Refractroy partial seizures with PLEDS in case of Hodgkins lymphoma

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INTRODUCTION

Certain viral infection (HSV, EBV, WNV etc.) can present in children with malignancies as refractory seizures.

MATERIALS AND METHODS

A 10 years old boy presented with fever and right partial seizures for one day. He was a diagnosed case of stage II Hodgkin’s lymphoma since April 2015. He had received third cycle of chemotherapy, ABVD (Adriamycin, bleomycin, vinblastine, and dacarbazine) protocol one week prior to presentation. There was no evidence of meningeal irritation and the rest of the physical examination was unremarkable. White blood cell (WBC) count was 8000/mm³, with absolute neutrophil count (ANC) 5400 cells/mm³, haemoglobin 10.8 g/l, and platelet count 320 000/mm³. Blood chemistry and cultures were normal.

Therapy with ceftioxone 100 mg/kg/day and phentoin 5 mg/kg/day was initiated. Antiepileptics were hiked gradually as his seizures persisted intermittently even on therapeutic doses of phenytoin, phenobarbitone and valproate. Three days later his neurological status deteriorated. His haemodynamic state was stable and no rash was noticed. With the presumptive diagnosis of meningoencephalitisitis, antimicrobial treatment was changed to intravenous meropenam 120 mg/kg/day, intravenous vancomycin 40mg/kg/day, and intravenous aciclovir30mg/kg/day.

A lumbar puncture was performed; cerebrospinal fluid (CSF) white cell count was 180/mm³ with 60% polymorphonuclear cells and 40% lymphocytes, protein was 60mg/dl, and glucose 55 mg/dl (85 mg/dl in serum). No malignant cells were found and the CSF bacterial culture was sterile. Polymerase chain reaction (PCR) for herpes simplex DNA was also negative. A brain computed tomography scan was normal. Electroencephalogram revealed bilateral periodic lateralized epileptiform discharges compatible with severe encephlitis.
RESULTS

We could not get serologies for mycoplasma, Epstein–Barr virus (EBV), West-Neil Virus (WNV) and cytomegalovirus due to affordability issues. Despite aggressive treatment with mannitol and anticonvulsive medications, the neurological abnormalities progressed and the child succumbed to the complications on 12th admission day.

CONCLUSION

Immuno-deficiency places children at increased risk for severe neurological diseases.