Bangladesh J of Otorhinolaryngology 2008; 14(1) : 36-38

Case Report

Benign thyroid tumor causing extensive skin ulcer - an unusual presentation

M. Alamgir Chowdhury[1], Shahidul Islam[2], Naseem Yasmeen[2], Mousumi Malakar[3]

Abstract:
Incidence of benign thyroid adenoma is common, but adenoma causing extensive skin ulceration is a very unusual presentation. Here we are reporting a case of a 70-year-old female from Norshingdi district who presented to us with an ulcerated, neck swelling over the thyroid region for one year, which moves with deglutition and bleeds on touch with foul smelling discharge for one month and pain for two months. Biopsy from the ulcer revealed inflammatory lesion while subsequent histopathology following thyroidectomy under local anesthesia gave features of follicular adenoma. Postoperative period was satisfactory and follow up was excellent.

Key words: *Follicular adenoma, Thyroid, Skin ulcer.*

Introduction:

Thyroid adenoma is the term applied to the benign epithelial neoplasm that forms glandular patterns as well as to the tumors derived from glands but not necessarily reproducing glandular patterns[1, 2].Those that forms large cystic masses are referred to as cyst adenomas. Follicular adenoma present as clinically solitary nodule. A follicular adenoma and carcinoma can only distinguish by histopathologically. In follicular adenoma, there is no capsular invasion or pericapsular blood vessel. Annual incidence of thyroid neoplasm is about 3.7 per 100,000 of the population, sex ratio being female: male is 3:1[1, 3]. Common presenting symptom is thyroid swelling which moves with deglutition. Associated lymph nodes may be enlarged in papillary carcinoma. Recurrent laryngeal nerve paralysis may be a presenting feature of locally advanced malignant disease. Anaplastic growths are hard and irregular which may involve surrounding structures even can cause skin ulcer, but benign adenoma causing ulceration in the skin is extremely rare. Here we report such a benign follicular adenoma presenting with big unusual skin ulceration.

1. Professor and Head, Otolaryngology & Head - neck surgery, Medical College for Women & Hospital, Uttara, Dhaka
2. Assistant Professor, Otolaryngology & Head - neck surgery, Medical College for Women & Hospital, Uttara, Dhaka
3. Medical Officer, Otolaryngology & Head - neck surgery, Medical College for Women & Hospital, Uttara, Dhaka

Address of correspondence to: Dr. M. Alamgir Chowdhury, Professor and Head, Otolaryngology & Head - neck surgery, Medical College for Women & Hospital, Uttara, Dhaka, e-mail: jaldi@dhaka.net,

Case Report:

A-70-year old female presented with a big firm lower neck swelling in the thyroid region for one year, pain for two moths and rupture of the mass over skin with ulceration for one month. The swelling was approximately 9 cm x 7 cm. which moves with deglutition. Skin overlying the mass had ulceration with surrounding necrosed tissue which bled on touch. There was foul smelling blood stained discharge and slough over the ulcer. Size of the ulcer was 5 cm x 3 cm (Fig.-1).

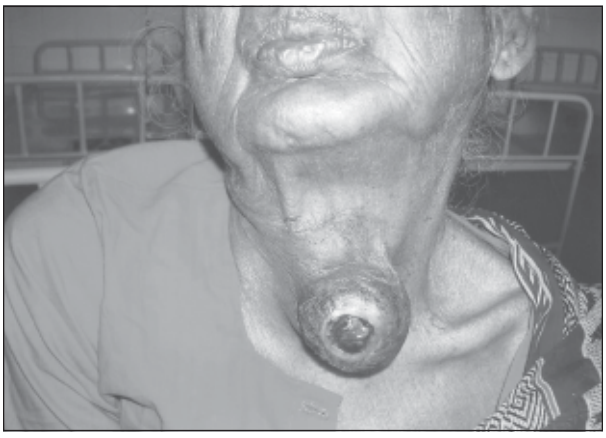

Fig.-1: *Pre-operative photograph of the patient showing ulcerated thyroid mass.*

The mass was fixed with underlying structures. No neck node was palpable. The patient was in a very debilitating condition with anemia, Hb% being 6.5 gm/dl and there is ischemic change in her ECG. Biopsy from the ulcer revealed inflammatory lesion which was not at all informative and satisfactory. We planned for thyroidectomy after transfusing two bags of whole blood to correct her anemia. But she was unfit for general anesthesia because of her debilitating condition, and ischemic change in her ECG. We then decided to operate her under local anesthesia with high risk informed written consent from the patient and her attendants. Total thyroidectomy was performed as the whole thyroid gland was involved with the lesion. Both recurrent laryngeal nerves and all parathyroid glands were identified and kept intact during surgery. The mass was sent for histopathology and the report was follicular adenoma. Post-operative period was uneventful with excellent follow up (Fig.-2).

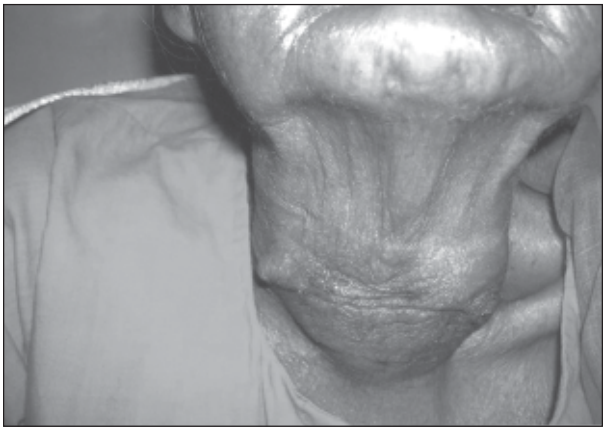

Fig.-2: *Photograph of the patient after seventh post operative day.*

Discussion:

Follicular adenoma of thyroid gland is the common benign neoplasm. Though very common it is rare with skin ulceration[4]. Adenoma occurs most frequently in middle aged females but is not uncommon in adolescents and in people over aged fifty[5]. Our patient is a 70-year-old female. Thyroid tumor with neck node, hard fixed mass, with change of voice and or skin ulceration would seem to be malignant. Our case was a benign tumor which gave a diagnostic dilemma before being histopathologically diagnosed. About 60 % cases of papillary carcinoma may be associated with neck node. A case of papillary carcinoma of thyroid gland with bleeding neck mass was reported[6]. Anaplastic carcinoma usually present with a rapidly growing hard fixed mass which coincides with our patient's neck swelling. The presentation in our case was a painful, big, firm, ulcerated neck swelling in the thyroid region which bled on touch, with a provisional diagnosis of thyroid cancer.

Thyroid hormone profile and other investigations in this case were within normal limit except low hemoglobin level and ischemic change in ECG. Biopsy from ulcer revealed inflammatory lesion which did not help the treatment plan. Due to very low socio-economic status, our patient could not afford to do the informative investigations like CT scan, MRI, FNAC, which could give us clues regarding benign or malignant lesion.

We did total thyroidectomy in our case as the lesion was involved the whole gland and also keeping in mind that the tumor could be a malignant one. But histopathologically it was again reported as benign follicular adenoma. Benign adenomas with euthyroid state often require surgery because cytology can not differentiate between a follicular adenoma and follicular carcinoma[3 - 5]. Other indications of surgery for benign thyroid adenoma are cold nodule which may turn into malignancy and in some cases for aesthetic purpose.

The total thyroidectomy was done under local anesthesia as she was in poor nutritional status and also there is ischemic change in ECG. The extensive skin ulceration in our case is thought to be due to negligence, improper or no treatment and with spreading secondary infection in cystic degeneration of thyroid adenoma. The result of surgery was satisfactory and she was doing well till the last check up with thyroxin replacement therapy[3]. Proper treatment in early stage of thyroid nodule can prevent complications like cystic degeneration, infection, rupture, skin ulceration and or malignant transformation.

References:

1. Russell RCG, William NS, Bulstrade CJK. Baily & Love's short practice of surgery, 24th edition, London, Edward Arnold Publishers Ltd, 2004; 776 – 804.

2. Kumar V, Cortan RS, Robins SL. In: Robins basic pathology, 7th edition, Philadelphia, Reed Elsevier India Ltd, 2004; 726 – 738.

3. Mazzeferri EL, Massoll N. Management of papillary and follicular (differentiated) thyroid cancer: new paradigms using recombinant human thyropin. Endocrine – Related Cancer, 2002; 9: 227 – 247.

4. AACE (American Association of Clinical Endocrinologists) guidelines. Thyrotropin Carcinoma guidelines, Endocr Pract, 2001; 7: 113 – 119.

5. Shaheen OH. Thyroid neoplasm, Scotts – Browns Otolaryngology, 5th edition, Volume 4, Alan G. Kerr. London, Butterworth-Heinemann, 1987; 301 – 14.

6. Amin ZA, Biwas SS, Razib SF, Mahbub S. Papillary carcinoma of thyroid presented as a bleeding neck mass. Bangladesh Journal of Otorhinolaryngology, 2006; 12: 66 – 67.