

Cytological diagnosis of metastatic oligodendroglioma in pleural effusion

李進成

Lee CC;CS Jiang;Chen TS;Pan UH;Yokoo H;Tsai MD

摘要

Abstract

BACKGROUND: Extraneural metastasis of oligodendroglioma is extremely rare and is diagnosed primarily by biopsy or autopsy and very occasionally by fine needle cytologic examination. We report a case of metastatic oligodendroglioma diagnosed by cytologic examination of a pleural effusion. Such a diagnosis has not been reported before. **CASE:** A 64-year-old woman developed anemia and bilateral pleural effusion 7 years after an operation for an oligodendroglioma over the left frontal lobe. Cytologic examination of the pleural effusion showed aggregates of atypical polygonal cells containing round, hyperchromatic nuclei and scanty, granular cytoplasm in Liu's and Papanicolaou stain and cell blocks. Immunohistochemical staining of the tumor cells revealed a positive reaction for antibodies to glial fibrillary acidic protein, S-100 and Olig2. Pleural biopsy confirmed the cytologic diagnosis of pleural effusion. A pathologic fracture of the right humeral and femoral bones was noted 1 month later, and the specimen also showed infiltrating oligodendroglioma cells in bone tissue. **CONCLUSION:** To the best of our knowledge, this is the first metastatic oligodendroglioma diagnosed by pleural cytology. Fine needle cytology can provide a reliable and rapid way to detect an extracranial metastatic oligodendroglioma in different organs.