



International Journal of Pharma Research and Health Sciences

Available online at www.pharmahealthsciences.net



Case Study

A Rare Case Report of Carcinoma Esophagus in Young Adult

Athawale Kedar^{1,*}, Lakhkar Dilip², Katariya Mitesh³, Barhate Anand³

¹ Assistant Professor, Padmashree Dr. Vithalrao Vikhe Patil Medical College & Hospital, Near Govt. Milk Dairy, Vilad Ghat, Ahmednagar, Maharashtra, India.

² Professor and HOD, Padmashree Dr. Vithalrao Vikhe Patil Medical College & Hospital, Near Govt. Milk Dairy, Vilad Ghat, Ahmednagar, Maharashtra, India.

³ Resident, Padmashree Dr. Vithalrao Vikhe Patil Medical College & Hospital, Near Govt. Milk Dairy, Vilad Ghat, Ahmednagar, Maharashtra, India.

ARTICLE INFO

A B S T R A C T

Received: 22 May 2014

Accepted: 19 Jun 2014

Carcinoma of esophagus is one of the common cancers affecting human being. However it is very rare below 30 years of age {1,2}. Many studies have shown that the esophageal malignancies are caused due to environment produced risk factors. They have long latent period of carcinogenesis. This makes them rare in childhood. Many of the reported cases do not have any relation to the etiological or environmental risk factors, therefore, the pathogenesis of the condition is still unknown {3,4,5,6}. Here we are reporting a case of esophageal carcinoma in a 25-year-old adult because of its rare incidence in this group.

Key words: esophageal cancer, young adult, adenocarcinoma, squamous cell carcinoma

Corresponding author *

Dr. Kedar Athawale, Dept of Radiology, Padmashree Dr. Vithalrao Vikhe Patil Medical College & Hospital, Near Govt. Milk Dairy, Vilad Ghat, Ahmednagar, Maharashtra, India. E Mail: kedarithawale@gmail.com

1. INTRODUCTION

The esophagus cancer is one of the cancers having worst prognosis. It occurs most commonly in individuals over 50 years old. This cancer is more common in males. The rate of its frequency among men to women varies from 2:1 to 20:1.

Histologically the esophagus cancer occurs in two different forms:

1. The epithelial squamous cell carcinoma
2. The adenocarcinoma.⁷

Nearly 60% of epithelial cell carcinoma type occurs in the middle and about 30% in distal part of the esophagus.⁷ The etiology of the epithelial cell carcinoma of the esophagus is still unclear. However many epidemiologic studies indicate a strong association between the disease and materials found in food, water, tobacco, alcohol, nitrous amines, infections, aflatoxines, vitamin and selenium deficiency states. Other risk factors are - obesity, low fiber in diet, hot beverages, asbestos and genetic factors have been mentioned, too.⁸

2. CASE REPORT

A twenty five year old female came to our hospital with symptom of dysphagia which was worsening over last two months. A barium swallow study was ordered. It showed mucosal irregularity at distal esophagus with shouldering of the barium filled esophagus. There was mild dilatation of the proximal esophagus. The gastro-esophageal junction was not involved. Neoplastic etiology was feared. CT scan was ordered for further evaluation. CT scan of chest and abdomen was obtained. It showed diffuse thickening of the distal esophagus causing irregular lumen. It measures 36 mm in cranio-caudal dimension. No involvement of gastro-esophageal junction was noted. There was no involvement of surrounding mediastinal structures. Multiple metastatic lesions were seen in liver. Diagnosis of carcinoma esophagus was confirmed by endoscopic biopsy. Patient was prepared for esophageal resection. Patient died on fourth day of surgery due to cardiac arrest.

3. DISCUSSION

The esophagus cancer is rare at young age.⁹ Based on a study (1952-1956), only three deaths (in <14 years) of esophagus cancer had been reported.¹⁰ The youngest patient had been an Indian girl (8 years old) that manifested the problem in middle third of her esophagus associated with lung metastasis.¹¹ Shah et

al.¹² introduced a case of a young adult who had periodic episodes of dysphagia. Endoscopic evaluation was normal. Resection however showed carcinoma completely filling an esophageal diverticulum with a normal esophageal lumen. The prognosis is worst in the younger patients than elderly¹³⁻¹⁵ because of following factors:

- 1) Aggressive biologic nature of the disease among the young,
- 2) Clinical and diagnostic presumption is not considered as an awful prognostic cancer among this group of patients.

Few studies indicate that there is no association of disease with smoking and alcohol misuse and rate of death during surgical operation and prognosis in young patients as compared to elderly¹⁶⁻¹⁷; therefore it has suggested that in young patients with continuous symptoms, endoscopic evaluations should be considered.



Fig 1: Barium swallow shows abrupt narrowing at the distal esophagus with mucosal irregularity (Arrow)

Authors acknowledge the great help received from the scholars whose articles cited and included in references of this manuscript. The authors are also grateful to authors / editors / publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed. Authors are grateful to editorial board members and team of reviewers who have helped to bring quality to this manuscript.

6. REFERENCES

1. Mori M, Ohno S, Tsutsui S, et al. Esophageal cancer in young patients. *Ann Thorac Surg* 1990; 49: 284-6.
2. Shahi UP, Sudarsan S, Dattagupta S, et al. Carcinoma esophagus in a 14-year-old child: report of a case and review of literature. *Trop Gastroenterol* 1989; 10:225-8.
3. Days N, Munoz N. Esophagus. In: Schottenfeld D, Fraumeni J, editors. *Cancer epidemiology and prevention*. Philadelphia: WB Saunders Co., 1982:596-623.
4. Sons HU. Etiologic and epidemiologic factors of carcinoma of the esophagus. *Surg Gynecol Obstet* 1987; 165: 183-90.
5. Munoz N, Crespi M. High-risk conditions and precancerous lesion of the esophagus. In: Sherlock P, Morson BC, Barbara L, Veronesi U, editors. *Precancerous lesion of the gastrointestinal tract*. New York: Raven Press, 1983:53-63.
6. Li MX, Cheng SJ. Etiology of carcinoma of the esophagus. In: Huang GJ, Kai WY, editors. *Carcinoma of the esophagus and gastric cardia*. New York: Springer-Verlag, 1984:25-51.
7. Abdullah R, Allam F. Esophagus carcinoma in a 15- years old girl: A case report and review of the literature. *Ann Saudi Med* 2000; 120: 261-264.

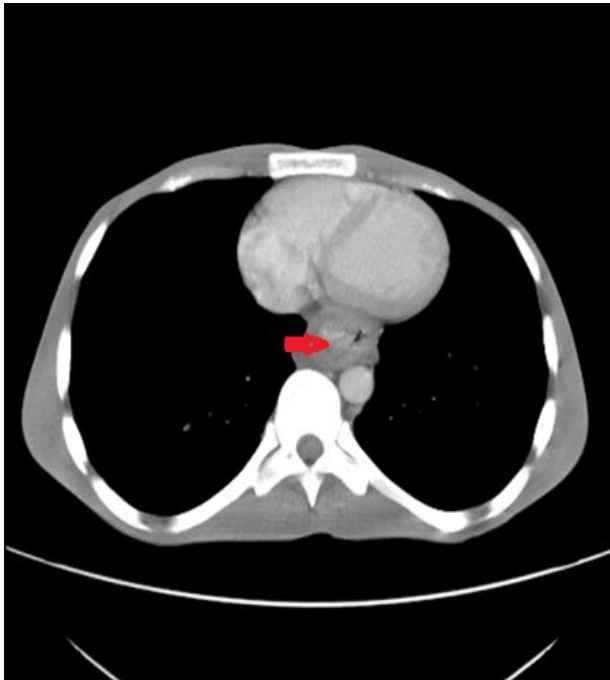


Fig 2: Post contrast CT scan shows diffuse wall thickening of distal esophagus (Arrow) with mucosal irregularity

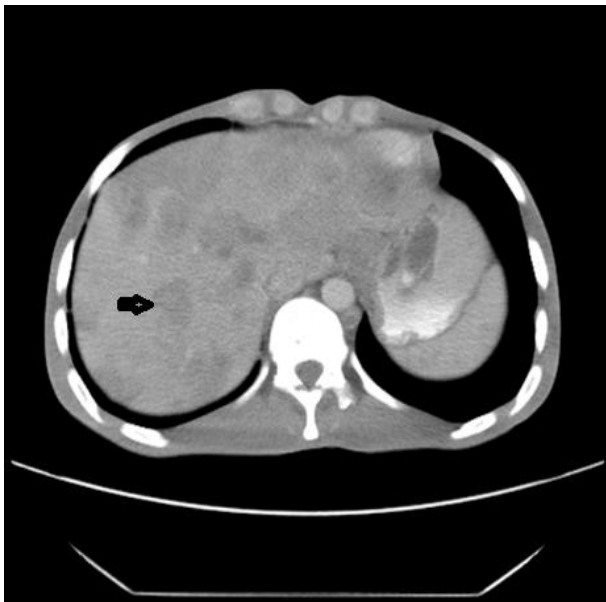


Fig 3: Post contrast CT scan shows multiple hypodense rounded lesions in both the lobes of liver (Arrow).

4. CONCLUSION

The incidence of carcinoma of esophagus has significantly increased in India due to increased smoking and alcohol intake habit. However it is very rare in less than 30 years of age. Many studies have proved that endoscopic evaluation is needed in all the individuals with prolonged symptom of dysphagia. Biopsy associated with endoscopy increases the diagnostic sensitivity to more than 99 percent.

5. ACKNOWLEDGEMENT

8. Day N, Munos N. Esophagus: Cancer Epidemiology and Prevention. W.B. Saunders, Philadelphia, 1982; 596-623.
9. Bowery DG, Clark GW, Rees BI, Williams GT, Carey PD. Outcome of esophagogastric carcinoma in a young patient. *Post Grad Med J* 1999; 75: 22-26.
10. Dessueault S, Coppolo D, Weitzner M, Dower BSP, Florida S, Richer DC. Barrett Esophagus and squamous cell carcinoma in a patient with psychogenic vomiting. *Intl. J. Gastrointestinal Cancer* 2002; 32: 57-62.
11. Kinnman J, Shin HI, Wetteland P. Carcinoma of the esophagus after lye corrosion. *Acta Chir Scand* 1968; 94: 332-393.
12. Mori M, Ohno S, Tsutsui S, Masuura H, Kuwono H, Sugimachi K. Esophageal carcinoma in young patients. *Ann Thoracic Surg* 1990; 42: 284-286.
13. Pickett LK, Biggs HC. Cancer of the gastrointestinal tract in childhood. *Paediatr Clin North Am* 1967; 94: 223-224.
14. Shah SM, Desia SG. Carcinoma in an esophageal diverticulum. *J Assoc Physician Ind* 1992; 40: 119-120.
15. Shahi UP, Sudarsan S, Dattagupta S. Carcinoma of esophagus in a 14-years old child: report of a case and review of literature. *Trop Gastroenterol* 1989; 10: 225-228.
16. Sutow WW, MD Jr. Wharam, Foulkes MA, W. Jr. Lawrence. General Aspects of Childhood Cancer. *Clinical Pediatric Oncology*. 1984; 3rd Edn., CV Mosby Co., UK., pp: 1-13.
17. Tsai CH, Hsu HS, Wang LS, Wang HW, Wu YC, Hsieh CC. Squamous cell carcinoma of the esophagus in young patients. *J Chin Med Assoc* 2002; 66: 93-93.