PP 432 - ULTRASOUND CHANGES OF HEALTHY THYROIDES OVER SIX YEARS IN ADULTS

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Background. Current international guidelines do not give indications on the need to retest adults with negative thyroid ultrasound. In the present study, we evaluated incidence of thyroid diseases in healthy subjects, after at least five years from a previous negative ultrasound. Moreover, clinical characteristics able to predict the risk of developing thyroid nodules were collected and analyzed.

Methods. Subjects who resulted without thyroid nodules in a previous evaluation were re-tested after at least 5 years. Anamnestic and physical data were collected. Ultrasound neck evaluation was performed by an experienced endocrinologist, recording detailed thyroid and nodules characteristics. When nodules were present, they were classified according to American Thyroid Association classification for prediction of thyroid cancer risk. Serum samples were collected for subsequent evaluations (TSH, free thyroid hormones, calcitonin, anti-thyroid antibodies).

Clinical and anamnestic, physical, sonographic or serological characteristics were analyzed with logistic regression analysis for subjects with nodules versus those without nodules.

Results. A total of 111 subjects were enrolled (43 M, 68 F). Half of them presented thyroid nodules, but the vast majority was smaller than 1 cm and without suspicious ultrasound characteristics. Only 4% had a serological diagnosis of thyroiditis. Ninety-seven percent were euthyroid. Incidence of thyroid diseases was higher in women, especially in nulliparous. Comparing clinical characteristics of subjects with and without nodules, the only statistically significant difference concerned thyroid volume adjusted for body weight or surface ($p<0.05$). Finally, none of the anamnestic, physical, sonographic or serological values were predictive of the risk of developing thyroid nodules at logistic regression analysis.

Conclusions. These results suggest that it is not indicated to repeat thyroid US after only 6 years in negative subjects, even if they might develop small and clinically irrelevant thyroid nodules.