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Paranasal Sinus Metastases, Two Cases

Paranazal Sinüs metastazları, İki Olgu

Gozde Arslan[1],Zerrin Boyacı[2];Rahmi Cubuk[1]
Maltepe University, Department of Radiology[1], Maltepe University, Department of Otolaryngology[2],Istanbul.TURKEY
Correspondance: Gözde Arslan, Maltepe University, Department of Radiology, 34843, Maltepe, Istanbul, Turkey. E-mail: gunesgozde@gmail.com

ABSTRACT
Sinus metastases is rare and not expected most of the time. It is usually misdiagnosed as sinusitis and the true diagnosis is delayed. Clinicians and radiologists should be aware of this possibility especially for cancer patients. On this article, we aim to present 2 cases with sinus metastases with radiological findings and figures.
Keywords: paranasal, sinus, metastasis

ÖZET
Sinüs metastazı seyrek görülen ve çoğunlukla beklenmeyen bir durumdur. Genellikle sinüzit olarak yanlış tanı alır ve gerçek tanı gecikir. Klinisyenler ve radyologlar özellikle kanserli olgularda bu olasılığın farkında olmalıdır. Bu yazıda, 2 sinüs metastazlı olguyu radyolojij bulgular ve görüntüler eşliğinde sunmayı amaçladık.
Anahtar sözcükler: paranasal, sinus, metastaz

INTRODUCTION
Sinus metastases is usually not on the differential diagnosis list, especially if the patient does not have a known malignancy. But we know that kidney, prostate, breast cancers can metastasize to sinuses (4,5,6,8,9). Otolaryngologists, oncologists and radiologists should be alert of the sinonasal symptoms of the oncology patients. If there is any suspect, histopathological examination should be performed. In this article, we aim to share 2 unique cases of sinus metastases in patients with known malignancy.

CASE 1
Sphenoid sinus metastases of colorectal adenocancer
A -67 year-old man was admitted to our hospital presenting with severe headache. He had a history of colorectal cancer which had been diagnosed on 2014. He had been given 2 courses of chemotherapy and 7 sessions of radiotherapy. A year later he was diagnosed with liver metastases. His headache had been persisting for a month. He had a cranial MRI a month ago and there was no neural parenchymal pathology . A control cranial Magnetic Resonance Imaging (MRI) was performed on this admittance due to non relieving symptoms. MRI was performed with a 1.5 Teslamagnet (25 mT/m: Magnetom Vision Plus; Siemens, Erlangen, Germany). His first MRI revealed fluid intensity and mild mucosa lthickening in the sphenoid sinus. (Fig.1a-b). There was not any neural parencyhmal pathology. His control MRI (a month later) showed that the amount of fluid increased, mucosal irregularities were much obvious and a contrast enhancing tumoral lesion had been added. (Fig.2a,b,c). There was no bony invasion on Computer Tomography (CT) exam. (Fig.3). Because the lesion progressed so fast, it was first thought to be fungal sinusitis. He underwent biopsy for confirmation. Surprisingly the biopsy showed colorectal adenocancer metastasis.

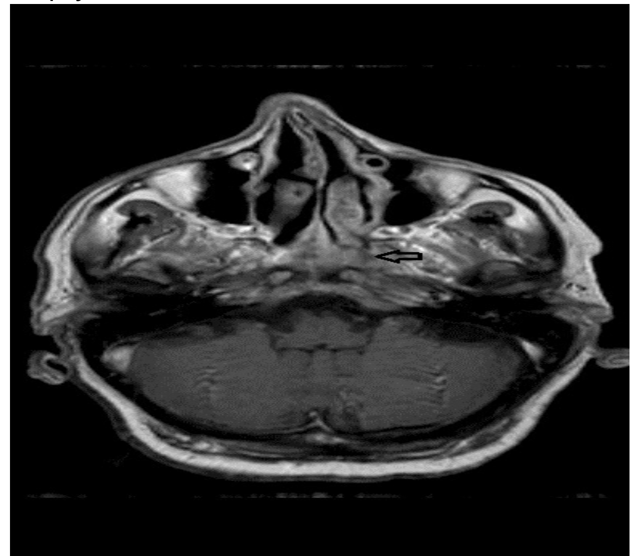

Fig.1a

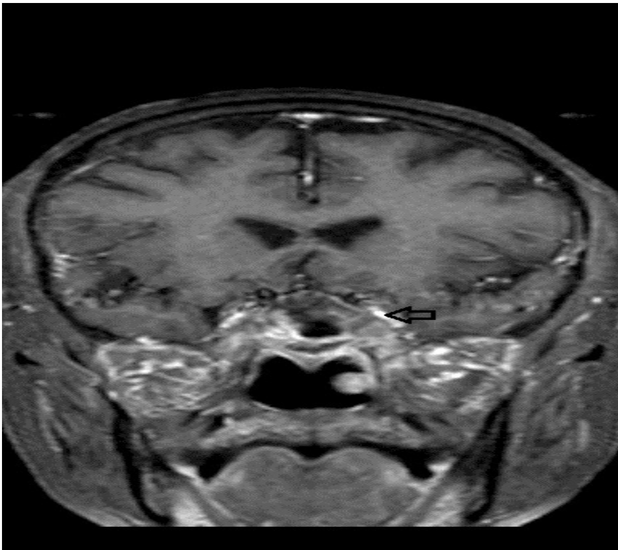
Fig.1b

Figure 1a,b: Axial and coronal T1 weighted contrast enhanced MRI images and sagittal T2 weighted MR image. Mucosal thickening and fluid is seen in the sphenoid sinus.

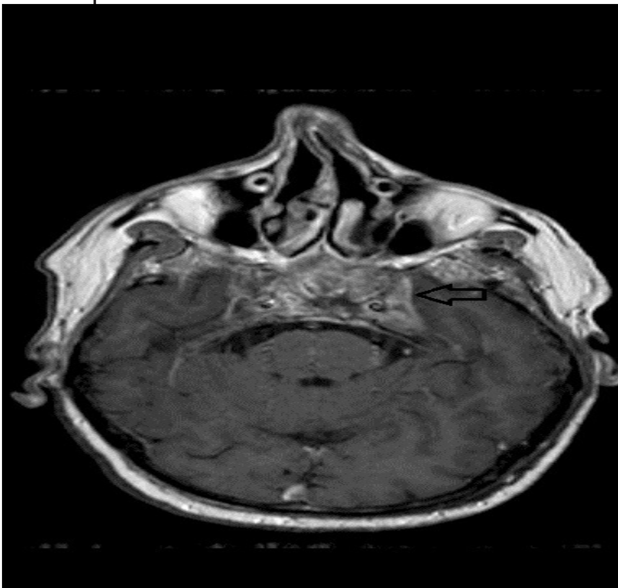
Fig.2a

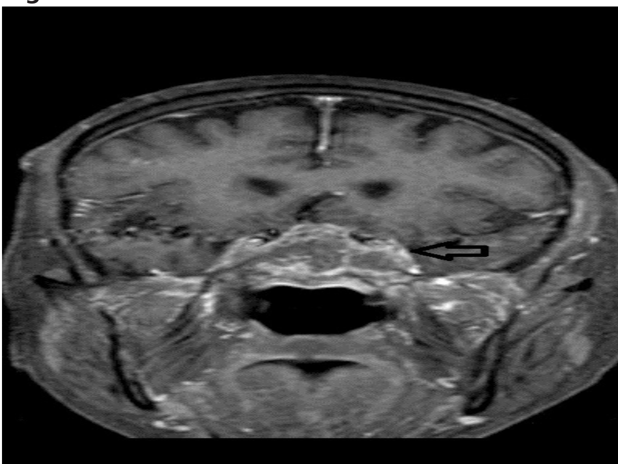
Fig.2b

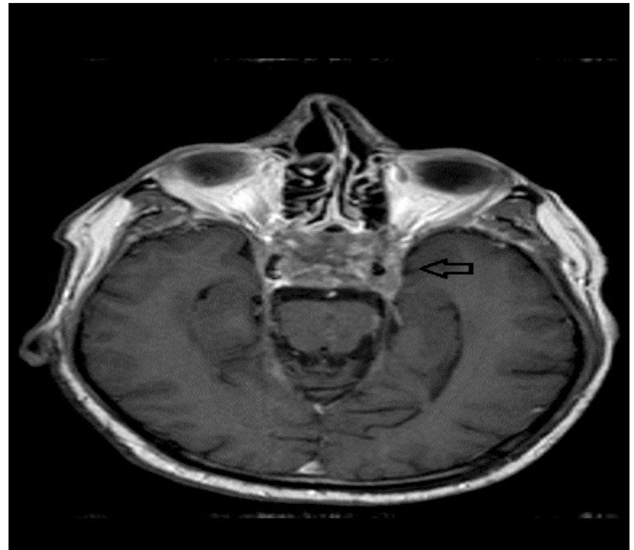
Fig.2c

Figure 2a,b,c: Axial and coronal T1 weighted contrast enhanced MRI mages. Mucosal thickening is more obvious and a contrast enhancing tumoral lesion is obstructing the sinus.

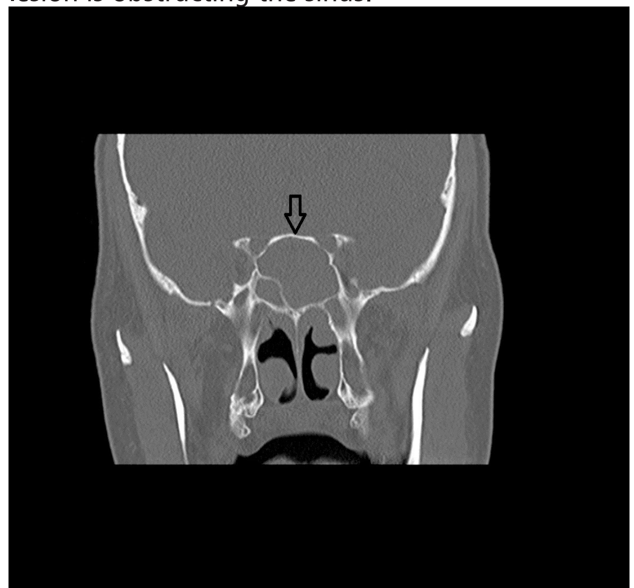
Fig.3: Coronal CT image. Sphenoid sinus is obliterated. No bony invasion is seen.

CASE 2

Invasive ductal carcinoma metastasis to ethmoid sinus

A – 50 year-old woman with a history of breast cancer which has metastasized to lung and bones had applied to neurology department with fascial nevre paralysis and loss of vision. She was referred to radiology for imaging. MRI was performed with a 1.5Teslamagnet (25 mT/m: MagnetomVision Plus; Siemens, Erlangen, Germany). MRI revealed a contrast enhancing ethmoid mass which was encasing right optic nevre and right rectus medialis muscle. (Figure 4a,b). The patient was referred to otolaryngology for sampling. Histopathology results were

compatible with adenocancer metastasis.

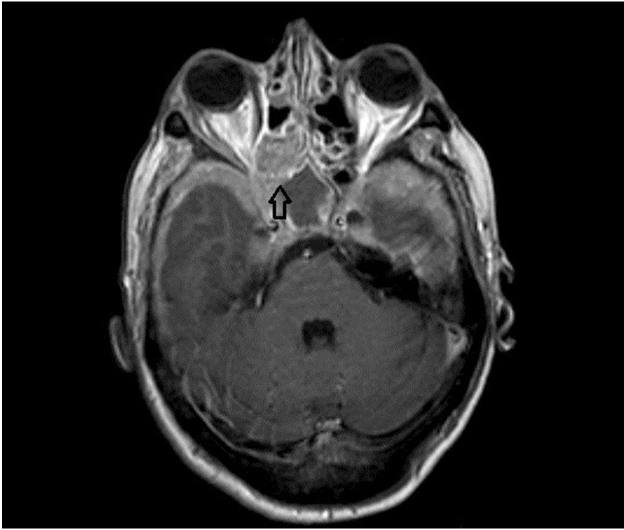

Fig.4a

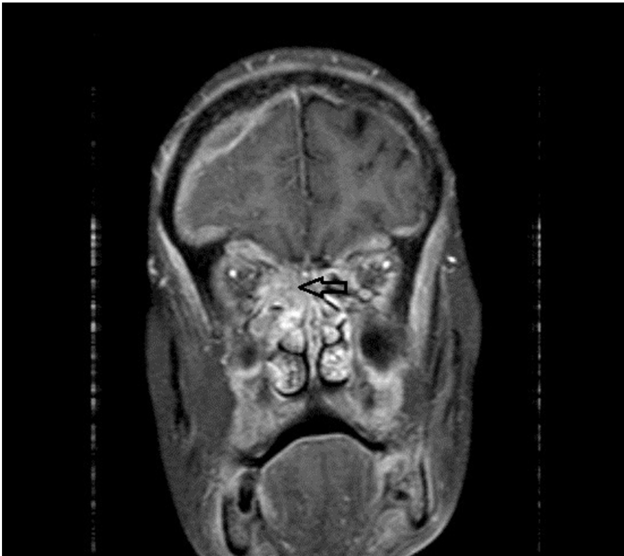

Fig.4b

Figure 4a,b: Axial and coronal contrast enhanced T1 weighted images. The mass in the right ethmoid sinus is seen (arrow). The mass is in close proximity to right optic nerve and rectus medius muscle.

DISCUSSION

As mentioned earlier, sinus metastases are rare (1,7) and the diagnosis is delayed most of the time. Kidney, prostate, breastcancers can metastasize to sinuses (4,5,6,8,9). Colorectal cancer metastases to sinuses is much rare with a few cases in the literature (1,2,3). The clinical presentation is similar to that of primary tumors and common symptoms including epistaxis, nasal obstruction, facial paralysis-pain.There could be optic symptoms if the mass is close to globe (10). Our first case differs in the way that the lesion progressed very fast in less than a month. This distanced us from the true diagnosis. Ethmoid sinus metastases, as in our second case, is one of the rarest. Overall, in a patients with a cancerhistory, radiologists and clinicians should always consider malignancy in the differential diagnosis of sinus pathologies.

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