A CASE OF DISSEMINATED CEREBRITIS WITH MYELITIS BY *PROPIONIBACTERIUM* ACNES IN HEALTHY ELDERLY FEMALE

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Propionibacterium acnes (P. acnes) is a Gram positive, anaerobic bacillus that is a part of the normal human skin flora and involved in the development of acnes vulgaris. We present a case of acute cerebritis with cervical myelitis by P. acnes, in which the histopathological diagnosis was confirmed by biopsy. A 75-year-old woman was admitted for left-sided hemiparesis. All laboratory tests were normal. Initial brain MRI revealed multiple small masses with rim enhancement that restricted diffusion with T2 hyperintensities in both frontal cortex and right internal capsule. Diagnostic work-ups were performed to look for the primary malignancy. Cerebrospinal fluid findings were normal. We performed whole body positron emission tomography, and which showed suggested malignant lesion in the spinal cord of C3-5 level. Cervical MRI revealed intramedullary enhancement lesion associated with cord swelling at the same level. On the lesion by brain biopsy, there was no evidence of malignancy. Localized collection of foamy histiocytes with perivascular lymphocytic infiltration was observed with Gram-positive filamentous branching hyphae. DNA sequencing results were entirely consistent with *P. acnes*. After treating with empirical antibiotics, her symptoms were improving. Follow-up brain and cervical MRI demonstrated markedly decreased size of prior multiple lesions. There were few reports of CNS infection in adults without any previous surgical procedures, and they had been limited to brain lesions. To our knowledge, this is the first case of acute cerebritis with myelitis by P. acnes.