MSD). MG was suspected and this diagnosis was confirmed by positive prostigmine test and typical electromyographic findings. Antibodies to acetylcholine receptors were not detected. The patient underwent thymectomy in Mars 1996. Then, under oral anticholinesterase therapy and corticosteroids (60 mg of prednisone daily), her condition stabilised, but her clinical status worsened when the dose of prednisone was tapered under 20 mg daily. She finally improved after institution of ciclosporine (5 mg/Kg/daily) in association with steroid therapy.

Results

Conclusion

FRI0249 CORRELATION BETWEEN SERUM MUSCLE ENZYMES, MUSCLE WEAKNESS AND MUSCLE PATHOLOGY IN PATIENTS WITH POLYMYOSITIS

¹W Louthrenoo, ¹N Weerayutwattana, ²N Lertprasertsuke, ¹W Sukitawut. ¹Division of Rheumatology, Department of Medicine; ²Department of Pathology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

10.1136/annrheumdis-2001.570

Background Polymyositis (PM) is a chronic inflammatory myopathy of unclear aetiology. Clinical features of PM have been well described, but the study of the correlation between serum muscle enzymes, muscle weakness and muscle pathology is limited.

Objectives We reported the clinical correlation between serum muscle enzymes, muscle weakness and muscle pathology in Thai patients with PM.

Methods A retrospective chart review was carried out in patients with PM, age >16, who had muscle biopsy available for review, and seen during January 1986 – December 1999. The diagnosis of PM followed Bohan and Peter's criteria. The degree of muscle weakness was graded 0–5. The degree of muscle inflammation was scored 0–4 (0%, 1–10%, 11–25%, 26–50% and >50% of inflammatory cell infiltration, respectively), and the degree of muscle destruction was scored 0–4 (0%, 1–10%, 11–25%, 26–50% and >50% of muscle fibre destruction respectively). Serum muscle enzymes including CPK, LDH and AST, which determined within 7 days prior to muscle biopsy, were used for analysis.

Results Of 163 patients, 123 had muscle biopsy performed. Only 102 specimens were available for review, of which 2 that showed granulomatous myositis were excluded due to the possibility of tuberculous myositis. Therefore, 100 charts were included for analysis. There were 22 males and 78 females, with their mean $\pm$ SD age and duration of disease of 45.0 ± 13.9 years and 6.3 ± 13.4 months, respectively. The clinical diagnoses were idiopathic PM in 37 cases, idiopathic dermatomyositis in 13, myositis associated with malignancy in 5, and PM associated with connective tissue disease in 45 (SLE in 16 cases, scleroderma in 22, MCTD in 6, and PAN in 1). The mean $\pm$ SD scores of proximal muscle weakness, muscle inflammation and destruction were 3.2 ± 0.8 , 1.5 ± 1.6 and 2.2 ± 1.7 , respectively. Serum muscle enzymes including CPK, LDH and AST were elevated in 87%, 92% and 82%, respectively, with a mean $\pm$ SD level of $2,352 \pm 3,239$ U/L, 750 ± 420 U/L and 196 ± 193 U/L, respectively. Seventy-six percent had abnormal EMG findings that were compatible with myositis. There was a good correlation between the level of serum muscle enzymes and the degree of muscle inflammation and destruction ($p < 0.02$). The degree of weakness correlated well with the degree of muscle inflammation and destruction ($p < 0.05$ and < 0.01 ,

respectively). There was no significant correlation between ESR and serum muscle enzymes, muscle weakness or muscle pathology. Patients with idiopathic PM had more severe muscle pathology than patients with PM associated with connective tissue disease.

Conclusion Serum muscle enzymes showed a good correlation with muscle pathology. The degree of muscle weakness correlated well with the degree of muscle destruction. ESR had a limited value in patients with PM.

FRI0245 CLINICAL COURSE AND OUTCOME IN MIXED CONNECTIVE TISSUE DISEASE

A Georgiadis, D Bougias, PV Voulgari, AA Drosos. Division of Rheumatology, Department of Internal Medicine, Medical School, University of Ioannina, Ioannina, Greece

10.1136/annrheumdis-2001.571

Background

Objectives To investigate the clinical course and outcome of patients diagnosed with mixed connective tissue disease (MCTD).

Methods Since 1981, forty-four patients with MCTD have been diagnosed and followed up until December 2000. We reevaluated all these patients by entering the demographic, clinical, laboratory, radiological and therapeutic disease characteristics in a database.

Results Thirty-nine patients had the typical feature of MCTD, 3 developed diffuse systemic sclerosis and 2 systemic lupus erythematosus. Thirty-six were female and 3 male. The mean age was 51.6 (11), the disease duration was 12.9 (5.2) (range 1–25 years) and the mean follow up was 6.6 (4.9) (range 1–19 years). Almost all patients (95%) presented symptoms and signs of Raynaud's phenomenon, arthritis and arthralgias evolving the small joints of the hands. Pulmonary dysfunction was observed in 44%, while pulmonary hypertension and renal involvement in 5% of patients. All patients had positive U1Sn-RNP antibodies and high titers of antinuclear antibodies. Only 10% of our patients also had Ro (SSA) antibodies.

Conclusion It seems that our patients presented the typical clinical and serological features of MCTD. The majority of our patients had favorable outcomes, with pulmonary dysfunction being the most frequent, while pulmonary hypertension and renal involvement was observed in only a few cases.

FRI0251 MUSCULOSKELETAL DISORDERS OF THE UPPER LIMB AND WORKRELATED FACTORS

¹M De la Hera, ²M Gandarillas. ¹Medical Services, ENSA, Mallatón; ²Medical Services, ASTANDER, Astillero, Spain

10.1136/annrheumdis-2001.572

Background

Objectives To study the association between upper extremity physical requirements (UEPR) at workplace and soft tissue lesions.

Methods A retrospective analysis (from 1–01–95 to 31–12–99) was carried out comparing temporal disability due to lateral, medial epicondylitis (LE), (ME) and shoulder tendinitis (ST) in two factories with different UEPR: a shipyard of 305 workers (AS) with high UEPR and a nuclear components manufacturing plant of 405 workers (EN) with low/medium UEPR. The UEPR