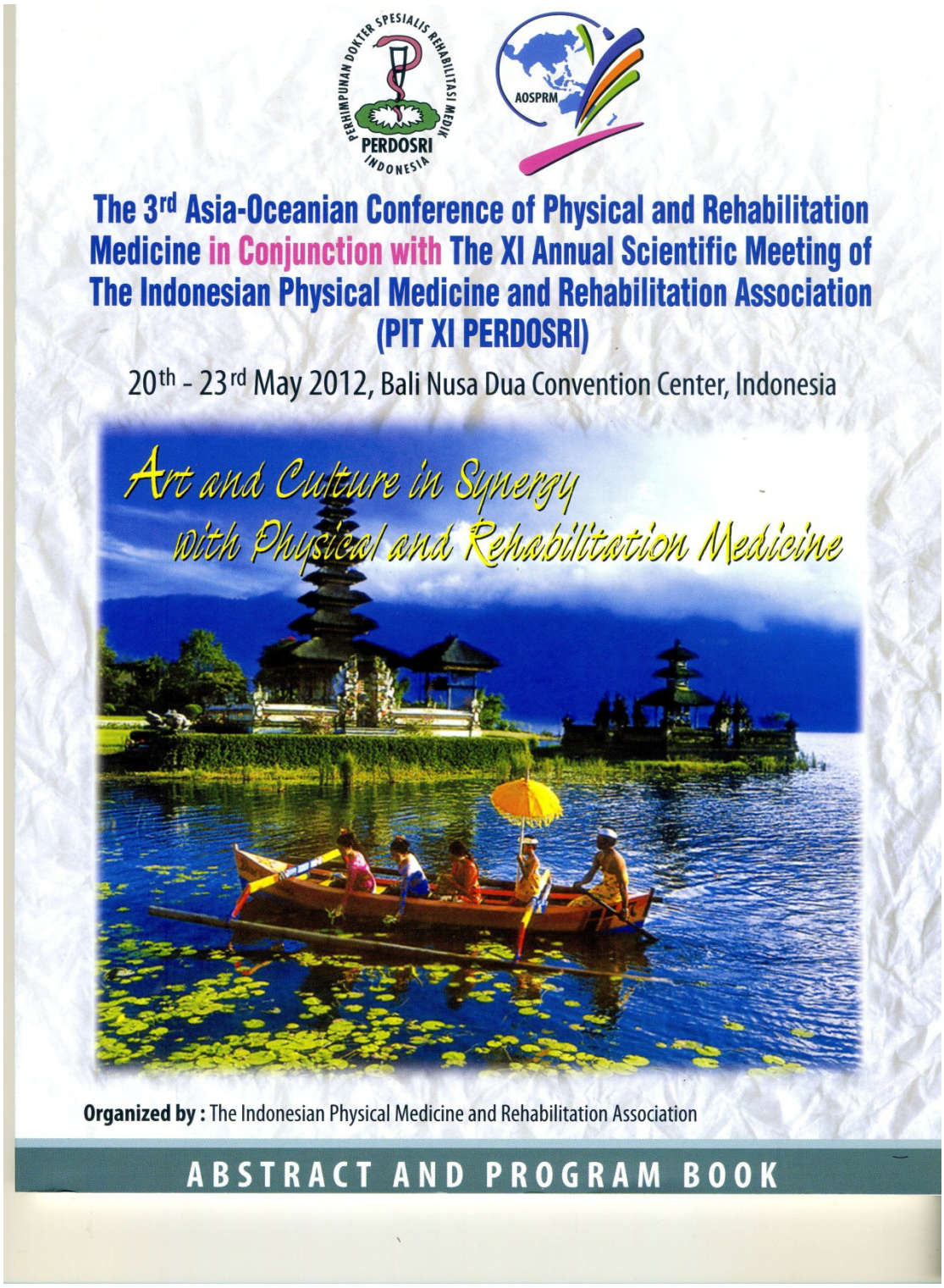
Li-Wei Chou[*], Yueh-Ling Hsieh, Chang-Zern Hong, Shun-An Yang The Effects of Dry Needling Therapy on Contents of Beta-endorphin in The Myofascial Trigger Point. The 3rd Asia-Oceanian Conference of Physical and Rehabilitation Medicine.20th-23rd May 2012, Bali Nusa Dua Convention Center, Indonesia (Poster presentation)



POSTER PRESENTATION
MONDAY, 21st MAY 2012

0521PP021

POTT'S DISEASE WITH CERVICAL DISLOCATION: A CASE REPORT

H.N. Nurhikmah, I. Lukitra Wardhani
Department of Physical Medicine and Rehabilitation, School of Medicine Airlangga University, Dr. Soetomo General Hospital, Surabaya, Indonesia

Purpose: To present the case of patient with weakness all extremities due to pott's disease and recovered almost fully after comprehensive rehabilitation programs. *Case:* A case of female, 18 years old with tetraplegia C3 ASIA C due to Pott's disease and dislocation of C5-C6. The problems were non ambulation, weakness of all extremities, sensory loss below dermatomes C3, and total dependency. MRI showed a paravertebral abscess formation on the level of C3 until C6 and dislocation of C5 to C6. She underwent debridement and stabilization surgery and took anti tuberculosis drugs. The patient was then mobilized using Philadelphia cervical collar. *Results:* After 3 months of intensive rehabilitation, the ROM could be maintain, the sensory and strength of all extremities was improved, she can do the daily activities living independently and patient could ambulate. *Conclusion:* Pott's disease is the most common extrapulmonary manifestation of tuberculosis in the spine, which is caused by Mycobacterium tuberculosis. With a comprehensive rehabilitation management, patient with C3 Tetraplegia ASIA C due to of Pott's disease could improve and achieve the functional capacity and her quality of life.

0521PP022

INTRATHECAL BACLOFEN THERAPY FOR SEVERE SPASTICITY

Yasutaka Takagi[1], Hiroshi Yamada[1], Yoshimitsu Kanazawa[1], Hidehumi Ebara[1], Yuu Mikami[1], Takashi Yamamoto[1], Kenji Kagechika[2]
[1]Department of Orthopaedic Surgery, Tonami General Hospital, Tonami, [2]Department of Rehabilitation, Kanazawa Medical University, Uchinada, Japan

Purpose: To determine the outcome of intrathecal baclofen (ITB) therapy in patients with severe spasticity. *Materials and Methods:* Baclofen 50 £gg was administered to 23 patients who had severe spasticity due to spinal cord injury (21), cerebral infarction (1), hereditary spastic paraplegia (1) in lumbar puncture as a schooling injection, and the pump burial operation were performed to 16 patients. The change of spasticity was evaluated by the Ashworth score points. *Results:* The improvement of the spasticity was remarkably admitted in all cases, and the pain from the spasticity disappeared. The pain was reduced by adjusting the amount of the medicine without the exacerbation of the spasticity. Two catheter-related complications were found. Additional operations of the exchange of the catheter were needed. The improvement of the spasticity was recovered of additional operations. *Conclusion:* In Japan, 25 cases have been clinically examined since 2002, and remarkable clinical effects were proved. And since April 2006, 627 cases have been implanted of a programmable subcutaneous pump by the end of December 2011. The spasticity of the patients who doesn't obtain the improvement by taking oral treatment is improved enough, and the reduction of the pain is seen. ITB therapeutic effect is as expected and could improve the patient and family's quality of life that can be proved from the experience of these series.

0521PP023

PAPASE AS TREATMENT OPTION FOR OVERGRANULATING WOUND

M.M. Nadia, T.Y. Chung
Department of Rehabilitation Medicine, Faculty of Medicine, University of Malaya, Malaysia

Purpose: Overgranulation (also commonly known as hypergranulation) is a common problem in chronic wound management. *Materials and Methods*: We described a case of a 57-year-old lady with chronic left diabetic foot ulcer for 6 years complicated with overgranulation for a year. She was treated with multiple treatment options among which include wait and see option and hydrocortisone 1% which were not effective and have delayed the healing process of her ulcer. We then decided to use crushed papase tablet applied to her ulcer after a normal saline dressing and prior to an application of secondary dressing. She was clearly instructed on the dressing technique to be done daily at home and only been monitored weekly in foot care clinic. *Results*: The over-granulating tissue was resolved within a month and we are currently continuing her care to promote epithelization. *Conclusion*: Papase is a brand name for papain which is derived from Carica papaya. It contains cysteine protease that could digest protein substrates. Its usage in wound management to date was described as enzymatic debridement of necrotic tissue. However, its potential as over-granulation treatment option needs to be explored further in a larger study sample.

0521PP024

THE EFFECTS OF DRY NEEDLING THERAPY INDUCED BETA-ENDORPHIN IN THE MYOFASCIAL TRIGGER POINTS

Li-Wei Chou, yueh-Ling Hsieh, Chang-Zern Hong, Shun-An yang
Department of Physical Medicine and Rehabilitation, China Medical University Hospital, Taichung, School of Chinese Medicine, College of Chinese Medicine, China Medical University, Taichung, Department of Physical Therapy, China Medical University, Taichung, Department of Physical Therapy, Hungkuang University, Taichung, Taiwan

Purpose: Dry needling at the myofascial trigger points (MTrPs) is an effective treatment for management of myofascial pain syndrome. Vascular endothelial growth factor (VEGF) is a signal protein produced by cells that stimulates vasculogenesis and angiogenesis. It is part of the system that restores the oxygen supply to tissues when blood circulation is inadequate. The opioid peptide, £]-endorphin, has been shown to involve in analgesia. However, biochemical effects of dry needling associated with antinociception were still unclear. To have a better understanding on the analgesic effects of dry needling for treating MTrPs, the levels of £]-endorphin and VEGF of the skeletal muscles were investigated. *Materials and Methods:* New Zealand rabbits (2.5–3.0 kg) were investigated in this study. Dry needling or sham operation was applied to the myofascial trigger spots (MTrSs, equivalent to human MTrP) of the biceps femoris for 3 min per day for one and five consecutive days. The protein levels of £]-endorphin and VEGF were measured by western blot immediately after treatment and on the follow-up days of the treatments. *Results:* The 5-day dry needling treatment enhanced £]-endorphin and VEGF levels, but not for only 1-day treatment. These proteins were also increased 5 days after ceasing 1-day and 5-day dry needling. *Conclusion:* Long-term dry needling can increase the biochemical associated with analgesia and angiogenesis, £]-endorphin and VEGF, to modulate pain and enhance circulation in skeletal muscles containing MTrSs.