## 中華民國風濕病醫學會第27週年中華民國免疫學會第31週年

2009 Joint Annual Meeting

27th Annual Meeting of the Rheumatology Association, Taiwan

31st Annual Meeting of the Chinese Society of Immunology



SVIII- B3 14:46~14:54	Associations of serum leptin with asthma and allergic rhinitis in children. 血清瘦體素在兒童氣喘及過敏性鼻炎之間的相關性 <u>郭業文</u> 孫海倫 廖培汾 顧明修 許績男 呂克恒 台中中山醫學大學附設醫院
14:54~15:00	Discussion •
15:00~15:20	Break
15:20~16:00	Session X-A 座長:曾瑞成、李修身
SX-A1 15:20~15:28	Nonlinear Relationship between Serum Uric Acid and mortality for all causes and Cardiovascular Diseases among 471235 Subjects 尿酸與總體及心血管疾病死亡的非線性關係 郭旭甫、史麗珠、余光輝、羅淑芬 林口長庚醫院過敏免疫風濕科
SX - A2 15:28~15:36	A33/B58/Cw10 Alleles May Modulate Radiographic Development of Bamboo Spine in Taiwanese Patients with Primary Ankylosing Spondylitis A33/B58/Cw10 與台灣僵直性脊椎炎病人 重竹竿腰病變密切相關 賴寧生 劉素勤 童建學 黃光永 許寶寶 呂明錡 慈濟大林綜合醫院 過敏免疫風濕科
SX- A3 15:36~15:44	Development of Human HLA-B27 Heavy Chain-Specific Monoclonal Antibody and Recognition of Significance of B27-Heavy Chain Dimer in Disease Pathogenesis of Ankylosing Spondylitis 建置人類HLA-B27 heavy Chain 特異性單株抗體進一步確認Heavy Chain Dimer 在僵直性脊椎炎病理機轉的重要性 游惠君 劉素琴 呂明錡 賴寧生 慈濟大林綜合醫院 過敏免疫風濕科
SX - A4 15:44~15:52	Magnetic Resonance Imaging in Patients with Inflammatory Back Pain 發炎性背痛病人之核磁共振影像評估 賴寧生 黃光永 許寶寶 童建學 呂明錡 慈濟大林綜合醫院 過敏免疫風濕科
15:52~16:00	Discussion
16:00~16:40	Session X-B 座長: 陳堃宏、魏正宗
SX-B1 16:00~16:08	Higher Physical Pain Tolerability, but Greater Affective-attentional Pain and Mental-processing Impairment in Male Fibromyalgia: A Neuroimaging Perspective from Tc-99m ECD brain SPECT 男性纖維肌痛症病人的疼痛與認知異常:腦部單光子放射斷層攝影的影像表現 陳俊宏'、黃春明'、黃柏豪'、顏國揚'、孫盛生'、高嘉鴻'、謝德鈞'中國醫藥大學附設醫院 風濕免疫科' 核醫科'

## Higher Physical Pain Tolerability, but Greater Affective-attentional Pain and Mental-processing Impairment in Male Fibromyalgia: A Neuroimaging Perspective from Tc-99m ECD brain SPECT

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## 男性纖維肌痛症病人的疼痛與認知異常:腦部單光子放射斷層攝影的影像表現

Introduction: Fibromyalgia (FM) is characterized by chronic wide-spread pain, fatigue and un-restorative sleep. A gender difference of FM in the prevalence, clinical symptoms and treatment response has been reported. However, the neuronal activation of FM has been reported mostly in women. We used regional cerebral blood (rCBF) perfusion measured by Tc-99m ECD brain SPECT to investigate the pain perception of male patients.

Method and Material: Twenty-one pairs of age-matched male and female FM patients fitting 1990 ACI classification criteria, and 17 controls (10 men with remitted gout or palindromic rheumatism, and 7 women with treated allergic rhinitis) were enrolled in this study. A brain SPECT was performed on all subjects at resting stage. SPM-99 was used to compare the group difference of rCBF, voxel-by-voxel.

Results: Male patients was demonstrated reduced rCBF over (1) regions of physical pain perception including thalamus, caudate, lentiform nucleus, primary and secondary somatosensory cortices (S1, S2), (2) neuronal network of the affective-attentional domain of pain, including bilateral anterior cingulate cortex (ACC), posterior cingulate cortex (PCC), insula, right hippocampus, and (3) mental processing regions of fronto-striatal and fronto-occipital tracks over bilateral prefrontal cortex (PFC), middle temporal lobes, and visual cortices of occipital lobes. The rCBF in female FM as compared with male patients significantly increased over bilateral S1, S2, PCC, insula, and decreased over bilateral PFC, which may account for women with reduced pain tolerability. Lower rCBF in male patients than female over insula, temporal lobes and visual cortices may lead to a greater involvement of the affective-attentional domain of pain and cognitive dysfunction.

Conclusion: A sex-divergent neurotic pathways in FM may have explained the gender difference of clinical presentation and treatment response. Further investigation for its clinical application is needed in the future.