• 計畫中文名稱	95 年度「獎勵醫療機構之醫事人員從事臨床研究計畫」		
• 計畫英文名稱	--		
• 系統編號	PG9606-0382	• 研究性質	應用研究
• 計畫編號	DOH95-PA-1053-F	• 研究方式	學術補助
• 主管機關	行政院衛生署藥政處	• 研究期間	9508 ~ 9512
• 執行機構	台北醫學大學神經科		
• 年度	95 年	• 研究經費	605 千元
• 研究領域	臨床醫學類		
• 研究人員	袁瑞昱,陳韋達,胡朝榮		
• 中文關鍵字	；；；；；；；；		
• 英文關鍵字	；；；；；；；；		
• 中文摘要	在神經科門診病患中有超過半數是屬於慢性神經疾患而其中偏頭痛、慢性神經炎及阿茲海默症是相當重要的部分。因此，本計劃將以此三類病患進行表徵、治療及基因之研究本計劃分成三個子計劃。子計劃一、是研究與月經相關偏頭痛患者之週期性改變，主要是探討與月經相關偏頭痛患者其觸覺與痛覺閾值是否隨著月經週期改變。我們將針對 10 位患有典型偏頭痛之女性病患進行 tactile detection threshold (TDT) and pressure pain threshold (PPT)的檢查，以評估並將此結果與偏頭痛之嚴重度和月經週期相比較。子計劃二、是研究阿茲海默症病人之睡眠結構與生理時鐘基因表達，是以較客觀而詳細之睡眠多功能檢查 polysomnography, PSG)爲工具，研究 50 位 AD 病人之睡眠結構，尋找 AD 病人之專一睡眠障礙形式；同時測量生理時鐘基因表達之改變，尋找 AD 病人睡眠障礙之分子機轉。子計劃三、是研究單一劑皮下注射肉毒桿菌素對糖尿病足部神經痛之治療療效。我們將以雙盲隨機之方式針對三十位慢性糖尿病病患具長期足部因神經炎疼痛，施打單一劑量之肉毒桿菌素，偵測此療法是否降低疼痛之嚴重度。		
• 英文摘要	Among the chronic neurological disorders regularly seen in the outpatient clinics, migraine, Alzheimer’s disease and neuorpahic pain of DM patients are in the list of most common disorders. Here our department set up a group projects to study the following three subjects. The first project is to study the cyclic somatic sensory change in relating to female migraine patients during menstruation cycle. Migraine is a common neurological disorder to which women have a significantly higher susceptibility than men. Clinically, about a half of women report an association between migraine and menstruation, which has been verified by some diary card studies. Intriguingly, menstrual cycle can affect the information		

	processing of somatic or other (eg. visual) sensory modalities, as demonstrated by some human or animal studies. We thus hypothesize that female gonadal hormone might result in the development of migraine via alterations upon sensory transmission (eg. decreased pain threshold). This study longitudinally follows tactile detection threshold (TDT) and pressure pain threshold (PPT) in MRM patients, aiming to identify the gonadal hormone effects upon somatic sensation across different phases of menstrual cycle. In comparison with phase-specific data from normal controls, the findings can justify the underlying somatosensory hypersensitivity in MRM patients. The second project is to study the changes of sleep architecture in AD patients and to survey the expression of circadian genes in mRNA level among AD patients and controls. Alzheimer's disease (AD) is a neurodegenerative disease of insidious onset, characterized by memory loss, cognitive dysfunctions, behavioral disturbances and various kinds of psychiatric manifestations. Sleep disturbance is one of BPSD and sleep/awake cycle is a part of circadian rhythm. The molecular mechanism, which consists of a transcriptional feed back loop involving expression of at least nine circadian genes is clearer now. In our recent study, disturbance of circadian genes was found in dementia patients. The changes of expression of circadian genes might contribute to sleep disturbance in AD patients. Therefore, this study will explore the changes of sleep architecture and the expression of circadian genes in AD patients. We will collect the blood samples of every patient and control at three time points. The first one is at the first REM, the second one is at the slow wave sleep and the third one is at the awakening in the morning. RNA will be extracted by use of commercial kits and mRNA of nine circadian genes will be surveyed by RT-PCR. These genes include PER1, PER2, PER3, CRY1, CRY2, CLOCK, BMAL1, TIM and CK1 . We will compare the mRNA expression levels in AD, AD with BPSD and controls. These findings will be correlated with the PSG findings. The third project is to determine the efficacy of BOTOX® intra-dermal (i.d.) injection for reduction of neuropathic foot pain in diabetics and to establish a treatment regimen of BOTOX® i.d. injection for reduction of diabetic foot pain that does not interfere with normal ambulation. Effective treatment of neuropathic foot pain in diabetic patients is very important to improve their quality of life. There are many medications used to reduce the diabetic neuropathic pain, including anti-convulsants, anti-depressants or analgesics, but none is universally satisfied. A few previous studies employing BOTOX® i.d. injection for control of trigeminal neuralgia, post-herpes neuralgia indicate that BOTOX® was effective in controlling neuropathic pain. Intra-dermal injection of BOTOX® to the dorsum of the foot in diabetics should be effective in controlling diabetes-associated polyneuropathic pain of the foot. The present study is a single-center, randomized, double-blinded, cross-over study of BOTOX® in diabetic neuropathic foot pain.