

中文題目：復發性副甲狀腺癌的預後因子：52年文獻回顧之合併分析

英文題目：The mortality and prognostic factors in recurrent parathyroid carcinoma: A pooled analysis from 52 years of medical literature

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**Background:** Parathyroid cancer is a rare disease with high recurrence rate. The prognostic factors for recurrent parathyroid cancer are yet to be conclusively determined. We aimed to establish the association between recurrent parathyroid cancer and previously reported prognostic factors.

**Patients and Methods:** We conducted a PubMed search using the keywords ‘parathyroid cancer’, ‘parathyroid neoplasm’, and ‘hypercalcemia’ during 1966–2018 and included 55 studies, 73 patients from 3272 articles. We performed the basic symptoms stratified by serum calcium level and conducted survival analysis by Cox proportional hazard model with 95% confidence interval.

**Results:** For the 73 patients included in the analysis, the mean  $\pm$  standard deviation age was  $44 \pm 13.2$  years, and 36 of the patients were women (49.3%). During 5236 person-months at risk (mean follow-up 71.7 months, range 3-264), 38 patients died. The incidence of local recurrence, lymph node metastasis, lung metastasis, and bone metastasis was 60.3, 12.3, 56.2, and 24.7, respectively. Bone metastasis, disease-free interval shorter than 1 year, and total surgeries  $<3$  were significant prognostic factors in univariate analysis (log-rank test  $P=0.063$ ,  $P=0.0006$ ,  $P=0.0056$ , respectively). In multivariate-adjusted analysis, the mortality risk were significantly increased in bone metastasis with hazard ratio (HR) as 4.83 (95% CI 1.16-20.2;  $P=0.03$ ), disease-free interval  $>1$  year as 0.17 (95% CI 0.05-0.54;  $P=0.003$ ) and total surgeries  $\geq 3$  as 0.09 (95% CI 0.02-0.36;  $P=0.001$ ), considering as predictively prognostic factors.

**Conclusion:** Bone metastasis, duration of disease-free interval, and total number of surgeries predict survival in recurrent parathyroid cancer.