

## LETTER TO EDITOR (VIEWERS CHOICE)

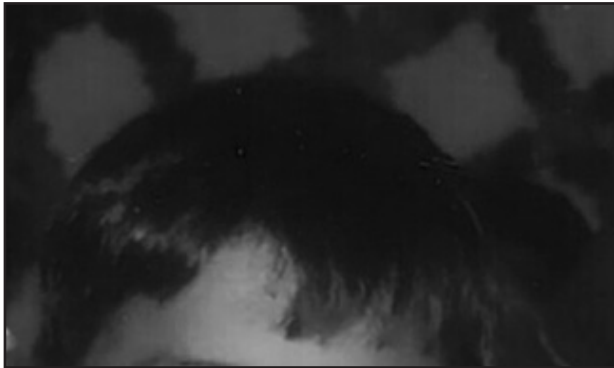
# CURLY HAIR: A RARE SIDE EFFECT OF SODIUM VALPROATE IN A CHILD

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A 13 years old boy suffering from epilepsy post viral encephalitis was on sodium valproate (10 mg/kg/day) for two years. At the sixth month of valproate usage, father noticed that the child's hair was becoming curly (figure 1 and 2). There was no hair loss. No other adverse effects were noted. Laboratory tests in form of complete blood count and liver enzymes were normal.

**Figure 1.** Hair before sodium valproate therapy



**Figure 2.** Hair after 6 months of sodium valproate therapy



Valproate is used in the treatment of epilepsy. The drug has many side effects such as weight gain, gastrointestinal disturbances, drug interactions, acute liver disease, pancreatitis, hyperglycemia, hyperammonemia, sedation, alopecia, hair loss and tremors.<sup>1,2,3</sup> Valproate-induced hair texture changes such as curly hair has rarely been reported<sup>4,5,6,7</sup> which

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usually occurs after 3 months after starting therapy. In a study done by Mattson and colleagues, on comparison between sodium valproate and carbamazepine for the treatment of generalized tonic-clonic seizures, it was found that 12% of patients using valproate had hair loss or change in texture.<sup>8</sup> The mechanism of valproate induced effects on hair is unclear; however, it may be related to the effects of chelating of metals (copper, zinc, and magnesium) as well as inhibition of metallic enzymes.<sup>5</sup> The original and normal texture of hair reappears after stopping sodium valproate.<sup>8</sup>

## Compliance with Ethical Standards

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**Conflict of Interest:** None

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