

# Unique Presentation of Post Cricoid Malignancy

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## Abstract

Post cricoid carcinoma represents 20-25% of hypopharyngeal carcinomas. Almost all hypopharyngeal carcinomas are squamous cell carcinomas having epithelial changes and presenting as ulcerative, proliferative or indurated mass.

We report a unique case of squamous cell carcinoma post cricoid region, presenting as mucosal intact mass.

A 60 year old male presented with progressive difficulty in swallowing of solids for last 1 month. Examination showed smooth mucosal intact bulge in posterior pharyngeal wall obliterating left pyriform sinus. CT scan showed diffuse wall thickening in post cricoid region extending to left pyriform sinus and posterior pharyngeal wall with right middle and lower deep cervical node involvement. Histopathological examination revealed moderately differentiated squamous cell carcinoma.

The aim of highlighting this case is to emphasize the need for thorough clinical evaluation and deep section biopsy in mucosal intact masses of hypopharynx.

**Keywords:** hypopharynx, mucosal intact, carcinoma

## INTRODUCTION

Post cricoid area is a part of hypopharynx extending from the level of arytenoid cartilages and connecting folds to the inferior border of the cricoid cartilage. Carcinoma of the hypopharynx is a relatively uncommon disease, which has an incidence of less than 1/100 000 of the population, and usually presents in patients aged 60- 70 years.<sup>[1]</sup> The most common site of origin of hypopharyngeal cancer is the pyriform sinus (66%–75%), followed by the posterior pharyngeal wall, and postcricoid area (20%–25%)<sup>[2]</sup>

In Europe and Asia , high incidence of hypopharyngeal cancers have been found among men in France, Switzerland, Spain, Slovakia, Slovenia and India.<sup>[3]</sup>

Almost all hypopharyngeal carcinomas are squamous cell carcinomas<sup>[4]</sup>. The clinical appearance of hypopharyngeal squamous cell carcinoma include exophytic growths or flat plaques with raised edges and superficial ulceration<sup>[5]</sup>. Almost all presentations are associated with epithelial changes.

In this paper, we report a case of squamous cell carcinoma post cricoid area presenting with smooth mucosal intact bulge which is unusual and unique.

## CASE REPORT

A 60 year old male presented in our department of Otorhinolaryngology ,SreeBalaji medical college, Chennai, with difficulty in swallowing since 1 month. It was slowly progressive, continuous, more to solids than liquids with no aggravating or relieving factors and no history of regurgitation or aspiration. Weight loss was significant with loss of appetite. There was no history of change in voice or difficulty in breathing. He was chewing tobacco and taking alcohol for last 40 years.

On video laryngoscopic examination, a smooth mucosal intact bulge was seen in the region of posterior pharyngeal wall with obliteration of left pyriform sinus. No exophytic or ulcerative lesion was seen.(fig .1) . On neck examination, Laryngeal crepitus was absent indicating post cricoid involvement. There was no clinically palpable cervical lymph nodes on both sides.

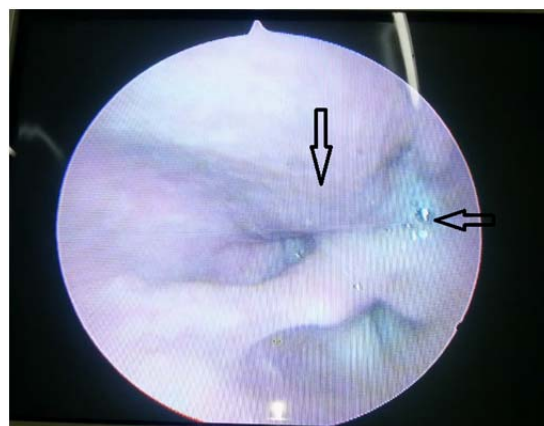


Figure 1- Video laryngoscopic picture showing smooth mucosal intact bulge in posterior pharyngeal wall (long arrow) ,with obliteration of left pyriform sinus causing pooling of secretions (short arrow).

CT Scan showed diffuse wall thickening in the post cricoid region and proximal esophagus from C4 to C7 levels extending to left pyriform sinus. (fig.2 ).



Figure 2- CT Scan showing diffuse wall thickening in post-cricoid region.

Ultrasound neck revealed two hypoechoic nodes, around 5mm in cross section in right mid and lower cervical region with no corticomedullary differentiation indicative of secondary metastasis.

Under General Anaesthesia, Direct laryngoscopy confirmed the findings of a smooth mucosal intact bulge in post cricoid region, extending to posterior pharyngeal wall and left pyriform sinus. After lifting the arytenoids with McCoy laryngoscope, mucosal incision was given and deep biopsy was taken from post cricoid area. Histopathological examination report revealed moderately differentiated squamous cell carcinoma. Patient was referred to Oncologist for further management as the patient was not willing for extensive surgical resection.

### DISCUSSION

Hypopharyngeal cancer is a rare disease representing about 0.5% of all human malignancies with an incidence of less than 1 per 100,000 population and constituting only 3%–5% of all head and neck cancers<sup>[6],[7],[8]</sup>. India and France record the highest incidence in male population of 8-15 cases in 100,000 population. The incidence in women is as high as 0.2 : 100,000 in majority of the countries, except for India (1:100000)<sup>[9]</sup>.

Upper hypopharyngeal cancers appear to be associated more with heavy drinking and smoking, whereas the lower hypopharyngeal or postcricoid cancers are more often associated with nutritional deficiencies<sup>[4],[10]</sup>.

Almost all hypopharyngeal cancers are squamous cell carcinoma presenting as exophytic growth or flat plaques with raised edges. On very rare occasion, squamous cell carcinoma may commence at a small location on the surface, burrow and undermine the subepithelial tissue in such a manner that the lesion appears mostly as a smooth surfaced exophytic lesion, which makes a diagnostic challenge<sup>[11]</sup>. Post cricoid carcinomas spread to mid and lower cervical nodes and paratracheal nodes, and have a lower incidence (30%) of nodal metastasis than other hypopharyngeal carcinomas<sup>[12]</sup>. Eighteen percent of patients have bilateral cervical node metastasis<sup>[13]</sup>. To date, Squamous cell carcinoma of the hypopharynx has not been associated with any specific chromosomal or genetic abnormality<sup>[5]</sup>; However, loss of chromosome 18 was observed in 57% hypopharyngeal tumors in one study<sup>[14]</sup>.

Submucosal tumors may be more extensive than clinically suspected<sup>[15]</sup> but diagnosis may be delayed in spite of direct laryngoscopic examination and biopsy<sup>[16]</sup>.

In our institute, 2 similar cases of mucosal intact masses in posterior pharyngeal wall presented and multiple biopsies could not prove malignant lesion. In the present case, although the patient had smooth mucosal intact bulge, CT scan showed diffuse wall thickening in post cricoid region extending to left pyriform sinus and posterior pharyngeal wall with right middle and lower deep cervical node involvement and deep incisional biopsy of post cricoid region revealed moderately differentiated squamous cell carcinoma.

### CONCLUSION

All hypopharyngeal malignancies do not present as ulcerative or proliferative growth. Progressively worsening symptoms in old age should raise suspicion of malignancy in all cases. Detailed history and thorough clinical evaluation should be done in all cases of mucosal intact masses of hypopharynx. Superficial biopsy in mucosal intact masses may come negative. Therefore, deep biopsy after incision of mucosa should be taken. The aim of presenting this case is to emphasize the need for deeper biopsies and stress the importance of history and clinical evaluation.

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