Seizure After Laminectomy Associated with Pneumocephalus

Forty-year-old female patient was examined due to the onset of clonic seizures on the left half of the face and left arm starting a day after L4 and L5 subtotal laminectomy. In the computerized tomography, there were numerous air bubbles on the right temporal lobe, fourth ventricle and perimesencephalic region (Figure 1). After observing the intravenous administration of 10 mg diazepam did not suppress the seizures, the status was determined as partial seizure and she was given a loading dose of 20mg/kg phenytoin. In the maintenance treatment 300 mg/day phenytoin divided into 3 doses was given. Following bed rest, hydration and close monitoring, the patient was discharged 3 days after neurological stability was achieved. There were no additional neurological symptoms in the 3-month follow-ups. Antiepileptic treatment was planned to continue for another 6 months. Pneumocephalus describes the presence of air pockets in the intracranial cavity. Spinal causes include lumbar puncture, infections, tumors, spinal traumas and surgery (1). Even though there have been multiple reports of symptomatic pneumocephalia following lumbar puncture in the literature, seizure is not a common complication of it. The symptoms of pneumocephalia are generally non-specific and varied and this possible complication should also be kept in mind to prevent severe outcomes.

References

Figure 1. Multiple air bubbles on right temporal lobe, fourth ventricle and perimesencephalic region as seen in axial brain tomography