台北市九家醫院創傷登錄資料之研究

Descriptive Analysis of 9 Hospitals Trauma Registry in Taipei

中文摘要

前言：創傷登錄是大規模傷害調查的主要資料基礎。利用創傷登錄資料庫中龐大的紀錄資料來進行分析及研究，就能歸納出各類傷害中的相關特徵，並可將此結果應用於傷害防治目標及流程的制定。創傷登錄收集、紀錄及描述病因、人口學特徵、診斷、治療及特定的臨床結果。每個地區的傷害型態及原因，皆有很大的不同，所以若要制定有效的創傷防治政策，創傷登錄的統計資料就非常重要。材料與方法：本研究收集 2002 年 1 月 1 日至 2003 年 12 月 31 日台北市九所創傷登錄醫院的資料，登錄工作皆由受過訓練課程的急診醫師或護理師負責抄錄與整理。結果：本研究中，九所醫院總共登錄了 7,192 位受傷者，男性佔 53.17%；由年齡層來看，以老年(65 歲以上)及壯年(25-44 歲)爲多數，各佔 27.18%及 25.71%；受傷原因則以交通事故及跌落比率最高，分別佔 42.73%及 28.78%；兩者的發生月份均以 1 月份的受傷人數爲最多，而 6 月份爲最少；受傷時間的分佈呈現雙峰現象；交通事故在早上 8 時和下午 4 時有明顯上揚的趨勢，跌落則以早上 9 時及下午 4 時二時段較常發生。傷害嚴重度方面， ISS 評分則以≦8 分者最多，佔 68.81%，而 ISS≧9 分者佔 31.19%；受傷部位以四肢 65.25%最爲常見。至於受傷治療的結果，超過一半的病患?(56.52%)需要住院，轉院者佔 6.55%，死亡者佔 2.09%。討論：本研究中 ICD-9 受傷診斷的分類已經與 AIS 做過 kappa 值檢定，發現其信度是良好的，所以如果用這些紀錄來預測其生存危險比率，將會與 ISS 的預測效力相等或甚至更好。收案期間因 5 月份 SARS 的發生，而造成該時段病患數大幅下降。研究中發現，除了汽車事故的 ISS 平均值確實比其他傷害原因的 ISS 平均值高以外，腳踏車事故的 ISS 平均值大於機車事故，這可能是因爲騎機車需戴安全帽法規所產生的保護效益，這可從機車事故發生頭頸部傷害的比例低於腳踏車獲的證實(19.44% vs 22.14%)。低處跌落以及滑倒的 ISS 平均值，隨著年齡層提高而有增加的趨勢，老年人的滑倒在中、重度比例佔了將近 60%。蓄意傷害集中於 25-44 歲的壯年人，且平均 ISS 甚至高過於交通事故。另外男性互毆的比例高於女性，而女性自戕比例高於男性，雖然受虐的人數僅 5 人，但是都集中在女性，這又是另一個值得注意的問題。結論：本創傷登錄指出台北市創傷是以交通事故及跌落爲主。但是，我們也發現年齡及性別對於各種不同種類傷害的顯著影響，將來對於傷害防治相關策略的制訂都需審慎考量這些因素。

英文摘要

Background：Trauma registry is the major database of a global traumatological investigation. Using the enormous amount of trauma registry data records for analysis and study, the characteristic factors of suspiscious high risk groups in all kinds of trauma will be concluded, thus to be applied in setting the goals and protocols for trauma prevention. Like all other disease registries, the trauma registry collects, records, and provides data and indexes which are used to describe etiology, population characteristics, diagnosis, treatment and clinical outcomes. The patterns and causes of injury may be variable between local areas, thus obtaining locale trauma data is essential for establishing effective injury prevention policies. This study is designed to achieve this goal, and will try to explain and discuss the statistic results of the collected databases furthermore.Material and Methods：Our study was collected through January 1st, 2002 to December 31st, 2003 from 9 medical facilities in Taipei. Registry was based on Emergency Medical Association registration guideline. Each registry was recorded by medical staffs or nursing staffs of emergency room (ER) that had qualified related courses or trainings.Results：In all 9 medical fascilities, total of 7,192 cases were recorded, which consisted of 53.17% male. The two age groups of 25-44 years old and above 65 years old have higher trauma incidence than other age groups. The locations of trauma episodes are mostly on the road (51.92%) and at home (31.89%). Causes of injury are mostly traffic incidence (42.73%) and fall (28.78%). Highest incidence of trauma is occurred in January and lowest in June. Time of occurrence has dual peaks traffic accidents at 8 AM and 4 PM, while fall occurs mostly at 9 AM and 4 PM. Triage severity Level II is most common (77.8%), and ISS score ≦ 8 has the highest incidence (68.81%) and ISS score ≧ 9 also has 31.19%. Limbs are mostly involved (62.25%). As to the succeeding managements, 56.52% patients are hospitalized, 6.55% transfer to other medical facility and 2.09% died. Discussion：Kappa between ICD-9 classification and AIS injury diagnosis was good. If we use (ICD-9)-based scoring in predicting mortality will have a equal or even better prediction strength than ISS. The emergence of SARS in May 2002 caused the patient numbers obviously decreasing during study period. Though ISS averages of automobile accidents are apparently getting higher in comparison to other traffic accidents, the bicycle accidents ISS averages are even higher than the motorcycle accidents, which may be due to the protections of wearing safety helmet when riding the motorcycle, that had been legally regulated in the Law. When the age groups are elevating, the ISS averages of low fall and slippering are also increasing gradually. Intentional injury ISS averages are even higher than traffic accident, which really worth thinking and discussion. Women have higher incidences than men in suicidal attempts and assult, yet this is one another social problem worth notified. Conclusion：We found that traffic accident and fall is the major trauma in Taipei. In addition, the influence of the age and sex must all be considered while making the strategy of injury prevention and control.