Annals of Nuclear Medicine Vol. 10, No. 4, 441–444, 1996

Treatment of radioiodine-negative bone metastasis from papillary thyroid carcinoma with percutaneous ethanol injection therapy

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A 62-year-old woman with metastatic papillary thyroid carcinoma in the sternum was successfully treated with percutaneous ethanol injection therapy (PEIT) when previous radioiodine therapy and external irradiation were ineffective. The patient tolerated the treatment well and the refractory pain in the anterior chest wall that was alleviated with morphine prior to PEIT completely disappeared. No severe complications were observed. PEIT was performed 4 times (2 times with ultrasound guidance and 2 times with CT guidance). The posttreatment CT scan and ^{201}Tl scintigraphy demonstrated significant decrease in the tumor volume. The serum thyroglobulin level fell to less than one-twentieth of the pretreatment value. It is suggested that PEIT has a value in treating bone metastasis from thyroid carcinoma which do not respond to radioiodine.

Key words: thyroid carcinoma, bone metastasis, radioiodine, percutaneous ethanol injection therapy