以台灣全民健保資料庫分析新氣喘個案診斷率與藥物處方趨勢

Newly-Diagnosed Rates of Asthma and Trends of Antiasthmatic Drug Prescribing Pattern in Taiwan

中文摘要

研究目的：利用全民健康保險資料庫之世代追蹤檔，來分析 2002 至 2005 年每年新氣喘個案診斷率，2002 至 2005 年新診斷氣喘病人的初次用藥趨勢，在 2002 年新診斷氣喘病人之後每年的用藥趨勢及改變。

研究方法：本研究利用國家衛生研究院所提供之全民健保承保抽樣歸人檔，研究期間爲 2000 至 2005 年之資料。新診斷氣喘個案的定義是在被診斷年之前至少兩年沒有氣喘診斷的就醫紀錄。主要評估：2002 至 2005 年間每年的新氣喘個案診斷率，新診斷氣喘病人初次用藥趨勢及組合，另外也分析 2002 年氣喘新診斷病人，之後每年的用藥趨勢及組合。次要評估：新診斷氣喘病人的性別、年齡、醫院層級、就醫地區及處方醫師科別各次分組的每年用藥趨勢及組合改變。初次診斷未用藥者，第一次用藥的時間及初次診斷用藥者，氣喘緩解的時間。

研究結果：2002 至 2005 年新氣喘個案診斷率 1.80%、1.55%、1.41%、1.36%。新診斷氣喘初次用藥中，仍以口服爲主。百分比每年分別爲 94.5%、93.3%、91.6%、92.9%，但有逐年下降的趨勢。吸入器的使用反而有逐年上升的趨勢，百分比分別爲 19.3%、20.6%、24.2%、22.7%。口服藥中除了白三烯酸拮抗劑有逐年上升的趨勢外，其他使用量皆逐年下降。吸入劑中吸入性類固醇和長效性乙二型交感神經作用劑的單一吸入劑有逐年上升的趨勢。2002 年新診斷病人的追蹤用藥中，口服及吸入器用藥的處方趨勢與初次用藥類似，但 2005 年吸入器處方比率可上升到 50.1%。第一次用藥時間中位數爲 4.1 個月，95%信賴區間爲 0.9-7.2 個月。氣喘緩解時間的中位數爲 9.8 個月，95%信賴區間爲 8.3-11.4 個月。

結論：新氣喘個案診斷率約 1.36-1.80%，新診斷氣喘病人的用藥主要以口服爲主，雖然吸入性類固醇和長效性乙二型交感神經作用劑的單一吸入劑有逐年上升的趨勢，但仍有很大的進步空間。另外、氣喘緩解時間爲 9.8 個月且氣喘發生年齡及地區是影響因子之一。

英文摘要

Objective: To evaluate and compare the annual rate of newly diagnosed asthma, as well as the trends of initial and follow-up asthmatic medications from 2002 to 2005 with the claim data of the National Health Insurance in Taiwan.

Method: Systemic sampling cohort database of 200,000 insurers were provided by the National Health Research Institutes (NHRI) for research purpose. The duration of database was from year 2000 to 2005. The newly diagnosed cases were defined as the subjects who were newly diagnosed of asthma during the index year, but did not had the ICD-9 code of asthma in the data base within the two years before the index year. Primary endpoints of the study included the annual newly diagnosed rate of asthma during year 2002-2005, and the trends of initial and followup asthmatic medications prescribed. The data was also stratified by genders, age, levels of health institution, geographic location and specialty of medical doctors. Secondary endpoints included the median time to first asthmatic medication prescribed for patients not prescribed medication when they were diagnosed, and the median time to remmission for patients started medications when they were first diagnosed.

Results: The annual newly diagnosed rate of asthma from 2002 to 2005 were 1.80%, 1.55%, 1.41% and 1.36% respectively. Oral medications were most frequently prescribed as initial asthmatic medications, above 90% in each year analysed. However, the use of oral medications, except leukotriene antagonists, as the initial asthmatic treatment decreased from 94.5% in 2002 to 92.9% in 2005, while the use of inhalers increased from 19.3% in 2002 to 22.7% in 2005. The use of single inhaler device of beta-agonsts/corticosteroids increased from 2002 to 2005. The median time to first asthmatic medications for patients not prescribed when they were first diagnosed is 4.1 (95% CI=0.9-7.2) months. The median time to remission is 9.8 (95% CI=8.3-11.4) months for patients who started asthmatic medications when they were first diagnosed. When patients required chronic treatment, the use of inhaler increased as high as 50.1%.

Conclusion: The annual newly diagnosed rates of asthma in Taiwan were 1.36-1.80%. Oral medications were the most prominent asthmatic medications prescribed among asthmatic patients in Taiwan, which was not comparable to the GINA guideline. Therefore, the use of inhaled medications in asthma patients should be encouraged in Taiwan.