# A Case of Peptic Ulcer in Recent Op/C/O Total Thyroidectomy: A Rare Case Report

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Abstract:- Gastric acid secretion induces the inner lining of the gastrointestinal tract to rupture, which is the hallmark of peptic ulcer disease. It mainly affects the stomach and proximal duodenum, but it can also affect the lower esophagus, distal duodenum, or jejunum. The two main factors interfering with the mucosal resistance to damage are *H. pylori* and NSAIDs.

Goitre is a disorder characterized by an enlarged thyroid gland that may or may not be linked to hyper or hypothyroidism. It can be manifested with normal thyroid hormone levels (euthyroid).

Both the entities are different. Here, we describe a case of peptic ulcer discovered in a patient who had undergone a total thyroidectomy recently for a massive diffuse nodular goitre.

**Keywords:-** Diffuse Nodular Goitre, H. Pylori, NSAIDs, Peptic Ulcer

### I. INTRODUCTION

NSAIDs including low-dose aspirin are some of the most commonly used drugs. They have good efficacy and a long history of clinical use, but can cause peptic ulcers which may have fatal complications.[1]

On the other hand, nodular goitre are clinically recognizable enlargements of the thyroid gland characterized by excessive growth and structural and/or functional transformation of one or several areas within the normal thyroid tissue. In the absence of thyroid dysfunction, autoimmune thyroid disease, thyroiditis, and thyroid malignancy, they constitute an entity described as simple nodular goitre.[2]

Here we present a situation where we operated the patient for diffuse nodular goitre and later he presented to us with upper GI bleed which later diagnosed as bleeding peptic ulcer because of chronic NSAIDs abuse.

## II. CASE REPORT

We present an instance of a 55 years of age male with goitre with a progressive expansion in size for past 7 years. There could have been no different symptoms other than the apparent neck irregularity. CT scan of neck showed gross enlargement of thyroid gland across the two sides of the neck. FNAC was done which was suggestive of cystic colloidal nodule and the thyroid profile was of euthyroid status.

We performed total thyroidectomy for this patient. During the intraoperative period patient had developed intra operative hypotension despite of very minimal blood loss during surgery. On the post operative day 1 patient's haemoglobin was found to be exceptionally low without any evidence of active blood loss. However, this was managed by serial blood transfusion. After being stabilised patient was discharged on post operative day 4 with-out patient management.

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Fig 1 Diffuse Nodularity Noted in Post-Op Specimen of Total Thyroidectomy

Consequently, patient reported to us after 4 days with multiple episodes of hematemesis. Blood investigations revealed severe anaemia. Detailed investigations revealed that patient was on NSAIDs of higher dose without any medical advice for last 6 months for back pain.

After stabilizing the patient, UGI scopy was performed which was suggestive of a small peptic ulcer in 1<sup>st</sup> part of duodenum. (No active bleed noted).



Fig 2 UGIs Copy Showing Ulcer Noted in the First Part of Duodenum

Then patient was counselled regarding the irrational use of NSAIDs and discharged on the next day with-out patient management for peptic ulcer disease.

### III. DISCUSSION

When diffuse enlargement of the thyroid occurs in the absence of nodules and hyperthyroidism, it is referred to as a diffuse non-toxic goitre also called "simple goitre" due to the absence of nodules, or "colloid goitre" due to the presence of uniform follicles that are filled with colloid. Diffuse goitre is most commonly caused by iodine deficiency and is termed "endemic goitre" when it affects >5% of the population in a given geographic area.[3] Indications for treatment of non-toxic multinodular goitre are compression of the trachea or esophagus, venousoutflow obstruction, growth of the goitre, neck discomfort, and cosmetic issues.[4] Surgery of thyroid is undertaken to exclude any malignancy or if there is benign thyroid disease which gives rise to dysphagia or stridor following compression of esophagus or trachea and for the cosmetic purpose.[5] In the present case, total thyroidectomy was performed on the patient. Intraoperatively we found diffuse enlargement of the whole gland, with multinodularity which gave us a high suspicion for malignancy. Peptic ulcer disease (PUD) is a heterogeneous disease caused by the imbalance between mucosal protective factors like mucosal bicarbonate secretion, blood flow, cell renewal, prostaglandin production, and aggressive factors like H. pylori infection, NSAID use, smoking, alcohol abuse, stress, and trauma. Such ulcers are common in the esophagus, stomach, and duodenum. Among all PUD, 10-20% present with complications such as perforation and gastric outlet obstruction, the most common being upper gastrointestinal bleed [6]

In this case patient had developed UGI bleed a few days after total thyroidectomy done for diffuse nodular goitre and which was found to be due to bleeding peptic ulcer of duodenum due to long term NSAIDs abuse.

# IV. CONCLUSION

The long term irrational use of NSAIDs can cause a detrimental effect on gastric and duodenal mucosa and can lead to ulceration of it and can produce serious life threatening complications needing urgent interventions.

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