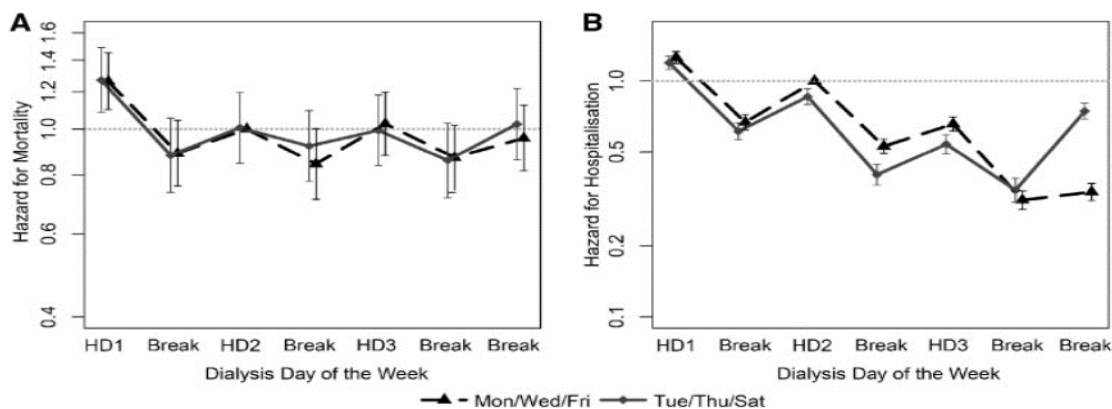


## 醫療新知

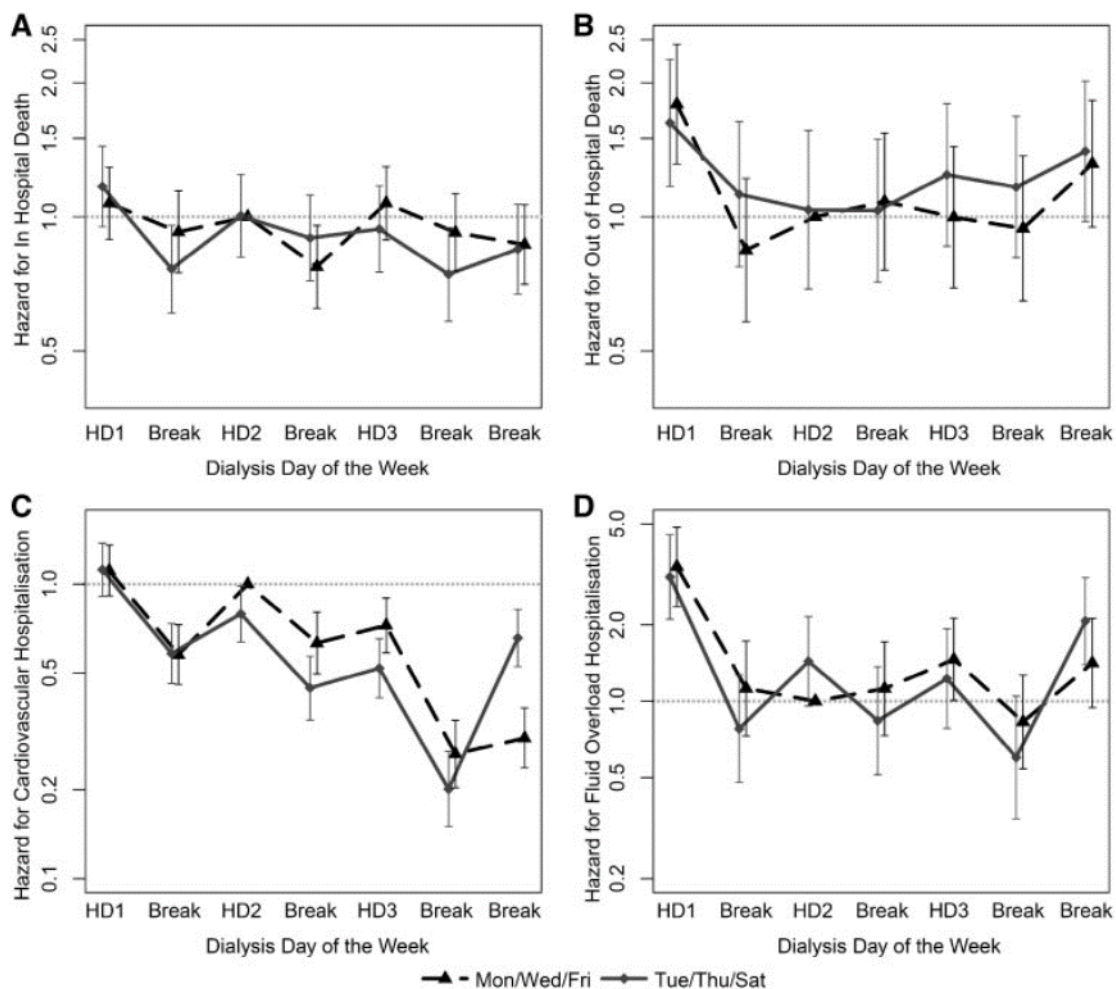
### 較長的血液透析時間與住院率及死亡率的相關性

- 每週 3 次的血液透析的病人，統計上間隔 2 天後的第一天，住院率及死亡率都比較高。如果延長血液透析時間是否可以減少住院率及死亡率呢？
- 研究人員在歐洲從 1998 至 2011 年，統計 19557 位每週 3 次的血液透析的病人，分成 4 組，每週透析總時間 <200，200-225，226-250，>250 分鐘，HD1 為每週透析第 1 天，HD2 為第 2 次透析那天，HD3 為第 3 次透析那天。
- 結果 HD1 比 HD2 住院率及死亡率均增加，且有統計學上的意義， $P < 0.002$ 。如果分成 4 組，每週透析總時間 <200，200-225，226-250，>250 分鐘，所有原因每 100 人年死亡率，HD1 分別為 23.0，20.4，16.4，14.6；HD2 為 26.1，13.3，13.4，12.1。



➤ FIGURE 1: HRs and associated 95% CIs for mortality and hospitalization across the dialysis week in in-centre 3xW HD patients: (A) all-cause mortality by HD schedule (Mon/Wed/Fri and Tue/Thu/Sat regimes); (B) all-cause hospitalization by HD schedule adjusted for age, sex, race, 13 comorbid conditions, BMI, residual kidney function, dialysis access blood flow and time the patient has been receiving renal replacement therapy, country and DOPPS phase. Reference day: HD2 in Mon/Wed/Fri patients.

A 圖是死亡率，B 圖是住院率，顯示 HD1 是明顯上升。



➤ FIGURE 2: HRs and associated 95% CIs for cause-specific mortality and hospitalization across the dialysis week in in-centre 3xW HD patients: (A) in hospital, (B) out-of-hospital mortality by HD schedule (Mon/Wed/Fri and Tue/Thu/Sat regimes), (C) cardiovascular hospitalization and (D) fluid overload/heart failure hospitalization by dialysis schedule. Adjusted for age, sex, race, 13 comorbid conditions, BMI, residual kidney function, dialysis access blood flow and time the patient has been receiving renal replacement therapy, country and DOPPS phase. Reference day: HD2 in Mon/Wed/Fri patients.

A 圖是院內死亡，B 圖是院外死亡，C 圖是心血管住院，D 圖是水分過量住院。仍然是 HD1 有較高的發生率。

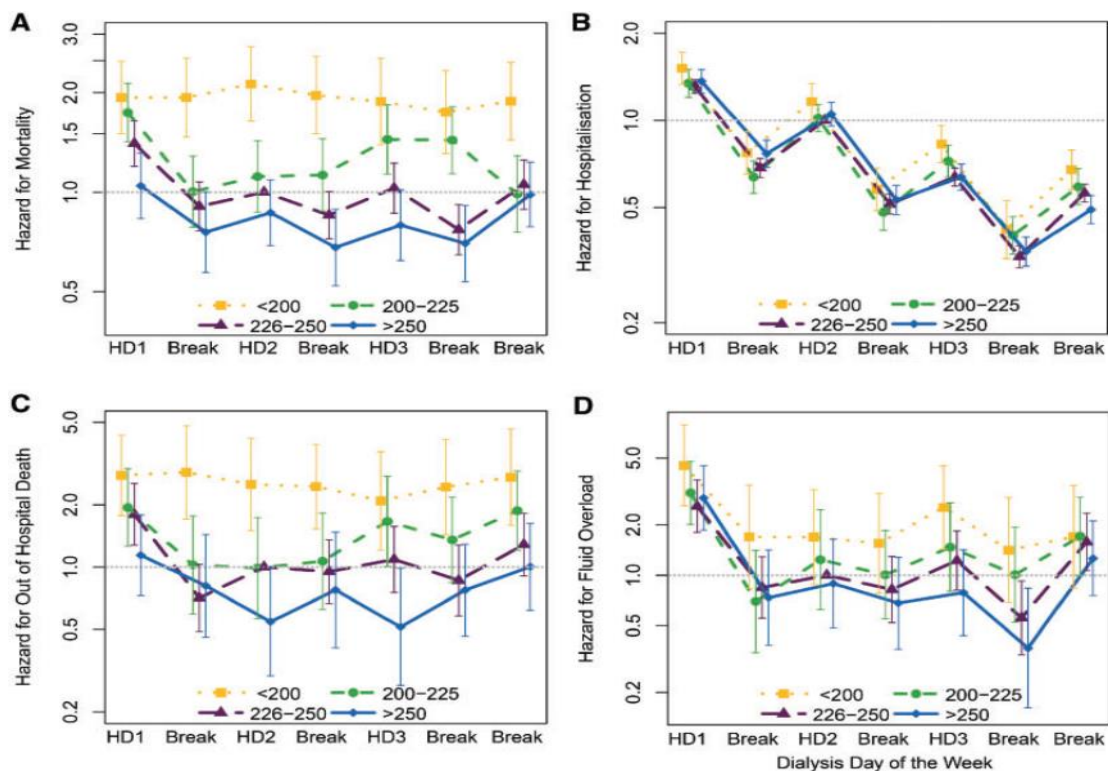


FIGURE 4: HRs with associated 95% CIs for (A) mortality, (B) all-cause hospitalization, (C) out-of-hospital death and (D) hospitalization due to fluid overload and heart failure across the dialysis week according to per session haemodialysis treatment time in 3x W in-centre HD patients (second HD day in patients receiving 226 - 250 min is the reference group). Adjusted for age, sex, race, 13 comorbid conditions, residual kidney function, BMI, dialysis access blood flow, time the patient has been receiving renal replacement therapy, country, DOPPS phase and HD schedule.

由上面的圖示，每週透析總時間大於 250 分那一組的死亡率與住院率均較低。

- 總之，每週第一次透析日的死亡率與住院率均較高，延長透析時間可以減少死亡率與住院率。其中的原因可能跟水分及電解質有關。因此建議腎友週末時更應該節制飲水及鉀離子。

資料來源：竹東安慎診所洗腎室 盧天成醫師 提供