ABSTRACT

Diagn Cytopathol. 2023 Jan 11. doi: 10.1002/dc.25100. Online ahead of print.

Oligodendroglioma metastasizing to cervical lymph node: Rare entity diagnosed on fine-needle aspiration cytology.

Kataria SP(1), Mahak(1), Kumar S(1), Singh G(2), Singh S(1).

Author information:

- (1)Department of Pathology, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India.
- (2)Department of Immunohematology and Blood transfusion, Pt. B. D. Sharma Post Graduate Institute of Medical Sciences, Rohtak, Haryana, India.

Extra neural metastasis of central nervous system oligodendroglioma is very rare. Oligodendroglioma is the seventh most frequently occurring neoplasm of central nervous system (CNS) with metastasis outside the CNS. According to literature, presence of metastasis in CNS was most frequently detected in patients of glioblastoma (41.4%), medulloblastoma (26.7%), ependymomas (16.4%), astrocytoma (10.3%) and oligodendroglioma (5.27%). A 38-year-old male patient presented with loss of vision and swelling on left side of neck since last 1 week measuring 3 x 2 cm. He was operated for brain tumor 7 years back, which was diagnosed as oligodendroglioma. Ultrasound sonography revealed multiple hypoechoic lymph nodes in bilateral cervical region largest measuring 4.5 x 1.9 cm in left submandibular region. FNA of left submandibular lymph node was done, which revealed deposits of poorly differentiated malignancy. Cell block was prepared for carrying out ancillary studies which showed positivity for glial fibrillary acidic protein (GFAP), S-100 and negativity for cytokeratin (CK), epithelial membrane antigen (EMA), LCA and progesterone receptor (PR). Based on previous history of oligodendroglioma, cytological and immunohistochemistry (IHC) findings a diagnosis of metastatic oligodendroglioma was made. Metastasis of oligodendroglioma to cervical lymph node should also be considered as one of the differential diagnoses. Diagnosing metastatic CNS tumor is extremely challenging for pathologists. It is essential to have the clinical information of a previous CNS tumor, including the histologic type and immunophenotype. Besides common malignancies of cervical lymph node, we should also think of CNS metastasis so that patient management will be early and proper.

© 2023 Wiley Periodicals LLC.

DOI: 10.1002/dc.25100 PMID: 36628997