

## Case Report

# Metastatic sigmoid tumor treated as primary nasopharyngeal tumor

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### ABSTRACT

We are reporting a case of a 65 year old male who was being treated as a case of primary nasopharyngeal carcinoma for five years, only to be later discovered that he actually suffers from a

primary sigmoid tumor with distant nasopharyngeal metastasis. (Rawal Med J 2013;38: 317-318).

**Key words:** CRC, nasopharyngeal carcinoma, sigmoid carcinoma.

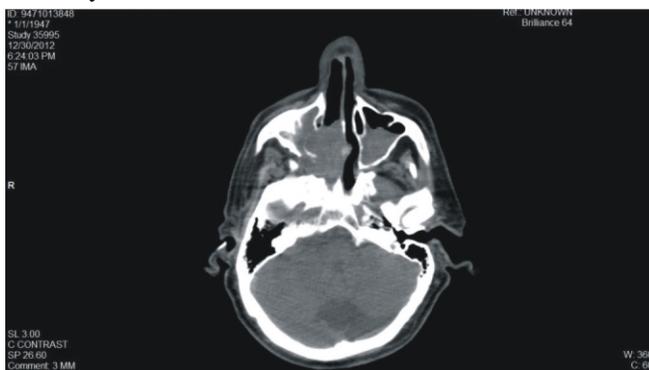
### INTRODUCTION

Metastatic nasopharyngeal tumor of colonic origin is very infrequent and is even indistinguishable from a primary tumor by routine pathological studies.<sup>1</sup> Colorectal carcinomas most often metastasize to the liver and lung, whether by hematogenous or lymphatic spread. Metastasis to other sites has been reported in the literature but is extremely rare.

### CASE REPORT

A 65 year old male patient, living in Amman who had been previously diagnosed as having a nasopharyngeal adenocarcinoma and treated with chemo-radiotherapy for the last five years, was admitted to the E.N.T division in King Hussein Medical Center on December 30, 2012 complaining of right nasal obstruction for possible tumor debulking.

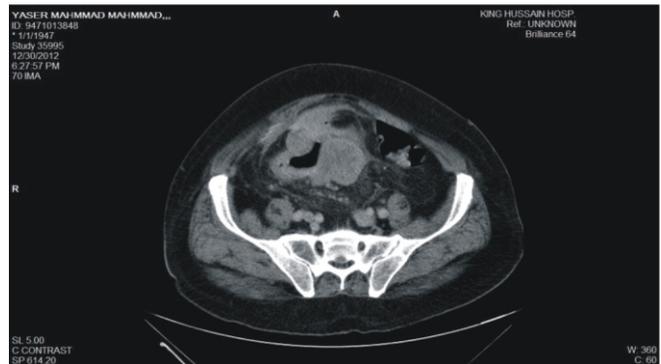
**Fig 1. Brain CT showing a lobulated inhomogeneous mixed intensity.**



On presentation, he was mildly dyspneic, with a right side nasal mass and a huge lower abdominal

mass. He was not toxic and had stable vital signs. Brain CT (Fig 1) revealed a lobulated inhomogeneous mixed intensity partially enhancing mass lesion filling the right nasal cavity posteriorly and right ethmoid air cells and extending to the left side and measuring about 3x5 cm.

**Fig 2. Abdominal CT showing a large mass lesion occupying lower abdominal cavity.**



Abdominal CT-Scan (Fig 2) revealed a large mass lesion occupying lower abdominal cavity arising from sigmoid colon and invading the cecum. New endoscopic biopsy of the nasopharyngeal mass revealed intestinal type adenocarcinoma of colonic origin. At this point, patient was diagnosed as a case of sigmoid carcinoma that had metastasized to the nasopharynx, so a colonoscopy was arranged to obtain a sigmoid tumor biopsy, but unfortunately patient passed away before it was performed.

### DISCUSSION

In our practice, this is the first documented case of a sigmoid tumor metastasizing to the nasopharynx

that presented to our division in King Hussein Medical Center, which is the major referral high volume military hospital in Jordan. It is disappointing to treat a patient for years as a case of primary nasopharyngeal adenocarcinoma diagnosed on the basis of histopathological evidence, only to be later discovered that it was actually a metastasis from a sigmoidal tumor.

Intestinal-type sinonasal adenocarcinoma is the second most common type of adenocarcinoma of the sinonasal tract. These carcinomas mimic the appearance intestinal adenomas and carcinomas, or exceptionally the normal glandular epithelium of the intestinal mucosa.<sup>1,3</sup> The exact pathophysiology of this metastasis was postulated by Batson on 1940, who explained the mechanism of retrograde spread of malignant cells from pelvic veins through vertebral veins till reaching the pharyngeal plexus.<sup>2,4</sup>

Metastases of primary cancers to the nasal cavity and nasopharynx are rare. A review of world literature yields only a few reported cases of gastrointestinal carcinomas metastasizing to the nasopharynx. The usual scenario is of a patient known to have a GI malignancy presenting with nasal obstruction to the ENT specialist. Physical examination will reveal a mass involving and obstructing the nasal cavity. CT scan or MRI of the head and the neck will show the mass and its extension. The neoplastic tissue will show marked positivity for CEA and express cytokeratin 20, confirming the diagnosis of metastases to the nasopharynx from colorectal adenocarcinoma.<sup>5</sup>

This leads us to consider that when a differential diagnosis between a second primary tumor of the nasopharynx and a metastasis has to be made, the

gastrointestinal tract should be taken into account, and detailed immunohistochemical tests should be performed. The unique thing in our case compared to other rare published cases that in our case the diagnosis was made the other way around, and amazingly the sigmoid tumor was unapparent all that time may be due to the effect of chemoradiotherapy given to control the nasopharyngeal tumor. In summary, despite the rarity of a colonic malignancy presenting as nasopharyngeal metastasis, it is advisable that when faced with intestinal type adenocarcinomas of the nasopharynx to consider other primary gastrointestinal tract tumors as a possibility.

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**Conflict of Interest:** None declared

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