

## Case Report

## Case Report of Anaplastic Thyroid Carcinoma with Ulcer Discharging Pus

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**Abstract:** Anaplastic thyroid carcinoma is one of the rare tumors of the thyroid gland. Its prevalence is about 2% to 5% in our environment. It has a characteristic of growing rapid. Typically develops from well differentiated thyroid carcinoma or goiter. Its the leading with worstest prognosis among the thyroid carcinoma. In this case we report of a female patient 77yrs old with a history of anterior neck swelling over a period of 30yrs. The swelling is ulcerative with pus discharge over the tip point. One of the investigations of fine needle and aspiration cytology was done and reported to have features suspicious of malignancy. Total thyroidectomy was done and the specimen taken for histopathology. We report one such case with discharging sinus over the involved skin which is rare. Only one article is published in relation to skin involvement and the type of thyroid malignant was papillary thyroid malignancy.

**Keywords:** Anaplastic thyroid carcinoma, tumors, environment.

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**INTRODUCTION**

Anaplastic thyroid carcinoma (ATC) is the rarest tumour of the thyroid gland, representing only 2% of clinically recognised thyroid cancers [1]. Most cases at the time of diagnosis are associated with extensive local disease spread and distant metastasis in 20%–50% of cases [2]. The most common metastatic sites are lungs, followed by the intrathoracic and neck lymph nodes [3]. Patients with anaplastic thyroid cancer (ATC) face a uniformly dismal prognosis, with average 5-year survival rates of around 7% and a median survival time of 6 months [4]. If patient age is advanced and has distant metastasis then survival rate is highly reduced.

**CASE PRESENTATION**

A 77 year old female, whom is hypertensive for 30 years and Diabetes mellitus for 1 year on regular medication was referred to our hospital for further management with main complaint of anterior neck swelling of the neck for more than 30 years. Also has an ulcer on the lower tip of the swelling and its discharge pus. The discharge is continuous, smelly and the area looks greenish. With ulcer of 2cm by 1.5cm.

Patient reports of the swelling to be of gradual onset not painful but it gradually increased further in the left side of the neck past this 2 years prior to admission. There were no other associated symptoms including those of hypothyroidism or hyperthyroidism.

Also there was no difficulty in swallowing or breathing. Two years prior to the presentation at BMC, patient noted a small ulceration in the skin over the mass above the supra-sternal notch more on the left lateral of the neck, which did not heal. A small quantity of discharge from this sinus has persisted since then, that was gradually increased with time. Patient also added that she has night sweats, no appetite and excessive weight loss during the past 5 weeks prior to admission. No other complaint was elicited.

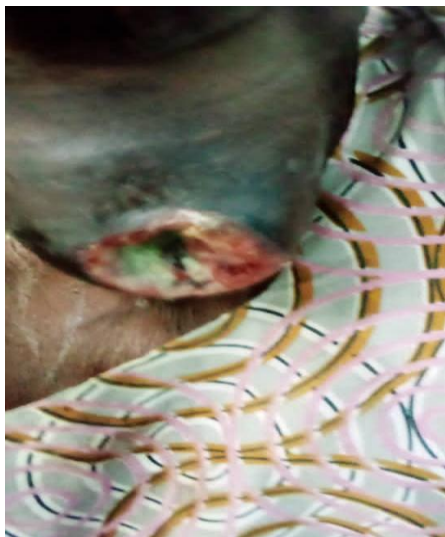
**On General Examination**

Patient was Awake/alert, with generalized body weakness, wasted, pale, jaundice, Afebrile, not dyspneic, but with persistent whitish productive cough associated with chest pain. Vitals: BP 137/90 mmHg, PR 84 bpm, SpO<sub>2</sub> 96%, RR 16 bpm.

**Local Examination**

Revealed a swelling in the thyroid region 7 x 12 cm in size, more prominent on the anterior part. The

skin surrounding the sinus was inflamed and thickened. The mass was fixed, non-tender, but mild pain on deep palpation, no nodules and the ulcer on the tip of the mass was oozing pus and foul smell. The colour of the discharge was greenish. Investigations revealed euthyroid states. Below is a figure showing the anterior neck swelling with the ulcer.



There was neither shift of trachea nor retro-sternal extension as per percussion and Xray results; patient could not afford CT scan done as one of the investigations. There was no vocal cord palsy as per fibre optic nasopharyngoscopy. We had a preoperative diagnosis of thyroid carcinoma whereby total thyroidectomy and modified neck dissection will be done. The procedures were done and the tissues taken for histopathological for analysis.

Postoperative patient was doing fine and the fourth day was discharged from the hospital. Biopsy results came out and that it was anaplastic thyroid carcinoma.

## DISCUSSIONS

Anaplastic thyroid carcinoma in lake zone Tanzania is about 2% to 5% [5]. The leading thyroid carcinoma is papillary followed by follicular carcinoma. The anaplastic thyroid carcinoma develops from the undifferentiated cell most of the times from the follicular.

It typically presents in older patients with a rapidly enlarged anterior neck mass and symptoms of local invasion. They are very nasty, aggressive malignancies that are frequently unresectable and incurable at presentation. The undifferentiated anaplastic cancer is considered to be lethal within a short time and survival time can last for months. As in our case the patient is 77 years old female which tallies with other published in hand with the sex and the neck mass has an ulcer from the tip which is something rare

in relation to other anaplastic thyroid carcinoma. ATC arises more commonly in female patients, with a mean age of 70 years, usually affected by nodular goiters or with a history of well-differentiated thyroid carcinoma or with nodal or distant metastases [6]. Extra-thyroidal extension (ETE) occurs in 4% to 16% of cases and carries with it an increased risk of disease recurrence and death [7, 8]. As in our case the cancer had already involve the skin. This extra thyroidal extension ETE does not represent a homogeneous group with a uniform prognosis [9]. Common ETEs include involvement of recurrent laryngeal nerve, larynx, trachea and esophagus but in our case it did not involve those parts. Involvement of skin with fixity is quite rare in ETE but to our patient it was fixed and also had ulcer.

Published findings emphasize the adverse impact of extra thyroidal extension in patients with differentiated thyroid cancer whereby they have 54% 15 year survival and 29% 30 year survival [8]. In contrast, patients without extra thyroidal extension (ETE) had a survival rate of 87% and a local failure rate of 9% at 30 years [8]. On the contrary there are reports that suggest 64% to 78% 15 year survival for complete versus 29% survival for incomplete resections [7, 8]. In this case report there was skin involvement and ulceration with a discharging pus but it has no laryngeal nerve palsy or tracheal involvement and it's anaplastic thyroid carcinoma. No large studies but a single report that address involvement of the overlying skin separately [9].

## CONCLUSION

Patient should visit the hospital early whenever realize something unusual in their body. This patient has stayed with the swelling for a long period chances of it changing was high as refer to literature. We conclude that addressing the primary needs to be surgically aggressive and more so when there is ETE in terms of skin involvement. External radiation should be considered in selected patients. Suppressive doses of thyroxine and regular follow-up is mandatory

**Recommendation:** Patient should be insisted to come back for follow up regardless of the progress.

### Abbreviations

ETE: Extrathyroidal extension.

ATC: Anaplastic thyroid carcinoma

**Competing interests:** The authors declare that they have no competing interests.

### Authors' contributions

AD: Discussed the case together and assisted in the review of literature

LW: Assisted in the preparation of the manuscript

RM: Involved in the management of the patient

AV: literature review

ZS-Literature review

**Consent:** Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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