

CONCLUSION

The expression level of COX-1 and COX-2 proteins in Thai patients with stomach cancer and colorectal cancer who had undergone surgical resection at the Maharaj Nakorn Chiang Mai Hospital was examined using Western blot analysis. COX-2 was significantly overexpressed in 13 out of 44 (29.5%) colorectal tumor tissues in comparison to the adjacent normal tissues ($P < 0.05$), although only 1 of 20 (5%) the gastric tumor was found to overexpress COX-2. Overexpression of COX-2 was significantly correlated with histological differentiation of colorectal tumors ($P < 0.05$) and found more frequently in colorectal tumors with lymphatic invasion, regional lymph node metastasis and larger size, although it was not statistically significant. In contrast, no significant relationship between the expression of COX-2 and the pathological features of stomach cancers was observed, which may due to the fact that only one out of 20 was found to overexpressed COX-2. Unlike COX-2, the level of COX-1 expression was found to be quite varied in tumor tissues. Forty-eight percent of colorectal tumors and 80% of gastric tumors exhibited a decreased level of COX-1 in comparison to normal tissues. Interestingly, COX-1 was also found to be overexpressed in 23% of colorectal tumors indicating the possibility that COX-2 and COX-1 may both play important roles in promoting tumorigenesis. However, there was no significant relationship between the alterations of COX-1 protein levels and the pathological features of tumors was observed in both cancers.