

Spinal tuberculosis in end-stage renal disease dialysis patients

Chia-Ying Lin

Chi-Mei Medical Center, Taiwan

Patients with end-stage renal disease (ESRD) have an increased risk of tuberculosis (TB). Approximately, 10–20% of patients with extrapulmonary TB are skeletal involvement. In addition, spinal TB accounts more than half of skeletal TB cases. Aim of this study was to determine the rate, risks and outcome of spine TB in ESRD patient. We examined records of ESRD patients who initiated dialysis between 1999 and 2007. Patients were followed from the initiation of dialysis to spinal TB, death, end of dialysis, or December 31, 2008. The cumulative proportion of patients with spinal TB and of survivors after spinal TB were calculated using the Kaplan-Meier method. Cox proportional hazards models were used to identify the risk factors for spinal TB. A total of 67,993 incident ESRD dialysis patients were examined in this study. During the follow-up period, 89 patients had a spinal TB. The overall incidence of spinal TB in ESRD dialysis patient was 32.43 / 10,000 patient-years. Being female was associated with 85% higher risk (HR 1.85, 95% CI: 1.19-2.90). Patients \geq 65 years old had more than 2 times the risk than did those 18-44 years old (HR 2.35, 95% CI: 1.04-5.34). The strongest predictor of spinal TB after dialysis was prior TB history (HR 3.86, 95% CI: 1.56-9.55). Overall in-hospital mortality was 19.1 %. The cumulative survival rates after spinal TB was only 65.5% at one year. In conclusion, being female, elderly and prior TB history were independent risk factors for spinal TB in dialysis group. The mortality was high after spinal TB. Clinicians should be aware of back pain in ESRD patients, especially in TB endemic areas such as Taiwan, because of high mortality rate of this disease.

Biography

Chia-Ying Lin, Nurse Practitioner, Department of internal medicine, Chi-Mei Medical Center, Taiwan. She grew up in Tainan City, Taiwan, and graduated from National Cheng Kung University in 2005 with a major in Nursing. After graduation, she works in a cardiology ward as a nurse in National Cheng Kung Hospital, Taiwan, 2005-2007. Since 2007 she has been working in the department of internal medicine, Chi-Mei Medical Center, Taiwan, as a Nurse Practitioner. In the meantime, she is devoted to the nursing care for patients with end-stage renal disease on dialysis.

joylin0526@gmail.com