Familial non-medullary thyroid cancers tend to be more bilateral and have more capsular invasion compared to non-familial ones

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OBJECTIVES

Currently, about 5-15% of non-medullary thyroid cancers are considered to be of familial origin. These are either syndome-associated tumors or non-syndromic tumors. The aim of the study was to determine the clinical, pathological and biochemical characteristics of familial non-medullary thyroid cancers (FNMTC) compared to non-familial ones with a follow-up of 10 years.

METHODS

Sixty-two patients with papillary cancer followed by a single physician were screened retrospectively.

| | Family history (+) (n=25) | Family history (-) (n=37) | P |
|--------------------------------|------------------------------|------------------------------|-------|
| Age (year) | 48.1 ± 15.1 | 45.3 ± 13.1 | NS |
| Gender (F/M) | 20/5 | 29/8 | N5 |
| Maximum tumor diameter (mm) | 0.9 ± 0.6 | 1.3 ± 1.0 | NS |
| Bilateral tumors (%) | 7/25 (28) | 5/37 (14) | 0.01 |
| Capsular invasion (%) | 11/25 (44) | 9/37 (24) | 0.004 |
| Multicentricity (%) | 8/25 (32) | 8/37 (22) | NS |
| Lymph node metastasis (%) | 5/25 (20) | 6/37 (16) | NS |
| Vascular invasion (%) | 5/25 (20) | 5/37 (14) | NS |
| >1 surgery (%) | 11/25 (44) | 15/37 (41) | NS |
| Classical tumor subtype (%) | 5/25 (20) | 6/37 (16) | NS |
| Radioactive iodine therapy (%) | 10/25 (40) | 13/37 (35) | NS |

RESULTS

Twenty-five patients (%40.3) had a history of papillary thyroid cancer in one or members of their family. The remaining 37 patients (%59.7) did not have a family history.

The clinical, pathological and biochemical characteristics of the study groups are given on Table 1.

There were no differences between the thyroglobulin and TSH levels between the groups at all time periodsearly postoperative period, 5^{th} and 10^{th} year after surgery.

All the parameters on the table have been found to be similar when patients with 2 cases (n=20) in the family and >2 cases in the family (n=5) were compared.

CONCLUSIONS

In conclusion, FNMTC tends to be more bilateral and has a higher rate of capsular invasion compared to non-familial ones.

References

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