


Case Report

A Synchronous Disaster: A Rare Case of Tonsillar Squamous Cell Carcinoma with Jejunal Adenocarcinoma

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ABSTRACT

A 65-year-old male patient presented with a jejunal perforation, and was previously diagnosed with squamous cell carcinoma of the tonsil with metastasis to the left cervical lymph node two months prior. Upon evaluation of the jejunal perforation, histopathological examination of the edge biopsy specimen revealed poorly differentiated adenocarcinoma of the jejunum. This case highlights the rare occurrence of synchronous primary malignancies, specifically squamous cell carcinoma of the tonsil and adenocarcinoma of the jejunum. The simultaneous presence of multiple primary malignant tumors in different organ sites presents unique challenges for diagnosis and management, underscoring the importance of thorough investigation and monitoring in such complex cases.

Keywords: Adenocarcinoma of jejunum, Multiple primary malignant tumour, Squamous cell carcinoma of tongue, Synchronous

INTRODUCTION

Multiple primary malignant tumours are defined as two or more distinct tumours occurring either synchronously or metachronously within the same organ or in different organs.^[1] These malignancies are relatively common, representing approximately 2.4%–17.2% of cancer cases over a 20-year follow-up period in cancer populations.^[2,3] Managing synchronous multiple primary malignancies (MPM), particularly advanced cases, remains a significant challenge.^[4] Tonsillar carcinoma accompanied by neck lymph node involvement is not an uncommon presentation in head and neck clinical practice.^[5] Small bowel adenocarcinoma (SBA), a rare cancer, accounts for less than 2% of all gastrointestinal tract malignancies. Its clinical presentation is often nonspecific, with symptoms such as nausea, vomiting, abdominal pain, small bowel obstruction, and bleeding.^[6] SBA is notoriously difficult to diagnose, often detected at an advanced stage, and is associated with a poor prognosis.^[7]

CASE REPORT

A 65-year-old male chronic smoker and alcoholic came with abdominal pain and abdominal distension and passing of black-coloured stools since 1 week. On arrival, the patient had tachycardia, and blood pressure (BP) was 110/60 mmHg; per abdomen examination revealed abdominal distension, guarding, and rigidity with sluggish bowel sounds. Other system

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examination was normal. He was evaluated in an outside hospital with an ultrasonography report showing moderate ascites with free-floating internal echoes, contrast enhanced computed tomography (CECT) abdomen pelvis showing pneumoperitoneum, and jejunal perforation with gross ascites. The patient had a history of swelling in the left side of the neck since 2 months, which was evaluated in an outside hospital and diagnosed with squamous cell carcinoma of the tonsil with metastatic squamous cell carcinoma of the left cervical lymph node.

Erect abdomen x-ray revealed free gas under the right dome of the diaphragm [Figure 1]. The patient was taken up for emergency laparotomy. Intraoperative showed jejunal perforation of 1.5×1.5 cm with indurated edges noted 8 cm distal to DJ flexure [Figure 2]; approximately 1–1.5 l of purulent fluid was suctioned out, and peritoneal lavage was given with 3 l of warm normal saline, and a biopsy taken from the edge of the perforation and sent for HPE. Primary closure of the perforation was done with 3-0 polydioxanone (PDS) and omentum placed over it. Postoperatively, the patient was kept nil per oral (NPO) and started total parenteral nutrition (TPN) and intravenous albumin infusion. On post operative day (POD) 3 he was started on oral liquid diet, but he developed abdominal distension; hence NPO continued with Ryle's tube (RT) inserted. HPE report was obtained on POD 6, which suggested of adenocarcinoma of the jejunum [Figure 3]. The patient developed a burst abdomen on POD 6 for which regular normal saline dressing was done. He developed a cough with crepitation of bilateral lung fields for which pulmonology opinion was sought and orders followed. The patient developed respiratory distress for which he was shifted to intensive care unit (ICU) and intubated and continuously monitored, following which the patient succumbed.

DISCUSSION

MPM were first described by Billroth in 1879.^[8] They are classified into two categories: metachronous, where tumours occur sequentially without a defined time interval, and synchronous, where tumours arise simultaneously or within 6 months of the primary malignancy.^[9] Sakellakis et al. observed that individuals with a history of cancer have a 1.29 times higher risk of developing another malignancy compared to those without such a history.^[10] Advances in diagnostic and therapeutic techniques, coupled with extended survival of cancer patients, have contributed to the increasing prevalence of MPMs.^[11] A synchronous presentation of squamous cell carcinoma of the tonsil and jejunal adenocarcinoma is extremely rare.

Among oropharyngeal cancers, tonsillar carcinoma ranks highly after thyroid and laryngeal cancers, with squamous cell carcinoma being the predominant histological type.^[12]

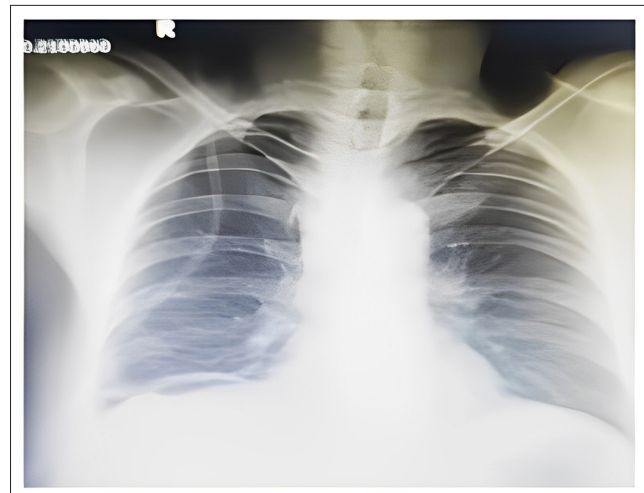


Figure 1: Erect abdomen x-ray free air under the right dome of diaphragm.



Figure 2: Intra op image showing jejunal perforation of 1.5×1.5 cm with induration of jejunum.

Many head and neck squamous cell carcinomas are linked to smoking and alcohol use. However, a distinct subset of tumours, originating in the tonsils and base of the tongue, is associated with human papillomavirus infection.^[13] The most common symptom of tonsillar carcinoma is a sore throat (78.8%), followed by neck swelling, difficulty swallowing, ear pain, and jaw stiffness. These patients are at significant risk for ipsilateral lymph node metastasis, with cervical lymph node involvement reported in 50%–80% of cases.^[14,15] Treatment often involves radiotherapy targeting the tonsillar region and radical surgery for neck disease beyond N1 stage.^[5] Cervical lymph node metastasis is a key prognostic factor, with its presence linked to lower survival rates.^[16]

SBAs account for only 1%–2% of gastrointestinal cancers, with jejunal adenocarcinomas being particularly rare.^[17] The most common site for SBA is the duodenum (57%),

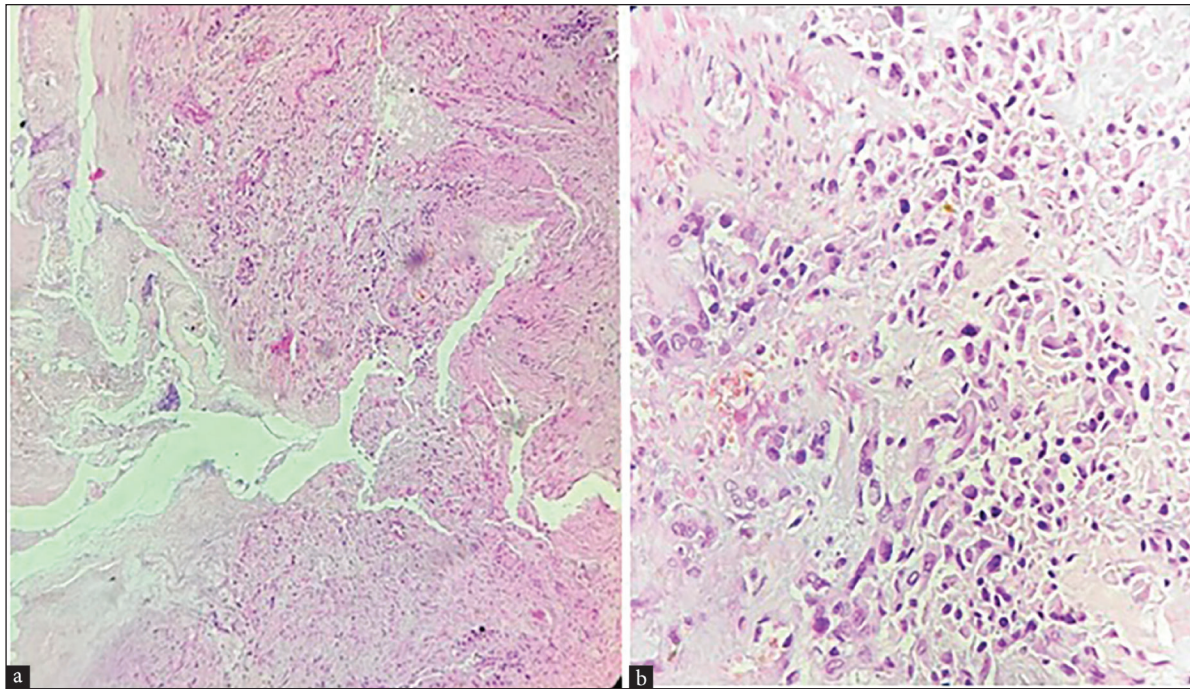


Figure 3: Histopathology of the perforated site showing poorly differentiated adenocarcinoma of the jejunum. (a) Loss of glandular architecture and tissue invasion. Low magnification- 40x stain used- Haematoxylin and eosin. (b) cellular pleomorphism with a high nuclear-to-cytoplasmic ratio. High magnification-200x stain used- Haematoxylin and eosin.

followed by the jejunum (29%) and ileum (13%). The small bowel environment has inherent anti-neoplastic properties, including rapid food transit, low bacterial load, enzymatic activity (e.g., benzopyrene hydroxylase), rapid epithelial turnover, IgA secretion, and extensive lymphoid tissue, all of which deter tumour development.^[18] SBA incidence peaks in the seventh decade but can occur earlier in patients with predisposing conditions like inflammatory bowel disease, familial adenomatous polyposis, hereditary nonpolyposis colorectal cancer, or coeliac disease.^[19] Symptoms often include abdominal pain and distension, with only 10% presenting with bowel perforation.^[20] Despite advances in imaging and endoscopy, early detection of SBA remains challenging.^[21] For jejunal adenocarcinomas, segmental resection with lymph node dissection is the recommended treatment.^[22] Chemotherapy generally has limited impact on survival, with 5-year overall survival rates ranging from 14% to 33% at all stages of SBA.^[17,19]

CONCLUSION

MPM predisposition among the susceptible population has to be investigated. This is possible with the advances and availability of genetic testing. Further research is needed, particularly in terms of guidelines and recommendations for management of these clinically challenging situations.

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