

• 系統編號	RN9611-5400
• 計畫中文名稱	TGF- β s, TG2, Apoptosis, GFAP, NF, P Substance 和 Dopamine 參與鼠腦部犬蛔蟲症神經系統病變之分子免疫病理機制之研究(II)
• 計畫英文名稱	Molecular and Immunopathological Mechanisms of TGF-Betas, TG2, Apoptosis, GFAP, NF, P Substance, and Dopamine involved in Cerebral Neurological Pathology from Mice Infected with Toxocara canis (II)
• 主管機關	--
• 執行機構	台北醫學大學寄生蟲學科
• 本期期間	9508 ~ 9607
• 報告頁數	83 頁
• 研究人員	范家 ; 蘇霽靄 Fan, Chia-Kwung
• 中文關鍵字	腦犬蛔蟲症; 血腦障壁; 阿滋海默症; 神經退化因子
• 英文關鍵字	Cerebral toxocariasis; Blood-brain-barrier; Alzheimer's disease; Neurodegenerative biomarker
• 中文摘要	<p>本實驗旨在探討：犬蛔蟲幼蟲入侵鼯鼠腦部造成腦犬蛔蟲症後，是否可引致血腦障壁功能失調與發生似阿海默症之神經退化病變，加以探究。實驗結果顯示：一、犬蛔蟲幼蟲入侵鼯鼠腦部可引致血腦障壁功能失調：鼯鼠於感染犬蛔蟲感染性蟲卵第 3 天開始至第 8 週實驗結束，血腦障壁的通透性於所有實驗組中皆見增加，因腦部的 Evansblues 的濃度皆較未感染之控制組鼠高(P<0.05)。此外，於感染後第 4 週至第 8 週腦脊髓液與血清中白蛋白比值和 GFAP 的表現明顯較未感染之控制組鼠高(P<0.05)，顯示血腦障壁發生損傷，而血腦障壁損傷似乎與腦部出現的明顯 SP 與 NK-1R 的表現有關。二、犬蛔蟲幼蟲入侵鼯鼠腦部似乎可導致發生似阿海默症之神經退化病變：鼯鼠於感染犬蛔蟲感染性蟲卵第 4 週至第 8 週，神經退化因子 TGF-β1,S100β,GFAP,NF-L,tTG,ubiquitin,AβPP,和 Tau 之蛋白質與 mRNA 於腦部有異常表現，而此異常表現似乎與 ubiquitin-proteasomesystem 功能失調有關。</p>
• 英文摘要	<p>The purpose of present studies was intended to assess whether presence of blood-brain-barrier (BBB) dysfunction and Alzheimer's disease-like syndrome in mice infected with Toxocara canis. Results revealed that (1). Increased BBB permeability was found in T. canis-infected mice from 3 days to 8 weeks post-infections (dpi or wpi) due to significantly elevated Evans blue concentration in infected mice as compared to uninfected mice. In addition, enhanced SP proteins expressions and marked NK-1R mRNA expressions seemed to be highly associated with persistent BBB impairment in experimental CT. (2). Cerebral toxocariasis may have potential risk to develop an AD-like syndrome due to TGF-beta1, S100beta, GFAP, NF-L, tTG, ubiquitin, AbetaPP, and Tau expressions at protein or mRNA levels enhanced in the brains of infected mice. The abnormal</p>

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• 使用語言 中文

expression of neurodegenerative biomarkers in experimental CT may be ascribed to ubiquitin-proteasome system dysfunction.