醫師服務量和醫院服務量對根除性腎臟切除術結果的影響

Impact of Surgeon and Hospital Volume on the Outcome of Radical Nephrectomy

中文摘要

二十多年前 Luft 等人已經提出一個重要的發現，就是「外科醫師的經驗值會影響病患手術的結果」。大部份的研究都來自歐美國家，鮮少有亞洲地區的研究。本研究希望能夠得到本土有代表性的研究結果。檢視這種「服務量－結果」的關係。本研究在於瞭解本土性的醫療環境是否也適用國外的「服務量－結果」理論。並且使用全民健康資料庫作檢視，看是否適用在全國。以 2001 年初至 2003 年底全國腎臟癌接受根除性腎臟切除術的病人以及執行手術的醫師、醫院。來自「全民健康學術研究資料庫」之「專科醫師證書主檔」、「醫事人員基本資料檔」、「醫事機構基本資料檔」、「住院醫療費用清單明細檔」。是屬於橫斷性研究，採用次級資料分析法進行分析。描述性統計：用來描述各研究變項包括病人、醫師、醫院之基本特性。推論性統計：以變異數分析及相關性統計分析來檢測各研究變項與構面間，是否有顯著性差異及相關程度。再以羅吉斯迴歸分析以及複迴歸分析探討各個自變項、控制變項對依變項的影響。

研究結果發現醫師服務量對於院內死亡、住院日數、醫療費用都有一致性的逆向相關；醫院服務量對於治療結果的影響則沒有統計學上的意義。

英文摘要

Objectives: The relationships between surgeon volume and outcome have been noticed since about 25 years ago. Many studies had been done in many fields in western countries. However, there are only scanty studies in Asian countries. This thesis is aimed to explore the relationships in radical nephrectomy in Taiwan.

Methods: This study used retrospective, second degree data analysis which obtained from the claim data from the National Health Insurance. The data contains nation wide claim data started from Jan. 2001 to Dec. 2003. The patient diagnosed of renal tumor and accepted radical nephrectomy was recruited in this study. We collected the data of patient outcome, including in-hospital death, length of stay, and total admission expense. The surgeons who done the operation was categorized into high, medium, and low volume groups according to the performed operation number in this period of time. The hospital volume was also categorized into three groups likewise. Other factors which might interfere the outcome include: co-morbidity, age of patient, gender of the patient, age of the surgeon, gender of the surgeon, ownership of the hospital were studied in the same time. The Logistic regression analysis and multiple regression analysis were used to evaluate the impact of the factors.

Results: The results showed negative volume– outcome relationship between surgeon groups after controlled the confounding factors. The lower incidence of in-hospital

death, shorter average length of stay, and lower average total admission expense were found in the group of high surgeon volume patients. But there was no evidence of relationship between hospital volume and outcome.
Conclusion: The surgeon volume- outcome relationships exist in radical nephrectomy patients. The impact of the relationship in other fields of operation await for further studies.