臺灣常用民間用藥：紅田烏與黃花蜜菜對各種肝毒性物質所誘發急性肝障害之保護作用

Hepatoprotective Effects of Taiwan Folk Medicine Alternanthera sessilis and Wedelia chinensis on Various Hepatotoxins-induced Acute Hepatotoxicity

中文摘要

紅田烏（ Alternanthera sessilis (L.) DC. ） 和黃花蜜菜（ Wedelia chinensis (Osbeck) Merr.）是臺灣用來預防及治療肝疾患常用的民間藥材，具有顯著保護肝臟的功效。爲了更進一步證實其療效，本實驗室以動物實驗模式來研究此生藥的保護功能。急性肝細胞障害的誘導是以下列三種具有肝毒性的藥物來進行：（１）. 四氯化碳 carbon tetrachloride 以及（２）. acetaminophen （APAP）分別以 31.25 μl/kg和 600 ㎎/kg 的劑量腹腔注射於小白鼠體內，而（３）. D(+)-galactosamine（GalN）則以 188 ㎎/kg 的劑量以腹腔注射法投與至大白鼠體內。生藥紅田烏和黃花蜜菜以科學中藥的製備方法，分別於各種肝毒性藥物注射完後的第二、第六以及第十小時後各口服投與生藥 300 ㎎/kg 的劑量，而於第二十四小時的血清檢查值之統計分析發現，肝功能指標中的血清轉胺酵素 SGOT 和 SGPT 可因紅田烏或黃花蜜菜的投與而明顯下降，同時於肝臟的病理組織切片上亦可發現，由於紅田烏和黃花蜜菜的投與可使受肝毒性藥物傷害的肝細胞組織獲得明顯改善。爲了進一步證實紅田烏和黃花蜜菜的保肝功效，各種藥理作用及病理組織變化的評估，均同時與北柴胡進行比較，因而更證實了紅田烏以及黃花蜜菜具有可對抗各種不同肝毒性物質，經由不同機轉所誘導的肝傷害之保肝效果。

英文摘要

The hepatoprotective effects of the crude Taiwanese herb " Horng-tyan-wu " (Alternanthera sessilis (L.) DC.) and " Hwang-hua-mih-tsay " (Wedelia chinensis (Osb.) Merr.) were investigated in the following experimental animal models. Acute hepatitis was induced by various hepatotoxins, such as carbon tetrachloride (31.25 μl/kg, i.p.) or aceta- minophen (600 mg/kg, i.p.) in mice and D(+)-galactosamine (188 mg/kg,i. p.) in rats. After treatment with A. sessilis or W. chinensis (300 mg/kg, p.o.) at 2 , 6 and 10 hours, a reduction in the elevation of serum glutamate oxaloacetic transaminase (SGOT

) and glutamate pyruvic transaminase (SGPT) levels could be observed at 24 hours after the above three hepatotoxins were administered. These serological observations were also confirmed by histopathological exami- nations. A microscopic examination of the liver showed a marked improvement in groups which had received A. sessilis and W. chinensis. In order to further confirm the hepato- protective effects of A. sessilis and W. chinensis,all phar- macological and histopathological effects were compared to those of an identified hepatoprotective Chinese herb,viz. Bupleurum chinense DC. (Family Umbelliferae) which has been confirmed to have obvious hepatoprotective effects. It was confirmed that A. sessilis and W. chinensis has a definitely hepatoprotective effects against the liver injuries induced by some hepatotoxins with different mechanisms.