Olgu Sunumu

Cervical Spinal Metastasis as First Sign of Colon Cancer

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✔ A patient with a neck pain was operated due to cervical spinal lesion which was histopathologically reported as adenocarsinoma metastasis. Detailed investigations revealed this lesion to be a ascending colon cancer which did not metastasize to liver and regional lymph nodes.

Patients with cervical spine lesions need to be evaluated carefully before surgery for accurate diagnosis. Here we report possibly the first case of colonic adenocarcinoma metastasis to the cervical spine sparing hepatic and regional lymph nodes.

Key words: Spinal metastasis, colon cancer, radiology

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Kolon Kanserinin İlk Belirtisi Olarak Servikal Spinal Metastaz

✔ Boyun ağrısı olan ve opere edilen servikal omurga lezyonu olan olgunun sonucu adenokarsinom metastazı olarak bildirildi. Detaylı araştırmalar çıkan kolonda karaciğer ve bölgesel lenf düğümlerine metastaz yapmayan kanser olduğunu gösterdi.

Servikal omurga lezyonu olan hastalar doğru teşhis için ameliyat öncesinde dikkatlice değerlendirilmelidir. Bu makalede karaciğeri ve bölgesel lenf düğümlerine metastaz yapmadan servikal omurgaya metastaz yapan muhtemel ilk kolon kanseri olgusunu bildiriyoruz.

Anahtar kelimeler: Omurga metastazı, kolon kanseri, radyoloji

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Neoplastic diseases of the spine may arise from local lesions developing within or adjacent to spinal column or from distant malignancies spreading to the spine via different routes. Metastases spread most commonly from skeletal tumors, and the spine is the most common site of skeletal involvement [(1)].

Colon cancer metastasis is usually detected in the most advanced stage of the disease. Approximately 30 - 40 % of the patients with colorectal cancer have regionally advanced or metastatic disease at the initial diagnosis which cannot be cured with surgery alone. The most common sites for colon cancer metastasis are regional lymph nodes, liver, lung, and the peritoneum [(3)].

Here we report a case of colonic adenocarcinoma diagnosed from its metastatic lesion in the cervical spine which further studies showed that it was the only metastatic site.

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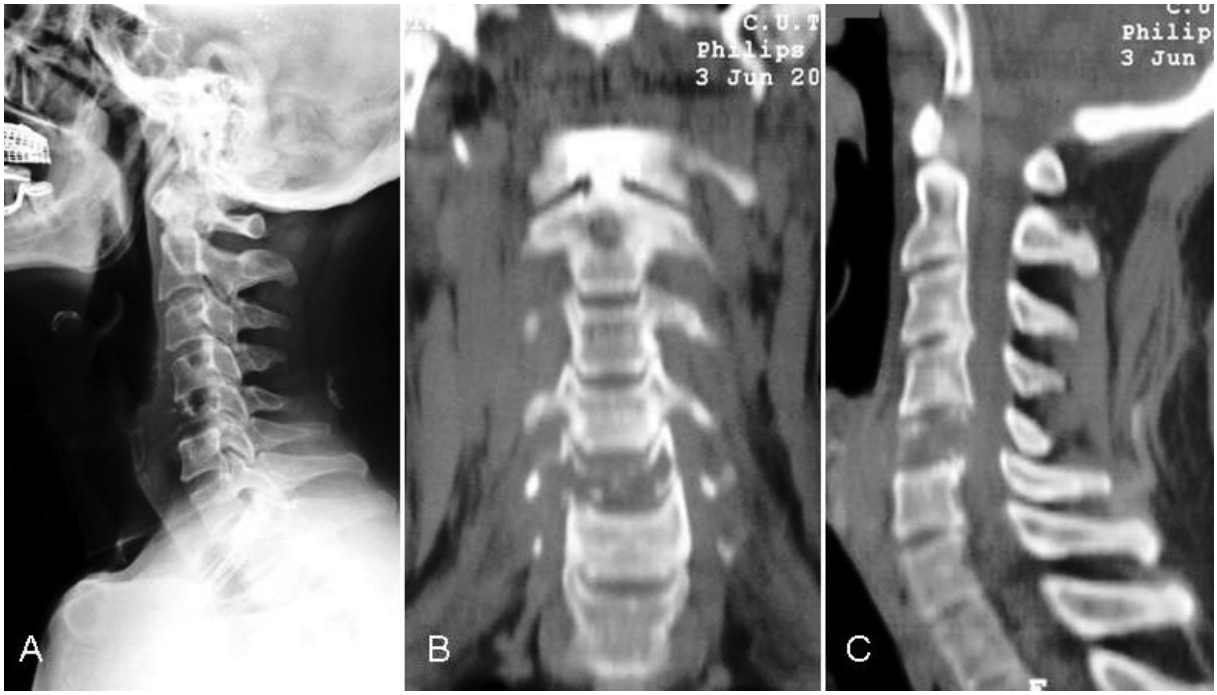

Figure 1. Preoperative lateral cervical X-ray (A), coronal CT (B) and sagittal CT (C) shows osteolytic lesion in vertebra corpus.

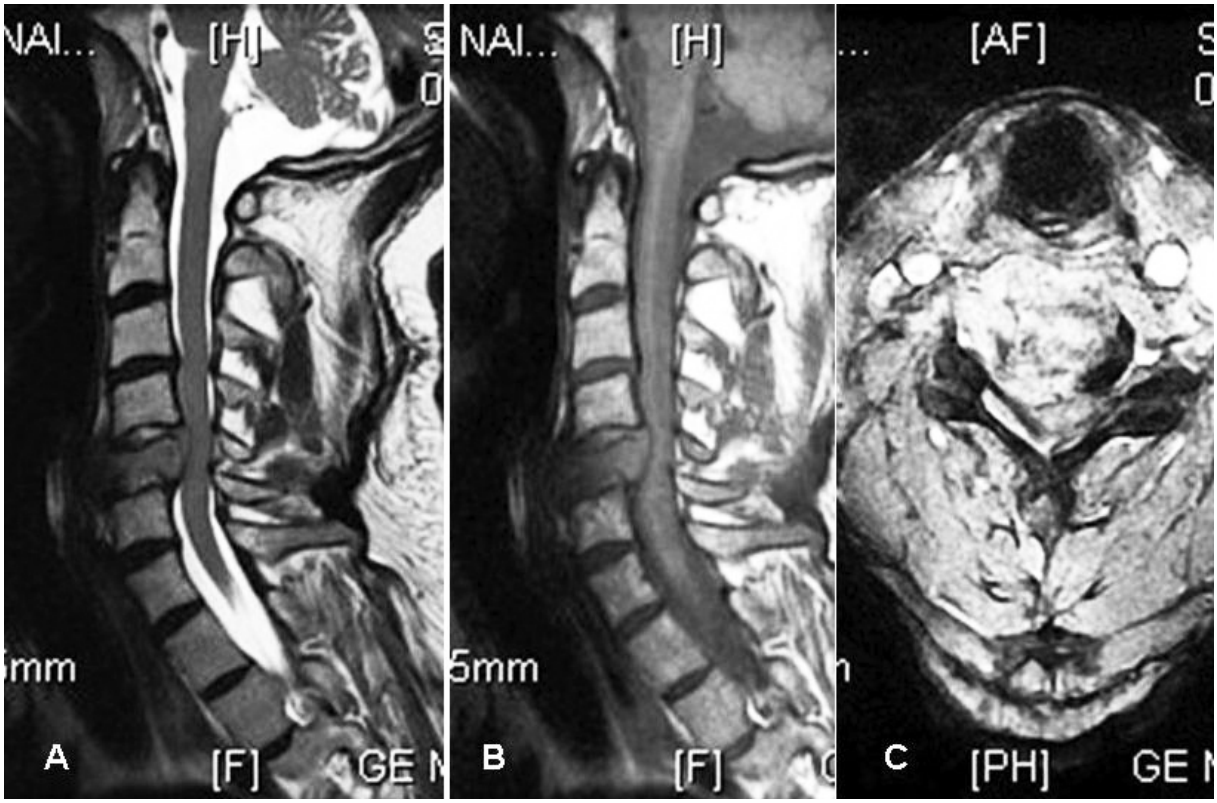

Figure 2. Sagittal T2-weighted (A), sagittal T1-weigted, and axial T2-weighted MRIs revealed spinal cord compresion and prevertebral extension of the lesion.

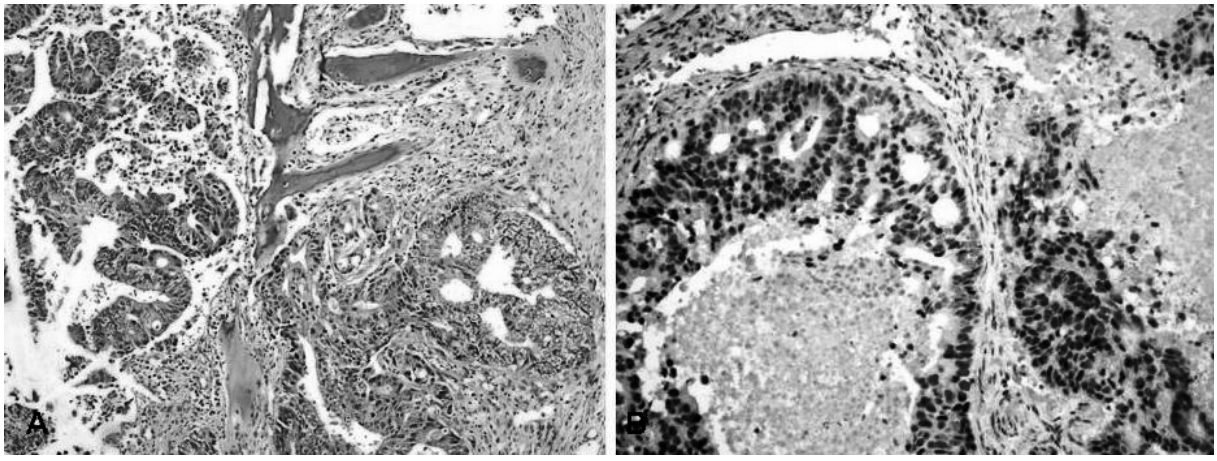

Figure 3. (A) Adenocarcinoma forming adenoid structures in between bony spicules (H&E, x40), (B) bowel tumor, cdx2 nuclear positive (CDX2, x80).

CASE

A 60- year old man presented to our clinic with a 5- month history of neck pain, right leg weakness and difficulty during walking. His neurological examination revealed increased reflexes, monoparesis in the right lower extremity, and plantar extensor response in the right side. These findings were compatible with upper motor neuron disease. Whole spine magnetic resonance imaging (MRI) and cervical spine computed tomography (CT) studies showed a lesion which was invading and destructing C5 vertebral body, narrowing the spinal channel and compressing the spinal cord (Figure 1 and 2). Patient underwent anterior cervical corpectomy and stabilization operation. After exploratory dissections to reach the prevertebral area, lesion was seen and palpated under prevertebral tissues which had been left intact as a soft cystic swelling. A parallel incision was made and hyperviscous fluid was drained. It was observed that C5 vertebra corpus had lost its integrity. Our intraoperative differential diagnosis was included abscess and metastatic tumor. Histopathological examination revealed a metastatic lesion of adenocarcinoma (Figure 3). During explorations the primary site of tumor was detected to be an ascending colon lesion. These investigations during colectomy operation, and histopathological examinations did not show any metastatic lesions other than those originating from cervical spine, and regional lymph nodes, liver, and peritoneum were not the primary sites. During follow-up period patient underwent a second cervical corpectomy procedure because of progression of the disease.

DISCUSSION

Via portal system, the liver is the most common site of hematogenous dissemination of colorectal cancer, followed by lungs, bones, and brain. Since inferior rectal vein drains into the vena cava, tumors of the distal rectum have a propensity to metastasize to the lungs. Spinal metastases arising from ascending colon cancer very rarely skips the regional lymph nodes and liver .Our case may be the first reported cervical spine metastasis stemming from ascending colon adenocarcimoma.

Radiological evaluation of the spinal lesion is important in terms of differential diagnosis. X-rays are the less sensitive diagnostic modality. Blastic or lytic nature of the lesion may suggest the presence of a metastatic lesion. In some patients prostate cancer metastatizes to vertebral bodies, and may give a completely opaque (white) image (blastic) [(2)]. In our case vertebral

body was lytic. CT allows visualization of bony details from three different planes and contrast usage may facilitate differentiation of fatty infiltration, and hemangioma from metastasis [2]. Total vertebral body destruction was seen in our case. MRI is more sensitive than other modalities. Blastic and lytic tumors are both hypointense on T1-weighted images when compared to normal bone marrow. While T2-weighted sections show hypointensity in lytic metastasis, blastic metastasis may be either hypointense or hyperintense or combination of both [2]. In our case MRI studies showed hypointense signal densities in both T1- and T2-weighted images. Hematopoietic system malignancies such as plasmacytoma, multiple myeloma, lymphoma, leukemia, and vertebral osteomyelitis are possible considerations in radiological differential diagnosis.

In conclusion, we report possibly the first case of ascending colon adenocarcinoma cited in the literature, which became clinically evident primarily with cervical spine metastasis sparing liver, and regional lymph nodes.

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