Intracranial hypertension secondary to low doses of vitamin A

Fabiola Dach, Tissiana Haes

Hospital of Clinics, Medical School of Ribeirão Preto, Department of Neuroscience and Behavioral Sciences. Ribeirão Preto, Sao Paulo, Brazil.

Introduction
Chronic Vitamin A toxicity usually occurs with high doses of Vitamin A intake, usually after using >30,000 mcg EA daily for several months. For treatment of skin disorders is used massive doses (50,000 to 150,000 mcg AE daily). Early signs and symptoms can be sparsely distributed rough hair, alopecia of the eyebrows, rough and dry skin, dry eyes and chapped lips. Later, severe headache, intracranial hypertension, and generalized weakness develop. Fractures can easily occur, especially in the elderly.

Objective
To present a case of intracranial hypertension secondary to chronic intake of low doses of Vitamin A.

Method
Revision of medical record.

Case
Woman, 60 years old, thin, presents with worsening headaches for two years. Since childhood, she has had migraine without aura in low-frequency. In the last two years, she has had some changes in headache characteristics, however she still met criteria for migraine. Pain occurred daily and there were four episodes of nocturnal awakenings by pain in the last year. Magnetic resonance imaging of the brain and venous-phase magnetic resonance angiography normal. A cerebrospinal fluid analysis was requested, which showed an opening pressure of 92 cmH2O and a closing pressure of 40 cmH2O. No further abnormalities. Acetazolamide 250 mg twice a day was started, with intolerance and metabolic acidosis after 3 days of use. It was replaced by topiramate, to which there was also intolerance at a dose of 25 mg twice a day for 7 days of use. Asked again by the use of any medicine/vitamin, patient revealed that use two capsules of propolis for fourteen years, whose leaflet showed the presence of 300 mcg EA of vitamin A in each capsule of the compound. Patient was advised to discontinue its use and to repeat cerebrospinal fluid analysis in three months, whose opening pressure was lower (40 cmH2O). New opening pressure six months after suspension of Vitamin A was 28 cmH2O, with the patient being asymptomatic.

Conclusion
There are several substances that can lead to increased intracranial pressure, including high daily doses of Vitamin A. The case above demonstrates that the chronic use of low doses of vitamin A, such 50 times less than the known toxic doses, can also lead to an increase of intracranial pressure, that can normalize after some months of complete suspension of this vitamin.

Keywords: Headache, Intracranial hypertension, Vitamin A.