黃梔子萃出物對血糖及胰島素敏感性影響之探討

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摘 要

糖尿病是一種因胰島素分泌或胰島素作用缺陷而影響糖、脂肪及蛋白質的代謝紊亂所照成的代謝疾病。目前世界衛生組織衛生組織將糖尿病分為三類：第1型糖尿病、第2型糖尿病、妊娠型糖尿病，其中第2型糖尿病患者占90%。胰島素阻抗是導致第二型糖尿病的主要因素。胰島素阻抗是指在正常的胰島素濃度不能與脂肪、肌肉和肝臟等組織產生正常胰島素的反應，也就是組織對於胰島素的敏感性降低。 黃梔子在過去文獻已提出具有降血糖、降胰島素及降血脂等改善糖尿病活性，但其機制尚未完全清楚，本研究首先利用正常大鼠餵食不同濃度黃梔子萃出物以尋找降血糖的最佳劑量，並運用在經由類固醇誘發的胰島素阻抗大鼠上，觀察是否也具有降血糖的效果。接著在類固醇誘發的胰島素阻抗大鼠上，評估其改善胰島素敏感性的效果，最後檢測血中游離脂肪酸，探討黃梔子萃出物藉由影響血中游離脂肪酸來達到改善胰島素敏感性的效果。 結果顯示：黃梔子萃出物在正常大鼠表現出降血糖的效果，且在餵食濃度200 mg/kg時有較佳的降糖率。且在類固醇誘發的胰島素阻抗大鼠也有顯著降低血糖的效果。而在胰島素增敏評估中，發現黃梔子萃出物具有增加胰島素敏感度的表現，但血中游離脂肪酸的改變未達統計顯著差異，可能黃梔子萃出物增加胰島素敏感度的作用，不是藉由降低血中游離脂肪酸達到效果，但可能因為餵食的時間較短，故無法顯現效果，必須進一步的研究，才能明確表示黃梔子對於游離脂肪酸的影響。 結論：本研究發現黃梔子萃出物在餵食濃度200 mg/kg時，具有顯著的降糖效果並且能改善類固醇誘發胰島素阻抗大鼠的高血糖症狀，以及增加胰島素敏感度，藉此能提供未來發展黃梔子做為胰島素增敏劑的方向。

關鍵詞 : 糖尿病、血糖、胰島素、游離脂肪酸、胰島素阻抗、黃梔子

目錄

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