

THE OCCURENCE OF NEWLY DIAGNOSED THYROID DISEASES DURING A THIRTEEN YEAR FOLLOW-UP

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OBJECTIVES

The increase in thyroid diseases frequency has been observed recently. It may be attributed to the changing iodine status, endocrine disruptors, as well as better availability of ultrasound and laboratory tests.

The aim of the study was to assess the occurrence of newly recognized thyroid diseases during long term follow up.

METHODS

The presented survey was carried out in 2010-2012 and was planned as the follow up of the study on thyroid diseases performed in 1997-1999 among the citizens of Krakow.

Study included 266 subjects (168 females, 98 males) aged 22-83 years out of 548 persons (307 females, 241 males) negatively screened for thyroid diseases during previous survey. The inclusion criterion was a written informed consent to participate in the current study.

The following examinations were performed:

- Blood test for TSH, FT4, and TPO antibodies (ECLIA method)
- Thyroid ultrasound (GE Voluson 730, 10-13MHz linear probe)
- Urinary iodine concentration in morning spot sample (Sandell-Kolthoff's method).

RESULTS

- Mean TSH (29 subjects already on LT4 excluded) – 1.83 IU/l (males - 1.74 IU/l; females – 2.08 IU/l)
- Mean FT4 - 15.39 pmol/l (males -16.13 pmol/l; females 14.92 pmol/l)
- Mean urinary iodine concentration – 98.8 +/- 56.3µg/l
- Before the survey 2 females underwent thyroidectomy (one due to thyroid cancer), 1 male and 1 female were treated with ¹³¹I due to hyperthyroidism
- Enlarged thyroid was noted in 29 subjects (11.1%): 17 males (17.5%) and 12 females (7.3%) [p<0.05]
- Uninodular goiter: cysts -34%, cystic-solid lesions 32%, solid lesions -34%.
- One new case of differentiated thyroid cancer (male) detected.

CONCLUSIONS

During about a ten year follow-up new thyroid pathology may be detected in up to 50% of studied adult population.

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