Treating headache with a needle in the anatomic spots Tratar cefaleia com uma agulha nos pontos anatômicos corretos

In the last decade physicians have increasingly used infiltrations to treat pain. (1-8) In Headache Medicine also the use of infiltrations or nerve block injection at different anatomic sites is frequently performed. (6,9) In general there is a consensus as to where the needle should be inserted, but the choice of anesthetic and whether it should be used in combination with corticoid are both still very controversial issues. (10-13) In this issue of Headache Medicine, Karen and coworkers (14) describe their experience with 82 patients over 50 years of age who were treated with infiltration of anesthetic, corticoid or both, in order to treat headache suffering.

Classically, the supraorbital, supratrochlear, auriculotemporal, greater and lesser occipital nerves are the target tissue of the infiltration, although the nerve must not be injured by the needle. The solution injected should be in the environment around the nerves, in order to block nerve transmission.

Some experts believe that the use of the needle alone, without any injection of anesthesic drugs or corticoid, is enough to induce an attenuation in the frequency and intensity of the headache attacks. The control group in the study using botulinic toxin, in which patients received only the vehicle or placebo, presented a significant improvement in their headaches. Acupuncture is another classic example of pain treatment using needles.

Curiously, historical data of a native Indian population – the Yámanas – an extinct prehistorical tribe that inhabited the island of *Tierra del Fuego* in the extreme south of the American continent, indicated that they used small branches of prickly plants (chaura, *Pernettya mucronata*) to scarify certain areas of the head to treat severe headaches in the sufferers. (15) Thus, a placebo effect must be considered as a possible mechanism responsible for the attenuation of the pain.

Regarding the technique of infiltration of nerves, the article by Ferreira and colleagues, (16) elegantly shows the supraorital foramen and its anatomical variants, where the supraorbital nerve reaches the forehead from its intraorbital pathway. This anatomical reference is very important in the process of infiltration and nerve block in a patient with incapacitating headache.

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