應用經濟的遠距病理系統做手術中冰凍切片諮詢之研究

Apply a Low-cost Telepathology System for Intraoperative Frozen Section Consultation

中文摘要

病理醫師在面對冰凍切片時，常需要在很短的時間內給外科醫師診斷，而外科醫師則根據這個診斷進行下一步的處置，如果有診斷錯誤的情況發生，對病人和醫師都是無法彌補的，也因此病理醫師的壓力是可想而知的. 若能在診斷上有疑慮時即時的得到相關專家或資深醫師提供諮詢和建議，是一件很有幫助的事情
我們自行開發一個經濟的遠距病理系統做手術中冰凍切片諮詢且加以評估，經過分析 50 個實際操作的病例後發現，在縮短診斷時間和提高診斷正確率上都有明顯的改善，我們的經驗指出遠距病理技術是可以應用於冰凍切片診斷諮詢.

英文摘要

We have established a low-cost, non-commercialized system of dynamic real-time telepathology (TP) for light microscopic (LM) diagnosis. It was used to aid intradepartmental consultation of frozen section diagnosis. Fifty cases were performed and completely recorded. For each case, multiple diagnoses were made and compared, including those made by the doctor on duty (D1), by a subspecialist or senior using TP (D2), by the same doctor as D2 but using LM (D3), and the final diagnosis of the case (D4). A comparison of D1 and D2 revealed that 37 cases (74%) were more precisely diagnosed in D2. Nine of 50 (18%) of the cases got a positive major impact to operation by teleconsultation. The results of D2 and D3 showed a good agreement. (kappa = 0.97). The average time span of TP is rather short compared with routine intradepartmental consultation. Our experience showed that TP was a good tool for frozen section consultation and with little additional cost.