• 系統編號	RN9406-0589		
• 計畫中文名稱	多藥劑併用之老年高血壓病患潛在藥品交互作用之流行病學研究		
• 計畫英文名稱	Epidemiology of Potential Drug-Drug Interactions by Polypharmacy in Elderly Hypertensive Patients		
• 主管機關	行政院國家科學委員會	• 計畫編號	NSC92-2320-B038-044
• 執行機構	臺北醫學大學內科		
• 本期期間	9208 ~ 9307		
• 報告頁數	8 頁	• 使用語言	中文
• 研究人員	張念中 Chang, Nen-Chung		
• 中文關鍵字	高血壓; 老年人; 藥品交互作用; 多藥劑併用; 盛行率; 發生率		
• 英文關鍵字	Hypertension; Elderly; Drug-drug interactions; Polypharmacy; Prevalence; Incidence		
	根據文獻研究,易發生多藥劑併用(polypharmacy)交互作用(Drug-Drug interactions; DDI)之危險因子包括高齡、 等人最近報告 70 歲以上老年人的多藥劑併用率為 48.4%,為 70 歲以下的 3 倍,這些多藥劑併用老年人有 4.4%		

• 中文摘要

根據文獻研究,易發生多藥劑併用(polypharmacy) 交互作用(Drug-Drug interactions: DDI) 之危險因子包括高齡、多重疾病等。Rosholm 等人最近報告 70 歲以上老年人的多藥劑併用率爲 48.4%,爲 70 歲以下的 3 倍,這些多藥劑併用老年人有 4.4%發生潛在 DDI 的危險,Doucet 等人報告 70 歲以上老年人發生 DDI 而住院者之藥 物以心血管藥物最多。截至目前爲止,文獻上尙無針對老年高血壓患者多藥劑併用造 成 DDI 的研究。研究目的爲了解國內 65 歲以上老年人高血壓患者,多藥劑併用的原因疾患可能導致的潛在危險及發生潛在 DDI 的相關藥劑。研究資料來源是以健保承保歸人抽樣資料庫(目前約 20 萬人)估計老年高血壓病患發生藥品交互作用之盛行率及因不良反應而住院之發生率。所有統計分析將採用 SAS 8.2 版。首先將健保給付之藥品品項,除去極少進入全身血流的劑型品項,以 anatomical therapeutic coding (ATC) 系統做藥理歸類。另潛在藥品交互作用,則依 Drug interaction facts 書之歸類。由資料 庫找出有高血壓診斷之處方,分析每張處方之年齡、性別、診斷、藥品品項數、發生潛在藥品交互作用之藥品、次數及嚴重度。分析結果,國內健保處方箋潛在藥品交互作用之盛行率約 10.5%,而高血壓處方箋潛在藥品交互作用之盛行率高達 30.3%。開方筆數愈多之處方,有潛在交互作用之相對危險性愈高,開方筆數大於 15 筆的處方配對數,約爲開方筆數 2-5 筆的 20 倍。由分析中得知,高血壓處方中潛在藥品交互作用約有 4.5%列爲臨床嚴重度最高之 significance "1"。年齡愈大,處方之潛在藥品交互作用比 例愈高,臨床重要性也愈嚴重。由臨床重要性歸類爲"1"之交互作用配對分析,最常 見之配對爲 Cardiac glycosides/High-ceiling diuretics。另由 longitudinal 分析,得知高血壓病患因藥品不良反應而住院之發生率爲 0.9%。雖然國內無論是一般處方或高血壓處方,潛在藥品交互作用之盛行率或發生率,均未高於文獻之數據。但仍需透過教育提 提醒開方時醫師及民眾重視用藥之安全。

• 英文摘要

Previous studies have reported the risk factors of drug-drug interactions in polypharmacy include elderly and multiple illness. Rosholm reported the prevalence of polypharmacy for the elderly older than 70 years old is 48.4%, that is 3 times of younger people. Among those, 4.4% had polypharmacy and got the risk of potential drug-drug interactions. The most frequent drugs of hopitalization resulted from potential drug interactions were cardiovascular drugs. Up to date, there is no studies of drug-drug interactions in elderly hypertensive patients with polypharmacy. The study purpose is to find the risk of potential drug-drug interactions in the elderly hypertensive patients with polypharmacy. The data sources from the cohort sampling database used to estimate the prevalence of potential drug-drug interactions and hospitalization incidence induced by adverse drug reactions in the elderly hypertensive patients. The data will be analyzed by SAS 8.2. The formulary lists in the database of national health insurance will be classified by anatomical therapeutic coding (ATC), and the external dosage form will be excluded. Based on the classification of drug interaction facts, the potential drug-drug interactions will be classified. We found the prevalence rate of potential DDIs in general prescriptions and hypertensive prescriptions were 10.5% and 30.3%, respectively. Among the potential DDI pairs, 4.5% pairs were categorized as Class '1' clinical significance. The most common potential DDI pairs in the clinical significance '1' category were Cardiac glycosides/High-ceiling diuretics. Although the prevalence and incidence of potential DDIs were not higher than those of western country, we still have to alert for drug safety.