• 系統編號	RC8910-0601		
• 計畫中文名稱	以免疫組織染色法定位介於培養牙齦組織及豬皮膠原蛋白膜片間之黏連分子的存在		
• 計畫英文名稱	Immunohistologic Localization of Adhesion Molecules in the Interface between Porcine Dermal Collagen Membrane and Gingival Tissue		
• 主管機關	行政院國家科學委員會	• 計畫編號	NSC88-2314-B038-138
• 執行機構	台北醫學院牙醫系		
• 本期期間	8708 ~ 8807		
• 報告頁數	0 頁	• 使用語言	中文
• 研究人員	吕炫? Lu, Hsein-Kun		
• 中文關鍵字	牙齦組織;豬皮膠原蛋白膜;黏著分子;免疫組織染色法定位法		
• 英文關鍵字	Gingival tissue; Porcine dermal collagen membrane; Adhesion molecule; Immunohistologic localization		
• 中文摘要	本研究的目的是要來探討將豬皮膠原蛋白(PDCM)於植入活體之模式中,是否會與結締組織產生黏連的作用,以進一步瞭解膜片於組織中被吸收之機轉。本實驗首先直接採用 3%GA-PDCM 植入老鼠牙齦下,以每組 2 隻老鼠分 9 組,經由 1,2,3,5,7,10,14,21,28 天, 犧牲老鼠。取出標本之後,五分之一的標本用福馬林固定,石蠟包埋;其餘部分直接急速冷凍包埋。再利用 H&E stain、Alcian blue-PAS stain,觀察形態及組織中基質的變化及利用免疫染色 ABC 法染色觀察 Fibronectin、Integrin.alpha.2、.alpha.3、.alpha.6.beta.1 的分佈。在此活體實驗中發現,牙齦結締組織與膜片接觸良好,具有組織整合的現象。於第一到三天時多爲 Neutrophils 的浸潤,實驗期間 Fibronectin、Integrin.alpha.2、.alpha.3 於組織中呈現陽性反應,促使細胞、血管往膜片移動,使得膜片漸漸被纖維囊包圍。於第十四天時 Integrin.alpha.6.beta.1 有明顯出現於組織中表示血管伴隨組織侵入膜片,且根據 Alcian blue-PAS stain 發現組織中不僅細胞外基質多另外還有新生成之膠原蛋白堆積,組織中血管開始明顯增加。本實驗之結果表示 3%GA-PDCM 於組織中第十四天後開始產生組織整合性,符合引導組織再生膜於臨床應用的要求。		
• 英文摘要	The purposes of this study were to study the phenomenon of tissue integration of porcine dermal collagen membrane (PDCM) in vivo. In this study, 3% GA-PDCM was implanted in the upper jaw of 18 Wistar rats. The specimens were harvested from each 2 rats 1, 2, 3, 5, 7, 10, 14, 21, and 28days after the surgery. One-fifth of the specimens were processed for H&E stain, Alcian blue-PAS stain, and the rest of the specimens were frozen immediately and processed for immunohistaochemical stain (ABC method) to localize the distribution of integrin .alpha. 2, integrin .alpha. 3, integrin .alpha. 6.beta. 1, fibronectin. The results indicates positive reaction of integrin .alpha. 2,		

integrin .alpha.3 and fibronectin in the specimens during all the period of this study. On fourteenth days, there were obvious positive reaction of integrin.alpha.6.beta.1 and PAS stain. 3%GA-PDCM starts to achieve good tissue integration on the day of fourteenth. There were no significant pathologic reaction and evidence of tissue damage. In conclusion, these results indicated that PDCM possesses a good quality of tissue integration with adjacent connective tissue. PDCM fulfills the requirement of tissue integration in guided tissue regeneration.