EPIDURAL SPINAL CORD COMPRESSION

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ESCC is one of the most common neurologic complications of systemic malignancy, following brain parenchymal metastases in frequency. Depending on the underlying malignancy, between 2-5% of patients develop clinical signs and symptoms of ESCC during the course of their disease. In most cases ESCC develops in patients with a known history of malignancy and is a manifestation of advanced cancer. In approximately 20% of patients with ESCC, spinal cord compression is the first manifestation of their malignancy. This is particularly common in patients with lung cancer and hematologic malignancies.

Most tumors reach the epidural space by direct spread from vertebral metastases (85% of cases), or less commonly through the vertebral foramen. The latter mechanism of spread is typical of lymphoma when it involves paraspinal lymph nodes. The vertebral body is the most common site of metastatic disease in ESCC and the cord is therefore more likely to be compressed anteriorly. Thoracic ESCC accounts for 60% of cases: 25% of cases are at the lumbosacral level, and 10-15% are at the cervical level. One third of patients have epidural tumor at multiple spinal levels.

Any systemic malignancy can metastasize to the vertebra and epidural space, but lung, breast, and prostate cancer are the most common solid tumors producing ESCC, and each accounts for approximately 20% of cases. Among hematologic tumors, non-Hodgkin lymphoma and multiple myeloma most commonly produce ESCC. Patients with prostate cancer or myeloma have the highest overall risk of developing ESCC (7.2% and 7.9% respectively). In children, the most common malignances producing ESCC are sarcoma and neuroblastoma.

Although the signs and symptoms of ESCC are readily recognizable, most patients are diagnosed only after they are non-ambulatory and irreparable damage to the spinal cord has occurred.. ESCC thus accounts for a disproportionate amount of disability and suffering in patients with cancer.

The goal of this component of the course is to review the typical clinical manifestations, tools of diagnosis, and expeditious therapy of ESCC with a view to preventing neurologic disability and maintaining quality of life

References:

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