Victor; Valerio Gil Lilem; Gil Chinchilla; Laura.

Disclosure: None. **Patient:** A 55-year-old woman. **Case Description:** After a distorting trauma on the right knee eight weeks ago when she was walking on a irregular sidewalk. She was initially managed by the orthopedic surgeon. The x-rays of the right was normal. He treated her with a cast with knee extension by 3 weeks; however the patient did not improve. Then a CT scan revealed a calcification on the soft tissue adjacent to the medial femoral condyle. She was referred to the rehabilitation department

because of medial pain and limitation of range of motion of her knee.

Assessment/Results: After six weeks she continues having right knee pain especially at the medial side of the right knee and motion between 0-80. Then she was injected with triamcinolone acetate 25 mg and lidocaine 1% adjacent to the medial femoral condyle. She initiated a physiotherapy program consisting of ultrasound, electrical nerve stimulation, improvement of range of motion and strengthening of quadriceps and hamstring muscles. **Discussion:** Pellegrini stieda syndrome (PS) is the presence of calcification of soft tissue adjacent to the medial condyle secondary to trauma associated with knee and decreased range of motion of this joint. Pellegrini stieda syndrome although rare should be considered. The response to physiatric treatment was excellent controlling pain and improving the range of motion. **Conclusion:** The physiatric management was excellent in the recovery of this rare syndrome.

No. 351 Influence of Sarcopenic Obesity on Osteoporosis and Vertebral Fragility Fractures in Post-Menopausal Women.

Francesca Gimigliano; Alessandro De Sire; Antimo Moretti; Giovanni Iolascon.

Objective: The aim of our retrospective case-control study is to evaluate the influence of sarcopenic obesity on osteoporosis and vertebral fragility fractures in post-menopausal women. **Setting:** Outpatients clinic university hospital. **Participants:** Participants were recruited among post-menopausal women aged 50 years or older with a BMI >30 kg/m² from January 2011 through December 2013. According to Newman et al, definition based on appendicular lean mass adjusted for height and body fat mass (residuals) these patients were classified in two groups: sarcopenic obese and non sarcopenic obese. **Main Outcome Measures:** We evaluated bone mineral density at lumbar spine, femoral neck, and total body DXA scans. Vertebral fragility fractures were identified using the technique of lateral vertebral assessment (LVA) of DXA scan. **Results:** We evaluated 133 women mean aged 63.71 years ± 8.59 (min. 50 years; max. 84 years) with a mean BMI of 34.31 ± 3.96 kg/m² (min. 30.04; max. 53.97). Forty-seven patients (35.33%) of our population had sarcopenic obesity 19 of these patients (40.43%) were osteoporotic and 15 (31.91%) had a vertebral fracture: 8 (17.02%) with a single vertebral fracture and 7 (14.89%) with multiple vertebral fractures. Sarcopenic obesity was associated with a higher risk of osteoporosis (odds ratio or 1.20; 95% confidence interval CI 0.25-0.58) and a higher risk of vertebral fractures (OR 1.21; 95% CI 0.56-2.62). **Conclusions:** In our cohort of post-menopausal women, sarcopenic obesity was associated with a higher risk of osteoporosis and vertebral fragility fractures.

No. 353 Effectiveness of Rehabilitation for Elderly Patients With Bilateral Femoral Neck Fractures.

Masashi Haga; Hideki Yumikake; Shiro Hanakawa; Naoya Kobayashi.

Objective: With increasing average life expectancy the incidence of femoral neck fractures (FNFs) is tending to increase among elderly people in Japan. We may encounter cases of contralateral FNF occurring after unilateral FNF. However there are few reports to date on bilateral FNFs. Here we reviewed cases of bilateral FNFs and report their findings and characteristics. **Setting:** A rehabilitation center of the 119-bed general hospital in Japan between 2011 and 2013. **Participants:** Five patients with bilateral FNFs during the study period. **Interventions:** According to our clinical path early ambulation and gait training with an applied load were initiated from the day following surgery. Patients also received the tailored multifaceted interventions including trainings for joint range of motion, muscle strength maintenance and systemic adjustment. **Main Outcome Measures:** We reviewed medical records to identify age at fracture onset, hospitalization period, changes in walking level (independent or assisted walking/ nonambulatory), and residence after discharge.