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Oesophageal Carcinoma: An Atypical Presentation – A Case Report

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Authors' contributions

This work was carried out in collaboration between both authors. Author SS wrote the manuscript. Author CMC reviewed the manuscript. Both authors read and approved the final manuscript.

Case Study

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ABSTRACT

Oesophageal Carcinoma presenting as symptoms of acute respiratory distress is extremely rare. Hence diagnosis may be difficult as all the initial investigations are focused towards finding a respiratory cause. In this paper the authors report a 62 year old Caucasian male who presented with acute dyspnoea with no respiratory history but was subsequently discovered to have an oesophageal carcinoma as the likely underlying cause. Subsequent investigations revealed it to be a stage IB squamous cell mid-oesophageal carcinoma that was treated by radiotherapy. It is important when evaluating a patient with acute respiratory symptoms but no previous respiratory history to consider alternative pathologies related to surrounding anatomical structures also.

Keywords: Oesophageal carcinoma; dyspnoea.

1. INTRODUCTION

Oesophageal carcinoma typically presents with dysphagia and weight loss [1], but naturally there are atypical cases also. Oesophageal carcinoma is the 9th commonest cancer worldwide with an annual incidence of 7300 cases in the United Kingdom [2] with smoking and alcohol each increasing the risk of developing the cancer fivefold. In terms of presentation the elasticity of the oesophagus means that around two-thirds of the lumen

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needs to be obstructed to produce dysphagia. Untreated, the tumour tends to be locally invasive and can eventually metastasise to the liver, lungs, bone and nervous system causing breathlessness in rare cases as a manifestation of a malignant pleural effusion. Treatment options include surgery and radiotherapy but the overall 5-year survival rates are approximately 20-25% for all stages [3].

Published epidemiological data regarding the presentation of oesophageal carcinoma is very scarce with no concrete figures for those that may present with respiratory signs. The authors here present a case of oesophageal carcinoma that presented with acute respiratory distress.

2. CASE

A 62-year-old Caucasian male presented to the Emergency Department after an episode of sudden collapse earlier that day. Presenting signs included extreme dyspnoea and wheeze of sudden onset with no apparent trigger. On further enquiry he had no respiratory history and his only risk factor was the fact he was a chronic smoker. A recent weight loss of 6 kg over the previous 8 weeks was also noted. He was apyrexial but tachycardic with a respiratory rate of 24. On examination patient was in severe respiratory distress using all his accessory muscles and unable to speak in full sentences with chest auscultation revealing poor bilateral air entry but no crepitations. The clinical diagnosis at this stage was acute exacerbation of a first presentation of chronic obstructive pulmonary disease. Arterial blood gases on high flow oxygen (60%) revealed an acidosis (pH 7.29) with a degree of CO_2 retention (7.91 kPa). However these improved on 24% oxygen to pH 7.40 and pCO_2 of 5.40kPa respectively. Haemoglobin was 16.0g/dL and white cell count was 12.6 x 10^9/L. Renal and liver function tests were normal. A chest radiograph revealed hyper inflated lung fields but nothing else of note.

The patient was initially managed with a course of intravenous antibiotics, steroids and regular nebulisers and his condition improved. The sudden sporadic nature of his symptoms together with the recent weight loss led one to the possibility of intermittent obstruction caused by a tumour in a main bronchus. A respiratory opinion was sought and subsequent bronchoscopy proved normal which now pointed to a possible diagnosis of acute laryngeal spasm. A CT (computed tomography) scan booked as next line investigation revealed a 3.6 x 3.2cm mass with a density of 58 (soft tissue) causing partial mid-oesophageal obstructions with an air fluid level at the level of the carina (Fig. 1). No mediastinal lympadenopathy was seen and no surrounding fat stranding was seen at this level either. The lungs and visualised bones were unaffected and there was no evidence of metastasis or infiltration to any surrounding thoracic or abdominal structures. A subsequent barium swallow revealed there to be a 5cm irregular tight stricture in the subcarinal oesophagus with a positive apple core sign and pooling of contrast with food residue being noted also. An urgent gastroscopy showed a tight stricture beginning at 30 cm from the incisors through which the scope was unable to pass without revealing any other possible features to explain these atypical presenting symptoms. Six biopsies were taken from the site all measuring 0.2-0.4 cm each. The biopsies comprised of oesophageal mucosa and clot that was confirmed histopathologically to be squamous cell carcinoma grade G2. The tumour cells were confined to the superficial layer of the oesophagus and determined to be stage IB. Following informed discussion of the potential treatment options with the patient he opted for a course of radiotherapy.

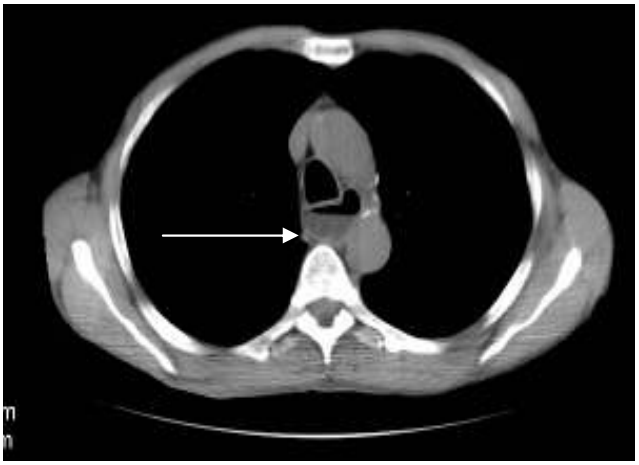

Fig. 1. CT Thorax indicating oesophageal mass (arrow)

3. DISCUSSION

The sudden sporadic onset of respiratory symptoms in this case with no prior respiratory history perplexed many of the physicians involved. Galandiuk et al. [4] have reported that dysphagia (80-90% of patients); vomiting (50%) and pain (45%) are the commonest presenting symptoms of oesophageal carcinoma but the reported patient presented with none of these. Indeed here the normal bronchoscopy findings pointed to a diagnosis of acute laryngeal spasm as the cause of the patients' respiratory symptoms in keeping with previously reported cases [5] Literature searches have revealed cases of airway obstruction [6] due to oesophageal carcinoma but they have all been caused by oesophagotracheal fistulas which this patient did not have [7].

In this case the patient presented with bizarre sudden respiratory distress sufficient to cause collapse. A respiratory cause was sought but all tests including bronchoscopy proved normal. The eventual diagnosis of oesophageal carcinoma is highly unusual in that the patient did not present with the typical symptoms. In retrospect further discussions with the patient revealed that he had avoided certain foods that had caused him to wheeze but he was never investigated for this. The authors surmise that the sudden respiratory symptoms were due to acute laryngeal spasm secondary to overspill caused by the oesophageal tumour and this gave the picture of hypercapnoeic respiratory failure present on the initial results. The acute laryngeal spasm is highly likely to be linked in this way to the oesophageal carcinoma diagnosed by subsequent CT scan.

4. CONCLUSION

Doctors may encounter several patients with acute respiratory symptoms but subsequent investigations focused on finding a respiratory cause fail to reveal any pathology. In such cases repeated evaluations of the patient must include alternative pathologies in anatomical areas closely related to the respiratory system. Physicians should be cautious to label any patient with acute dyspnoea as having a respiratory cause without any definitive respiratory past medical history.

CONSENT

All authors declare that written informed consent was obtained from the patient for publication of this case report and accompanying images.

ETHICAL APPROVAL

Not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Ojala K, Sorri M, Jokinin K, Kairaluoma M. Symptoms of carcinoma of the oesophagus. Med J Aust. 1982;1:384-5.
2. Pennathur A, Gibson MK, Jobe BA, Luketich JD. Oesophageal carcinoma. Lancet. 2013;381(9864):400-12.
3. Richel DJ, Verwenne WL. Systemic treatment of oesophageal cancer. Eur J Gastroenterol Hepatol. 2004;16:249-54.
4. Galandiuk S, Hermann RE, Cosgrove DM, Gassman JJ. Cancer of the esophagus. Cleveland Clin Exper. Ann Surg. 1986;203:101-8.
5. Bortolotti M. Laryngospasm and reflex central apnoea caused by aspiration of refluxed gastric contents. Gut. 1989;30:233-8.
6. Freitag L, Tekolf E, Steveling H, Donovan TJ, Stamatis G. Management of malignant esophagotracheal fistulas with airway stenting and double stenting. Chest 1996;110:1155-60.
7. Hokamura N. A case of rapidly growing esophageal cancer with tracheo-esophageal fistula. Jpn J Clin Oncol. 2011;4:153.

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