

Thyroid cancers in Artvin region between 1990-1994

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The incidence of thyroid cancer was 2.8% in 206 surgical cases with goitre in Artvin region between 1990-1994. This incidence was similar to the incidence of the world reports. Whether Chernobil disaster has increased the incidence of malignant disease in the north-east of Turkey is a debatable subject. We have found no sign of increase in thyroid cancer incidence in Artvin. [Turk J Med Res 1995; 13(2): 78-79]

Key Words: Thyroid, Cancer, Radiation

It has been discussed intensively whether the Chernobil disaster in 1986 had increased malignant diseases in black sea and balkaniques regions. The incidence of diseases has not regularly been followed in Turkey, but some reports can give idea about the incidences of the diseases.

In order to make the subject clear, we evaluated 206 patients operated in Yusufeli and Artvin state hospital for goitre, in the view of thyroid cancer incidence.

MATERIALS AND METHODS

Two hundred six patients were operated on between January, 1990-June, 1994 in Yusufeli and Artvin state hospital. We evaluated these patients for thyroid cancer. The thyroidectomy materials were screened by pathologists in Erzurum University Hospital, Trabzon Farabi Hospital and Trabzon Numune Hospital.

RESULTS

One hundred eighty seven (%91) of thyroidectomy cases were female, 19 (%9) were male, mean age was 31 year, and range were 13-83 years (Table 1).

There were only 6 thyroid cancer in 206 patients. Five of them were female and one of them was male. Mean age of women's was 24.6 and the hys-

topathological diagnosis of the patients were papillary carcinoma. The male patient was 32 years old and the hystopathological diagnosis was follicular carcinoma.

There was a rapid expansion of thyroid gland in two female patients in last one year. One of them was 15 and other one was 16 years old. Ultrasonography (US) showed multiple solitary nodules in the right lobes of two patients preoperatively. In the patients considered as thyroid cancer, the operative procedure was right total+left near total thyroidectomy.

The other females and male patients bearing thyroid cancer were evaluated by physical examination and US as multinodular goitre preoperatively. Since there was no possibility to make frozen section during the operation, bilateral subtotal thyroidectomy was chosen as the operative procedure. Cancer cases were sent to the oncology centers for future evaluation and treatment. In the four cases bearing simple cyst, unilaterally subtotal thyroidectomy was performed. Bilaterally subtotal thyroidectomy was performed in the resident 196 cases.

DISCUSSION

The incidence of thyroid malignancies are changing according to age, sex and environment.

United State Cancer Association had reported, the incidence of thyroid cancer in general malignant disease as 0.4% in 1987. Thyroid cancers, nodules and sarcomas may occur in 4-40 years period after radiation therapy subjected to the neck, especially in childhood (8-13). In an experimental study, tissue cultures were prepared from thyroid, toxic thyroid and neoplastic (PC and FC) thyroid cells. After radiation

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Tablo 1. The analysis of patients according to age and sex.

Age Groups	Sex		Total
	Female	Male	
10-20	52 (%25)	4 (%2)	56 (%27)
20-40	93 (%45)	10 (%5)	103 (%50)
40 and over	42 (%20)	5 (%2.5)	47 (%23)
Total	187 (%90)	19 (%9)	206

apply, thyroid and neoplastic thyroid cells were found sensitive and showed nuclear atyp. According to the results of this study; thyroid cells show atyp after radiation, papillary carcinoma and follicular adenoma are sensitive to radiation therapy (14). The dosage of X-ray is not so important for this effect (7).

The effect of Chernobil disaster in black sea region and balkaniques country has been discussed since 1986. The thyroid cancer incidence of our series was 2.8%. This result is similar as the literatures (2-5). As a result of this finding, we can say, the Chernobil disaster didn't change thyroid cancer incidence in the early period after the disaster in Artvin. However, it is impossible to make exact disicion about the effect of the disaster on thyroid cancer, becaus of not knowing the incidence of thyroid cancer before the disaster in this region. The similarity of cancer incidences in Artvin and World reports is supporting us making this desicion.

This report could be considered as an early report about the effect of radioactivity in this region and we hope many reports will be prapered about the thyroid cancer incidence in this region and our study will help the reporters researching this subject.

Artvin bölgesinde 1990-1994 yılları arası tiroid kanser sıklığı

1990 ile 1994 yılları arasında Artvin bölgesinde tiroidektomi uygulanan 206 guatr hastasında tiroid kanseri insidansı %2.8 olarak bulundu. Bu oran tiroid kanseri insidansı için (tiroidektomilerden sonra) diğer serilerde bildirilen seviyelere yakındı. Bu değerlerle Çernobil felaketinin Türkiye'nin kuzey-doğusunda malign hastalık insidansını artırıp ayırmadığını söylemek tartışmalı olmakla beraber, biz

Artvin'de tiroid kanseri insidansının Çernobil felaketi ile arttığına dair bir bulguya rastlamadık. [Turk JMedRes 1995; 13(2): 78-79]

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