

PAPILLARY THYROID CANCER- A CASE OF LOCO-REGIONAL AGGRESSIVENESS

Tiberiu Ștefăniță ȚENEĂ-COJAN¹
Carmen DRAGOMIRESCU²
Mihaela VLADU³
Diana CLENCIU⁴
Cristina Gabriela ENE⁵
Vlad BĂLEANU⁶
Lucrețiu RADU⁷

ABSTRACT

ALTHOUGH THYROID CANCER IS RELATIVELY UNCOMMON COMPARED TO OTHER CANCERS, THYROID REPRESENTS THE MOST FREQUENTLY LOCATION FOR MALIGN TUMORS WHEN IT COMES TO ENDOCRINE SYSTEM.

WHEN IT COMES TO STATISTICS, THYROID CANCER IS MORE FREQUENT IN WOMEN THAN IN MEN WITH A RATIO OF 3:1 AND IT CAN OCCUR AT ANY AGE BUT WITH A HIGHER INCIDENCE OVER 30 YEARS OLD AND ITS AGGRESSIVENESS INCREASES SIGNIFICANTLY IN OLDER PATIENTS.⁸

THE "GOLDEN STANDARD" FOR THE TREATMENT OF THYROID CANCER REMAINS THE SURGERY, ALTHOUGH, THYROIDECTOMY OFTEN IS NOT ENOUGH SO THE TREATMENT MAY BE COMPLETED WITH RADIOTHERAPY, RADIOACTIVE IODINE, CHEMOTHERAPY OR HORMONE THERAPY. OVERALL, THE PROGNOSIS FOR MOST PATIENTS DIAGNOSED WITH PAPILLARY OR FOLLICULAR THYROID CANCER IS USUALLY AN EXCELLENT ONE.

KEY WORDS: PAPILLARY THYROID CANCER, TOTAL THYROIDECTOMY, PARTIAL DYSPHAGIA

INTRODUCTION

¹Department of Surgery, Faculty of Medicine, University of Medicine and Pharmacy of Craiova, The CF Hospital of Craiova

² Department of Endocrinology, CF Hospital of Craiova

³Department of Metabolism and Nutrition Diseases, Faculty of Medicine, University of Medicine and Pharmacy of Craiova

⁴Department of Metabolism and Nutrition Diseases, Municipal Clinical Hospital "Filantropia"

⁵PhD student, Department of Pharmacology, University of Medicine and Pharmacy of Craiova

⁶University of Medicine and Pharmacy of Craiova, Bucharest University Emergency Hospital, Surgery Department (corresponding author, baleanuvlad@gmail.com)

⁷ Department of Hygiene, Faculty of Medicine, University of Medicine and Pharmacy of Craiova

⁸ <https://www.endocrineweb.com/conditions/thyroid-cancer/thyroid-cancer>

Although as many as 75% of the population will have thyroid nodules, the vast majority are benign – only 1% of them are malignant . Young people usually don't have thyroid nodules. However, children and adolescents with thyroid nodules are most commonly benign, but the overall risk of thyroid cancer is markedly higher than in the adult population⁹.

Thyroid cancer, however, is a rare disease, its incidence being about 1% of all type of cancers.¹⁰ 90% of these are differentiated carcinomas (papillary, follicular and medullary tumors),¹¹ especially among young people, between 30-40 years of age,¹² while anaplastic types are presented more in older patients.¹³

From the etiological point of view, certain factors are incriminated in the development of thyroid cancer:

- Therapeutic radiation
- Iodine
- Polynodular goiter
- Family susceptibility
- Oncogenes¹⁴

Thyroid cancer is usually presented without symptoms. In some cases, patients may experience a lump in the neck or hoarseness or change in voice¹⁵

Papillary thyroid carcinoma is an infiltrating, multi-centric and predominantly lymphatic cancer; ¹⁶there are histological variants with good prognosis (micro-papillary, encapsulated, solid and follicular carcinoma)¹⁷ and aggressive variants with poor prognosis (with high cell cells with cylindrical cells)¹⁸.

This presented case is about a young patient admitted in our clinic for the appearance within the last month of a voluminous goiter and with the progressive addition of dysphonia and dysphagia.

MATERIAL AND METHOD

The presented case is about a 48 year old patient admitted in the IV th Surgery Clinic, of the CF Hospital of Craiova for the volume increase of the anterior throat accompanied with dysphonia and mild dysphagia.

⁹ <https://www.endocrineweb.com/conditions/thyroid-cancer/thyroid-cancer>

¹⁰ Caloghera C. , Bordosi D. – Chirurgia tiroidei si paratiroidelor – ed a II –a, Ed. Mirton, Timisoara 1996.

¹¹ Caloghera C. , Mogosanu I. , Bordosi D. – Chirurgia tiroidei si paratiroidelor- Ed Falca. Timisoara 1974.

¹² Fane Ghelase, Ion Georgescu, Raducu Nemes – Chirurgie Generala- Ed didactica si pedagogica, R.A.- Bucuresti 1999.

¹³ Buck Walter. J.A. si Thomas C. – Selection of surgical treatment for well differentiated thyroid carcinomas Ann. Surg. 1972, 176: 565

¹⁴ Fane Ghelase, Ion Georgescu, Raducu Nemes – Chirurgie Generala- Ed didactica si pedagogica, R.A.- Bucuresti 1999.

¹⁵ <https://www.endocrineweb.com/conditions/thyroid-cancer/thyroid-cancer>

¹⁶ Caloghera C. , Mogosanu I. , Bordosi D. – Chirurgia tiroidei si paratiroidelor- Ed Falca. Timisoara 1974.

¹⁷ Fane Ghelase, Ion Georgescu, Raducu Nemes – Chirurgie Generala- Ed didactica si pedagogica, R.A.- Bucuresti 1999

¹⁸ Crile G. Jr. Survival of patients with papillary carcinoma of the thyroid after conservative operations. An. J. Surg. , 1964, 108:862

From personal pathological and heredocolateral data that we collected from the patient, we found nothing of importance. From the patient's history, we note that the volume increase of the anterior neck lobe began 1 month ago, growing very fast and worrying the patient over the last 10-14 days

Objective examination revealed that the patient presented a voluminous tumor of 10 / 8cm at the level of the anterior cervical region, deflecting on the left side, deforming the area, with normal overlying skin, mobile with swallowing, painless, without any loco-regional adenopathies being clinically detectable.

Biologically, the patient's analyzes are within physiological parameters. The baritone transition reveals a cervical esophagus with a deviated tract to the right (describes a concavity open to the left), the cardiology exam and the ENT exam within normal limits.

Imaging examination revealed a normal abdominal ultrasound but the thyroid ultrasound showed a 10/11 / 43mm right thyroid lobe with homogeneous ecographyc structure, with no vascular semantics, a large thyroid left lobe occupied by multiple cystic formations between 20-30 mm diameter (with completely disappeared glandular stroma), and with the left side of the ismmet being occupied from a 20 mm diameter cyst.

After a pre-treatment with Lugol solution, sedatives and after an endocrinological exam that confirmed euthyroidia, the patient was scheduled for surgery (3 days after admission).

Surgical approach confirmed the ultrasound results: right thyroid lobe with a quasnormal macroscopic aspect, enlarged left thyroid lobe with cystic transformation. Total thyroidectomy is performed with some difficulty on the left side and the removed pieces were sent for histopathological extemporaneous exam that showed a voluminous goiter with areas of cystic transformation with hyperplasia of follicular epithelium and rich inflammatory, hemorrhagic and chronic lymphocytic infiltration.

After thyroid extirpation, we observed that the left side of the throat was bloated. We decided to penetrate by the dissociation of the sternocleidomastoid muscle fibers and we found several cystic formations, between 2-8 cm, which formed a chain extending from the cranial mastoid to retrosternal left caudal area with the same macroscopic aspect as the left thyroid lobe. At the moment of dissection, intimate ratio of these formations with the neck vessels and especially the left internal jugular vein is found. We managed to remove with a slight difficulty the cystic formations; the histopathological extemporaneous examination showed the same result as the thyroid.



Image 1. Intra-operative aspect

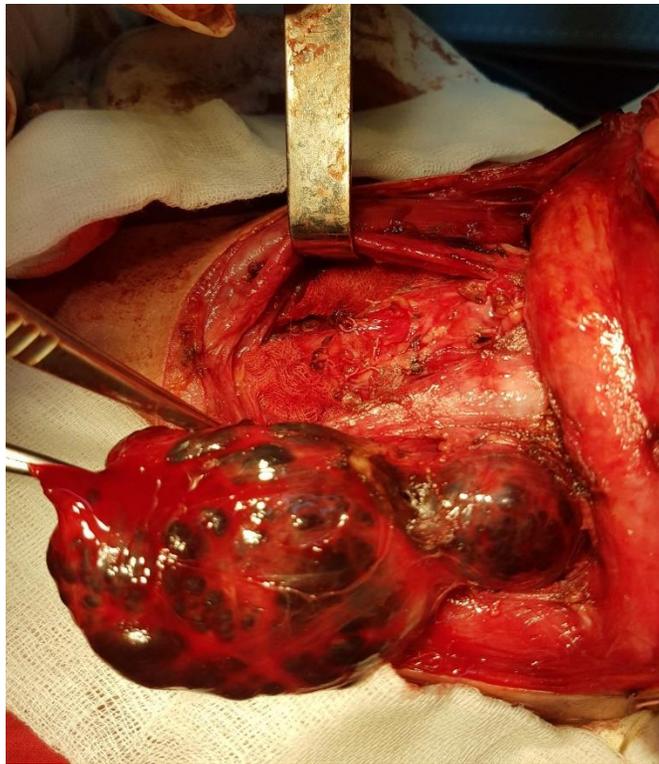


Image 2. Intra-operative aspect

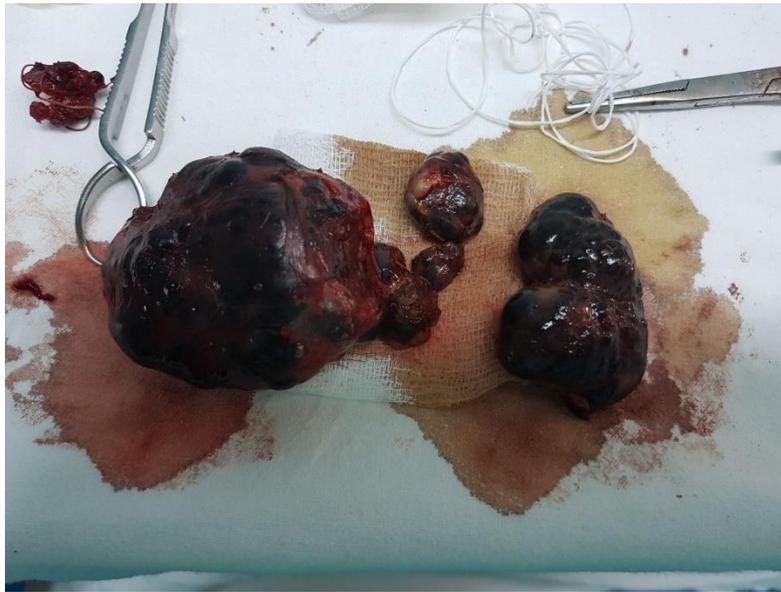


Image 3. Thyroid- macroscopic aspect



Image 3. Thyroid- macroscopic aspect

Because of the problems we had with the left internal jugular vein that we tractioned during the intervention we decided to administer anticoagulation treatment to the patient for a few days.

The patient's post-operative progression was favorable, with the discharge 8 days after admission.

Approximately 21 days after surgery, we received the histopathological result of the paraffin block which revealed a papillary intracellular proliferation, presenting vesicular nuclei that raise the suspicion of an intrachistic papillary thyroid carcinoma. Immuno-histochemical examination confirmed the diagnosis - papillary carcinoma.

The patient is guided to oncology for the post-surgical treatment, and for reasons we do not know he did not appear in any oncology service and after about 4 months he presented the volume increase of the neck (perhaps relapse).

He was admitted at another surgical service where another surgery is performed and he was sent again to oncology. The patient delayed again the visit to an oncologist and after about two months he returned for the same problem, but the loco-regional relapse made another intervention to not be possible.

CONSLUSIONS

This case particularity – the loco-regional aggressiveness of a papillary thyroid cancer, knowing however that this type of thyroid cancer has a favorable prognosis, was favored by the patient's delay in presenting to an oncology center for further treatment.

ACKNOWLEDGEMENTS

All authors equally contributed in the research and drafting of this paper.

All authors report no pottential conflict of interest.

REFERENCES

1. <https://www.endocrineweb.com/conditions/thyroid-cancer/thyroid-cancer>
2. **Caloghera C. , Bordosi D.** – Chirurgia tiroidei si paratiroidelor – ed a II –a, Ed. Mirton, Timisoara 1996.
3. **Caloghera C. , Mogosanu I. , Bordosi D.** – Chirurgia tiroidei si paratiroidelor- Ed Falca. Timisoara 1974.
4. **Fane Ghelase, Ion Georgescu, Raducu Nemes** – Chirurgie Generala- Ed didactica si pedagogica, R.A.- Bucuresti 1999.
5. **Buck Walter. J.A. si Thomas C.** – Selection of surgical treatment for well differentiated thyroid carcinomas Ann. Surg. 1972, 176: 565
6. **Crile G. Jr.** Survival of patients with papillary carcinoma of the thyroid after conservative operations. An. J. Surg. , 1964, 108:862