Summary

A Possibility of the Prognosis Factor of Serum Cross-Linked Carboxyterminal Telopeptide Region of Type I Collagen (ICTP) as a Marker of Bone Metastasis

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We measured ICTP in 126 patients suffering from cancer in our palliative care unit to investigate the clinical significance of serum cross-linked carboxyterminal telopeptide region of type I collagen (ICTP) and divided them into 2 groups according to the absence or presence of bone metastasis. 1) There was a relationship that of ICTP$=-22.6\mathrm{Log}_e$ (Ccr)$+111.4$ ($r=0.63$, $p<0.01$) between ICTP and creatinine clearance (Ccr) in non-metastasis group. The ICTP increased as renal function deteriorated. 2) In cancer patients with normal renal function of 40 ml/min/1.73 m^2, ICTP was significantly higher in the group of metastasis than non-metastasis group. 3) In cancer patients who died, ICTP was high in both metastasis and non-metastasis groups and no difference was found between 2 groups. Duration of disease was significantly short in non-metastasis group than in metastasis group. These results suggest that ICTP is one of markers of bone metastasis, but higher value of ICTP is influenced by various factors such as renal function and may reflect the prognosis.

Key words: ICTP, Bone metastasis, Renal dysfunction, Duration of disease, Prognosis factor.