## 跌倒老人髖部骨折之危險因子

## Risk Factors for Hip Fracture in Elderly Fallers

## 中文摘要

目的:老人跌倒後髖部骨折是最嚴重的傷害之一,會導致許多的合倂症、死亡與 後續生活品質的影響。過去許多關於老人跌倒導致髖部骨折的危險因子多是不同 種族的研究結果,國內對此領域的研究迄今仍極爲少見。方法:以個案對照研究 (case-control study)的方式,利用結構式問卷在台中中國醫藥大學附設醫院急 診室收錄研究樣本,研究期間從民國94年8月1日起至民國95年12月31日止 (共17個月)。結果:符合研究條件的個案組204人與控制組364人。初步分析 結果個案組平均年齡較高(差2.8歲)、喪偶及獨居比例較高、視力較差、身體 質量指數(body mass index, BMI)較低、骨密度較低、曾飲酒但已戒酒比例較 高、慢性疾病數較多、罹患心血管疾病比例較低、中風比例較高、服用降血糖藥 比例較高、跌倒前有頭暈症狀比例較高、跌倒方式爲傾倒的比例較高、側跌比例 較高、最先著地部位以髖部爲主、於房間/走廊/騎樓/庭院跌倒比例較高;兩組的 性別、臀圍、近五年體重、女性生產胎數、運動強度/時間/天數、每日曬太陽的 時間、喝茶、咖啡與抽菸、跌倒前喝酒、除中風以外的其他慢性疾病罹患比例、 癌症的罹患與否與治療方式、過去骨折與否及骨折年齡、雙親髖部骨折病史、過 去一年跌倒次數、女性荷爾蒙服用、跌倒前藥物服用時間、除頭量外的前驅症狀、 行動輔具使用、利用物體阻止跌倒、室內外跌倒比例、跌倒接觸面材質等並無明 顯統計上的差異。多變項分析結果顯示年齡、視力、身體質量指數、過去一年跌 倒次數、使用降血糖藥物、跌倒種類、跌倒方向及跌倒地點爲走廊、玄關、騎樓 或庭院、其它室內地點與跌倒老人發生髖部骨折具有顯著統計相關。 結論:本研究結果與國外的結果有些許的差異,特別是在過去一年跌倒次數方面 更是呈現完全不同的結果,顯示國外的許多危險因子在本國人身上並不一定存

在,本研究結果可以作爲國內未來預防跌倒後髖部骨折的參考。

## 英文摘要

Background: Fall-related injuries in elderly fallers have gradually become an important health issue in Taiwan. One of the most serious fall related injuries is hip fracture, because it results in the high risk of morbidity, mortality, and disability and subsequently reduces quality of life in the elderly. There are many studies concerning with risk factors for hip fracture in elderly fallers; however, little research has been conducted in Taiwan.

Material and methods: A case-control study was conducted to recruit subjects from the Emergency Department (ED) of China Medical University Hospital from August 1, 2005 to December 31, 2006. Eligible fallers who aged 65 and older and visited the ED were included.

Results: At the end of the study, 204 cases and 346 controls were enrolled. The result of the multivariate logistic regression analyses show that elderly fallers who are older, with poor visual acuity, with body mass index equal to or greater than 25 kg/m2, with 1 fall or no fall history in the past 12 months, fell down due to weakness of legs or general weakness, fell backward or sideward, and fell on corridor, vestibule, arcade, yard, or other indoor places were independently associated with the occurrence of hip fracture during a fall in elderly people.

Conclusion: Our findings were not totally the same as other study results in the other countries. The risk factors identified could provide important information for preventive strategies of hip fracture in elderly people