Prognostic factors of Survival Outcomes in Thai Colorectal Cancer Patients with Liver Metastasis

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The Thai Cancer, 2017, 31.60.014

Background: Colorectal cancer with liver metastasis (CLM) correlates with poor prognosis. Several clinical scoring systems were developed as prognostic tools; however, no consensus was established. Thus, we aimed to determine prognostic factors in Thai colorectal cancer patients with liver metastasis.

Method: A prospective observational study was performed in fifty CLM patients who were diagnosed at Ramathibodi Hospital during December 2012 and March 2015. Univariate and multivariate Cox proportional hazard with regression analyses were used to determine the significant prognostic factors for OS and PFS.

Results: Forty-three patients had progressive disease, with 35 deaths from any causes. Two patients who did not receive chemotherapy were excluded from analyses. The median PFS was 11.9 months (95%CI: 9.4, 17.4). The median OS was 31.47 months (95%CI: 19.1, 43.1). For PFS, multivariate analysis identified resection of both primary lesion (HR 0.22, 95%CI: 0.08, 0.66) and liver metastases (HR 0.26, 95%CI: 0.12, 0.58) as positive prognostic factors, and N2 (HR 2.55, 95%CI: 1.26, 5.16) as negative one. For OS, multivariate analysis identified resection of liver metastases as positive prognostic factor (HR 0.06, 95%CI: 0.02, 0.22). Liver metastasis 3.0 cm or larger (HR 2.76, 95%CI: 2.23, 16.39), T4 (HR 4.81, 95%CI: 1.74, 13.32), and extrahepatic metastasis (HR 6.04, 95%CI: 2.23, 16.39) are negative prognostic factors.

Conclusions: Resection of liver metastasis is associated with improved PFS and OS. The nature of primary lesion plays major role in survivals. Further study with larger sample size is needed to confirm the current findings.