Cancer Among End-Stage Renal Disease Patients on Dialysis

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Abstract

Introduction: The aim of this study is to investigate the risk of cancer among end-stage renal disease (ESRD) patients on dialysis in Singapore. Materials and Methods: The study looks at a retrospective cohort of 5505 ESRD patients who had received dialysis between 1998 and 2007. The cancer risk of these patients would be compared against the risk of the general population. Results: During a median follow-up time of 3.9 years, 267 (4.9%) dialysis patients developed cancer. The risk of cancer (excluding non-melanoma skin cancer) is 1.66 times higher in dialysis patients than the general population, and is highest at age less than 35 years old and at first year after dialysis. Cancer risk was found to be significantly higher among Chinese dialysis patients, followed by Malays, compared to the general population. The 3 sites with highest elevated cancer risks among dialysis patients compared to the general population are kidney, tongue and multiple myeloma. Conclusion: The finding of elevated cancer risk among younger dialysis patients is similar to other international studies. High cancer risks among specific cancer sites were also consistent with other studies. In view of the lack of screening procedures for these cancers and shortened expected survival of ESRD patients, cancer screening of ESRD patients should be individualised and based on a reasonable life expectancy and transplant candidacy, keeping in mind the competing risk of cardiovascular mortality.

Key words: Chronic dialysis, Chronic kidney disease, Malignant neoplasms


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