

## Encephalopathy Due to Isotretinoin Therapy: Letter to the Editor

### İzotretinoin Tedavisine Bağlı Gelişen Ensefalopati

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I read the recent original research of “Are the Should Side Effects of Isotretinoin Limit its Use in State Hospital?” that was published in Journal of Dermatology with great interest.<sup>1</sup> There is only one published report of encephalopathy associated with isotretinoin therapy.<sup>2</sup> And our objective is to emphasize the importance of this rare side effect by reporting this second case of encephalopathy.

A 26 year-old female patient had admitted to our hospital with left sided ptosis and numbness in both hands and legs. She had no systemic disease history. Her brain computed tomography was normal. Biochemical findings, blood count, markers for vasculitis were all in normal ranges. Cranial magnetic resonance imaging (MRI) and angiography (MRA) were normal. She only had a history of isotretinoin use 40 mg per day for 4 weeks because of severe cystic acne. In her physical examination, eczema was present all over the body, mainly at the face, probably due to isotretinoin (eczema is the second common adverse effect reported) therapy. At the second day of admission, confusion, right sided fascial and left sided oculomotor weakness and speech difficulty had developed. Patient’s deep tendon reflexes were absent. Cerebrospinal fluid opening pressure and analysis were normal. With a pre diagnose of Myasthenia gravis, pyridostigmin treatment was started but no response was detected to this therapy. Electroneuromyography (ENMG) was also in normal ranges. Electroencephalogram (EEG) showed a diffuse slowing without showing any localization or seizure activity. By supportive therapy for 10 days, patient’s complaints had reduced and at the control after a month, she had total recovery.

Wong et al. had reported the first case of isotretinoin-induced encephalopathy.<sup>2</sup> In that case a 16-year old male had developed persistent headache 3 weeks after starting isotretinoin treatment at a dose of 80 mg per day. He had developed word-finding difficulty, agitation, confusion and his EEG showed continuous delta activity without seizure activity. These

finding are similar with our case. Although the exact mechanism of toxicity is unclear, it is thought to be due to the accumulation of retinyl esters.<sup>3</sup>

Our case is the second report of encephalopathy due to isotretinoin therapy and clinicians have to keep this adverse effect in mind at the patients using isotretinoin.

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