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Research

Case Report: Post Cricoid Cancer, Ct4aN0M0 (Stage IVA)

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	Abstract
Published on: 26.12.2025	Post-cricoid squamous cell carcinoma (SCC) is an uncommon and aggressive hypopharyngeal malignancy that often manifests at an advanced stage due to ambiguous early signs. For two months, a 46-year-old female complained of constant throat pain. Endoscopy revealed a significant ulceroproliferative lesion in the post-cricoid region, and CT imaging showed circumferential thickening with expansion into the mediastinum and potential invasion of the thyroid cartilage. PET-CT staged the disease as CT4aN0M0, suggesting locally progressed malignancy without distant metastasis, and biopsy verified invasive SCC. Due to substantial airway constriction, an emergency tracheostomy was performed. The patient was treated with cisplatin-based concurrent chemoradiation coupled with supportive treatments to maintain treatment tolerance. This case underlines the diagnostic problems, rapid advancement, and requirement for early clinical suspicion in post-cricoid.
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2025 All rights reserved.  Creative Commons Attribution 4.0 International License.	Keywords: Post-cricoid carcinoma, Squamous cell carcinoma, Hypopharyngeal cancer, Airway obstruction, Tracheostomy, Ulceroproliferative growth, Thyroid cartilage invasion, Mediastinal extension, CT imaging, Endoscopy, PET-CT, cT4aN0M0, Chemoradiation, Advanced hypopharyngeal tumour, Oncology management.

INTRODUCTION

One of the most problematic forms of head and neck malignancies is the involvement of the cricoid cartilage, which can lead to obstructive symptoms and airway impairment [1]. Cricoid cancer, although rare, manifests with characteristics such as throat soreness, trouble swallowing, and voice alterations. These symptoms often mimic benign illnesses, delaying identification and treatment [2]. The most prevalent histological type of cricoid cancer is squamous cell carcinoma (SCC), which can spread locally or regionally to the esophagus, thyroid cartilage, and trachea. In advanced stages, it can lead to considerable airway obstruction, respiratory difficulty, and in rare circumstances, requiring surgical treatments like tracheostomy [3].

A 42-year-old woman presented with ongoing throat pain, and imaging tests, including endoscopy and CT scans, showed a significant lesion in the post-cricoid region, potentially affecting the thyroid cartilage. These results raised concerns about malignancy, probably squamous cell carcinoma (SCC). The patient's situation emphasizes the necessity for early detection and the involvement of a multidisciplinary team for diagnosis and treatment [4]. Timely intervention, possibly involving surgical removal and additional therapies, is vital for enhancing prognosis and avoiding complications like airway obstruction. This case illustrates the diagnostic difficulties and complexities related to cricoid cancer [5].

CASE PRESENTATION

A 46 yrs old female patient presented to oncology department with chief complaints of persistent throat pain for two months. Endoscopy and CT scan revealed a large lesion in the post-cricoid region, extending into the mediastinum and possibly involving the thyroid cartilage, raising concerns for squamous cell carcinoma. Tracheostomy tube was placed for management.

PHYSICAL AND SYSTEMIC EXAMINATION

	D1	D2	D3	D4	D5	D6	D7
Temperature (F)	98	98.6	99	98	98	98	98
Blood pressure (mmHg)	110/80	130/70	130/70	120/76	120/80	110/70	130/80
Pulse (bpm)	90	82	82	72	89	86	93
CVS	S1S2+	S1S2+	S1S2+	S1S2+	S1S2+	S1S2+	S1S2+
Respiratory system	BAE+	BAE+	BAE+	BAE+	BAE+	BAE+	BAE+
P/A	SOFT& NT	SOFT&NT	SOFT&NT	SOFT&NT	SOFT&NT	SOFT&NT	SOFT&NT

LAB INVESTIGATIONS

HAEMATOLOGICAL PATTERNS

Parameters	Results
Hb[13-17] g/dl	14.2
RBC[4.0-5.5] millions/cumm	4.9
WBC[4000-10000] cells/cumm	7,800
Lymphocytes [15-30]%	26
Eosinophils [1-6]%	2
Monocytes [2-10]%	3
ESR [0-10]mm 1 st hour	8
Platelets[1-4] lakhs/cum	3.5

OTHER INVESTIGATIONS

1. Histopathology Report

Impression: Features are consistent with Squamous Cell Carcinoma

2. ULTRASOUND NECK

Impression: Few hypoechoic-anechoic and spongiform small oval shaped lesions in both lobes of thyroid – likely multinodular goiter. Reactive cervical lymphadenopathy

3. Endoscopy Report

Impression: Post cricoid ulceroproliferative lesion to r/o malignancy



Post cricoid lesion

4. CECT NECK

Impression:

- Heterogeneously enhancing soft tissue lesion in post-cricoid region as described.
- Nodular hypodense lesion with mild attenuation with calcifications noted in right aryepiglottic fold & benign lesion.

S.N O	TRADE NAME	GENERIC NAME	DOSE	RO A	FRQ	CLASS	INDICATIO N
1	INJ.CISPLASUR E	cisplatin	50mg in unit NS	IV	OW	Platinum based antineoplast ic agent	Primary chemotherapy agent used with radiation (chemoradiati on) for post- cricoid cancer
2	CAP.FIXPRITAN T	aprepitant	125mg	IV	thrice/we ek	NK1 receptor antagonist	Prevention of chemotherapy -induced nausea and vomiting (CINV) caused by cisplatin
3	INJ.DEXONA	dexamethasone	16mg in 100ml NS	IV	thrice/we ek	corticosteroi d	As part of antiemetic regimen with

							aprepitant and ondansetron. Reduction of inflammation, edema
4	INJ.ZOFER	ondansetron	16mg in 100ml NS	IV	thrice/week	5HT3 receptor antagonist	Prevention and treatment of nausea/vomiting during chemotherapy
5	INJ.RANTAC	ranitidine	100mg in 100ml NS	IV	thrice/week	H2 receptor antagonist	Prevention of stress ulcers, gastritis, reflux symptoms during chemo/radiation or steroid therapy
6	TAB.ULTRACET	Tramadol hydrochloride and acetaminophen	325mg+37.5 mg	PO	SOS	Opioid analgesic	Management of moderate cancer-related pain.
7	SYP.MUCAINE GEL	Oxetacaine + aluminium hydroxide	10ml	PO	TID	Topical anesthetic+ antacid	Relief of gastritis, acidity, mucosal irritation
8	TAB.PULMOCL EAR	guaifenesin	1tab	PO	BD	expectorant	Help clear respiratory mucus.
9	TAB.SINAREST	Paracetamol +chlorpheniramine +phenylephrine	1tab	PO	BD	Analgesic + antihistamine+ nasal decongestant	Symptomatic relief of cold, congestion and fever
10	TAB.CLAVUM	Amoxicillin and clavulanic acid	625mg	PO	BD	Penicillin antibiotic + beta-lactamase inhibitor	Treatment or prophylaxis of secondary infections Respiratory or oral infections common in neck cancer patients
11	TAB.PAN	pantoprazole	40mg	PO	OD	Proton pump inhibitor	Prevention of gastric irritation, ulcers especially due to steroids, NSAIDs and other drugs
12	INJ.BIOKCL INJ.MAGNEON	INJ.kcl +mgs04 in 500ml DNS	1ampoules both	IV	BD	Electrolyte supplement	To provide kcl and mgs04 to the body

DISCUSSION

Post-cricoid squamous cell carcinoma (SCC) is an uncommon but aggressive form of hypopharyngeal cancer that frequently presents at an advanced stage because of vague symptoms. In this instance, the patient reported ongoing throat discomfort, and further examination revealed a substantial ulcerative mass extending into the mediastinum, with potential involvement of the thyroid cartilage—characteristics typical of advanced disease. A biopsy confirmed the presence of invasive SCC, while a PET-CT scan classified the tumour as cT4aN0M0, signifying locally advanced cancer without evidence of distant metastasis.

Due to airway obstruction, an urgent tracheostomy was necessary, which is often required in cases of advanced post-cricoid tumours. The patient was initiated on a standard regimen of cisplatin-based concurrent chemoradiation, the mainstay of treatment for locally advanced hypopharyngeal cancers. Supportive care measures such as antiemetics, mucolytics, pain relief, and proton pump inhibitors were implemented to enhance treatment tolerance and mitigate complications.

In summary, this case underscores the challenges in early detection, the aggressive behaviour of post-cricoid SCC, and the necessity of a multidisciplinary approach—including imaging, histopathology, airway management, and combined chemoradiation—to enhance clinical results.

CONCLUSION

This case illustrates the intricacies and seriousness of post-cricoid squamous cell carcinoma, an aggressive cancer that is frequently diagnosed in more advanced stages. The patient exhibited ongoing throat discomfort, and thorough imaging along with histopathological analysis revealed a significant invasive tumour causing airway obstruction. An early tracheostomy was vital for the patient's stabilization, and treatment with cisplatin-based chemoradiation commenced promptly.

This case underscores the importance of maintaining a high degree of clinical suspicion when assessing patients with persistent throat issues, as early detection can greatly influence outcomes. A multidisciplinary approach—which includes endoscopic evaluation, advanced imaging techniques, pathology review, and oncology consultation—is crucial for effective treatment planning. Although the prognosis for advanced cases remains uncertain, prompt intervention and comprehensive supportive care can enhance both quality of life and treatment results.

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