PERICRANIAL NERVE BLOCKS AS PROPHYLACTIC TREATMENT OF MIGRAINE: EXPERIENCE ON A SERIES OF 50 PATIENTS


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OBJECTIVES: Peripheral nerve blocks have been widely used to treat primary headache disorders. Attention has been paid mainly to greater occipital nerve (GON) blocks in cervicogenic headache and occipital neuralgia. We aimed to assess prospectively the efficacy of pericranial nerve blocks as prophylactic treatment of migraine, using homogeneous technique and indication criteria.

METHODS: From January 2009 to January 2013 we have offered pericranial nerve blockades to migraine patients (diagnosed accordingly to International Classification of Headache Disorders, II Edition), who had previously failed at least one trial of preventive therapy. We used nerve tenderness to palpation in Great Occipital Nerve (GON) or Supraorbital Nerve (SON) as selection criteria. We injected a mixture of bupivacaine and mepivacaine in a 1:1 ratio (2 cc in GON and 0.5 cc in SON). Response was grouped into complete response (pain free), partial response (reduction in severity or frequency of headache of at least 30%), or no response.

RESULTS: In 50 patients (44 females, 6 males, mean age 40.3 ± 12.6, range: 19-76), at least one anaesthetic blockade was performed during the inclusion period. Among a total number of 108 procedures, the most frequent technique (61, 56%) was blocking of four nerves (GON and SON in both sides). No serious side effects were detected. After 88 blockades (81.5%), at least a partial response was achieved lasting from 2 weeks to 6 months.

CONCLUSION: According to our experience, anaesthetic blockade of pericranial nerves using tenderness to palpation as inclusion criteria, is a safe and potentially effective prophylactic treatment of migraine.