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BACKGROUND

Fine-needle aspiration (FNA) is an important test for triaging patients with thyroid nodules and differentiating benign from malignant disease. According to Bethesda System Classification, the rate of AUS/FLUS is between 3-6% of all FNA. The malignancy risk is of 5-15%. TSH levels might be associated to the likelihood of malignancy in thyroid nodules according to some studies. Our aim was to establish a possible correlation between TSH level and malignancy of AUS/FLUS.

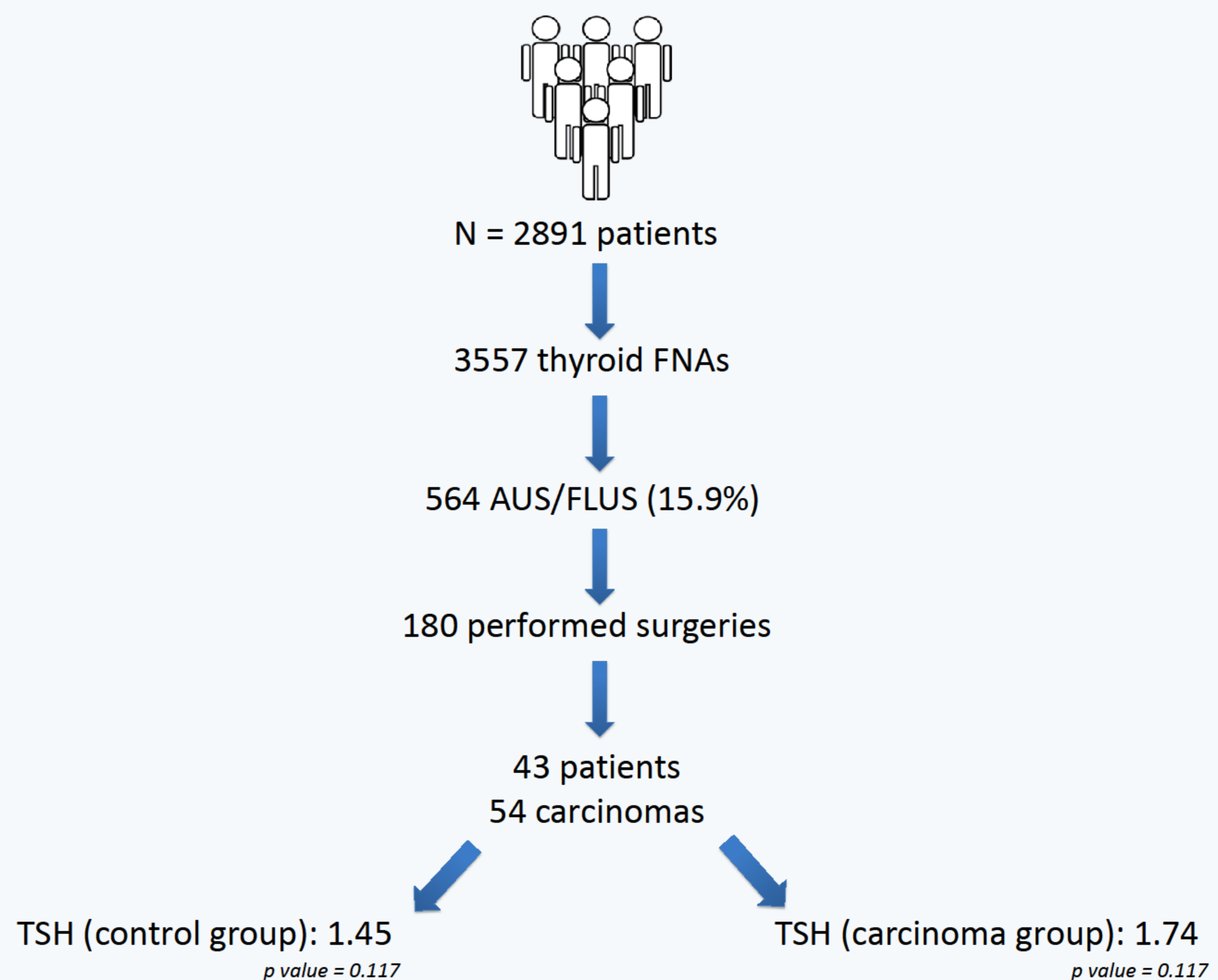
METHODS

Retrospective study using SPSS.

RESULTS

The authors reviewed a total of 2891 patients from January 2012 to December 2014. There were 564 (15.9%) AUS/FLUS in 3557 thyroid FNAs performed. The malignancy risk was 9.6%. The rate of carcinomas on operated patients was 30%. From a total of 180 performed surgeries, there were 54 carcinomas. TSH value was determined in carcinomas. 11 were excluded because of missing data or because of patients under thyroid hormonal replacement before surgery. On the 43 remaining patients correlation between AUS/FLUS and TSH values was established. The mean value for TSH in carcinomas versus control group (benign lesions) was 1.74 vs 1.45 (p value = 0.117).

January 2012 – December 2014:



DISCUSSION / CONCLUSION

The casual factors for differentiated thyroid cancer are poorly understood. There are known risk factors like age, gender, a history of radiation exposure and a family history of thyroid cancer. Cytological examination of samples by FNA is an accurate method for differentiating benign from malignant thyroid nodules. However, some results might be nondiagnostic or false positive/false negative. The rate of AUS/FLUS is between 3-6% of all FNA, with a malignancy risk is of 5-15%, established according to the Bethesda Classification System. Whether TSH as an influence on development of human thyroid cancer is uncertain, although some studies report that there may be a correlation between TSH levels and the likelihood of malignancy.

Our aim was to analyse a possible correlation between TSH levels and malignancy of AUS/FLUS.

Although our series had a considerable number of patients and FNAs, the results weren't statistically significant, and we could not establish a correlation between TSH level and the likelihood of carcinomas in AUS/FLUS in our series. A bigger data may be necessary to get statistically significant results.

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