- Najarian JS, Delaney JP, eds. Advances in breast and endocrine surgery. Chicago: Year Book Medical Publishers; 1986:329-335.
- Harach HR, Escalante DA, Onativia A, et al. Thyroid carcinoma and thyroiditis in an endemic goiter region before and after iodine prophylaxis. Acta Endocrinol (Copenh) 1985; 108:55-60.

M. A. Taher Postgraduate Hospital Shahbag, Dhaka, Bangladesh

REPLY: Only one of the eight cases with thyroid cancer had a recurrence. This occurred in the contralateral thyroid 8 yr after hemithyroidectomy. No further recurrence of thyroid cancer was detected in any of the cases at the Adult Health Study 14-cycle examination (1985–1987) conducted 11-28 yr after operation in these eight cases. Recent studies (1-3) demonstrated that the mortality from well differentiated thyroid cancer was low in both U.S.A. and Japan. Radiation induced thyroid cancer is of the histologically well-differentiated type, and its clinical course is the same as that of well-differentiated thyroid cancer found in other settings (4).

Radiation doses in the eight cases with thyroid cancer were 104-600 rad and were similar to those of irradiation among Marshall Islander (5) and neck radiation cases reported by Hempelman et al. (6). The dose-effect relationship for radiation carcinogenesis of thyroid in human has not been confirmed, high dose of irradiation leading to sterilization of the thyroid cells does not induce tumor (7).

There is no data concerning differences in iodine intake in people who live in Hiroshima and Nagasaki.

References

- Mazzaferri EL, Young RL. Papillary thyroid carcinoma: a 10 year follow-up report of the impact of the therapy in 576 patients. Am J Med 1981; 70:511-518.
- Harada T, Shimaoka K, Yakamaru K, et al. Prognosis of thyroid carcinoma. Int Adv Surg Oncol 1981; 4:83-110.
- McConahey WM, Hay I, Woolner LB, et al. Papillary thyroid cancer treated at the "Mayo Clinic" 1946-1970: Initial manifestations, pathologic findings, therapy, and outcome. Mayo Clin Proc 1986; 61:978-996.
- Schneider AB, Recant W, Pinsky SM, et al. Radiationinduced thyroid carcinoma. Clinical course and results of therapy in 296 patients. Ann Int Med 1986; 105:405-412.
- Conard R. Summary of thyroid findings in Marshallese 22 years after exposure to radioactive fallout. In: DeGroot, ed. Radiation associated thyroid carcinoma. New York: Grune & Stratton; 1977:241-258.
- Hempelmann LH, Hall WJ, Phillips M, et al. Neoplasms in persons treated with x-rays in infancy: Fourth survey in 20 years. J Natl Cancer Inst 1975; 55:519-530.
- Doniach I, Williams ED. Biologic effect of radiation. In: Ingbar SH, Braverman LE, eds. *The thyroid*. Philadelphia: JB Lippincott Co; 1986:258-432.

Isao Morimoto Nagasaki University School of Medicine Nagasaki 852, Japan