

82. SPHENOPALATINE GANGLION BLOCK - REVIEW OF TECHNIQUE AND RESULTS

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Introduction: About 35 million Americans suffer from headache. Most headaches require symptomatic treatment, but a few require specific therapies.

It is hypothesized that blocking the sphenopalatine nerve causes disruption of the vicious autonomic pain cycle within facial and cranial area leading to alleviation of severe headaches.

Methods and technique: The results of 15 cases (13 male and 2 female) of severe headache treated with sphenopalatine blocks (SPB) between 1998-2000 were reviewed. Patients' age ranged between 34-70 years. The etiology was head trauma (7 cases), dental work (2 cases), herpetic infection (2 cases), fibromyalgia (1 case), migraine (1 case), temporomandibular joint related pain (1 case), and unknown (1 case). The patients presented with a complete medical and neurological work-up being negative for any intracranial pathology, and all varieties of headache lasting from 10 months to 35 years. Sphenopalatine block (SPB) was performed in the supine position. Sterile cotton sticks, soaked in 4% lidocaine, were inserted uni- or bilaterally through the patient's nose to the back of nasopharynx and left in place for 10 minutes. The blocks were repeated daily, throughout the week. On the 3rd day, patients were instructed to perform the block themselves. Patients continued the treatment with sphenopalatine blocks at home throughout the follow-up period. The frequency of performed blocks varied from 1 to 3 per day. In all cases, the pain score before and after treatment was compared using a standard 0-10 pain score scale.

Results:

Please see the table for results.

Discussion:

Sphenopalatine ganglion block (SPB) is a safe and easy technique, used effectively in the management of temporomandibular joint pain, cluster headaches, dysmenorrhea, trigeminal neuralgia, bronchospasm, and chronic hiccup for over 80 years (1, 2, 3, 4).

It takes just a few minutes to administer the block, and patients can be taught to perform this procedure effectively at home with good results.

In contrast to previous reports, both our patients with herpes infection failed the treatment with SPB 5.

Although the literature reports are controversial, we found SPB very effective in the treatment of headaches related to the head trauma (6, 7).

We successfully used the above technique to interrupt acute migraine in a 30-week pregnant patient.

SPB can serve as a sole modality or as an adjuvant to systemic therapy, both prophylactically and therapeutically.

SPB can be used in outpatient setting or self-administered at home.

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3. *J Neurosurg*, 1997; 87(6): 876-80

4. *Nebr Med J*, 1996; 81(9): 306-9

5. *Clin J Pain*, 1993; 9(2): 135-7

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7. *Reg. Anesth. Pain Med*, 1998; 23(1): 30-6

PATIENT'S NUMBER	CAUSE OF PAIN	INITIAL PAIN SCORE	PAIN SCORE 5 DAYS POST-OP	PAIN SCORE 12 MONTHS POST-OP
1	HEAD TRAUMA	10/10	4/10	5/10
2	HEAD TRAUMA	8/10	4/10	4/10
3	HEAD TRAUMA	6/10	4/10	4/10
4	HEAD TRAUMA	9/10	1/10	3/10
5	HEAD TRAUMA	8/10	8/10	NO FOLLOW-UP
6	HEAD TRAUMA	10/10	5/10	5/10
7	HEAD TRAUMA	5/10	5/10	NO FOLLOW-UP
8	UNKNOWN	7/10	4/10	2/10
9	HERPES ZOSTER	8/10	4/10	NO FOLLOW-UP
10	HERPES ZOSTER	5/10	3/10	NO FOLLOW-UP
11	DENTAL WORK-UP	6/10	6/10	NO FOLLOW-UP
12	DENTAL WORK-UP	8/10	3/10	4/10
13	FIBROMYALGIA	6/10	2/10	NO FOLLOW-UP
14	PHARYNGITIS	9/10	6/10	5/10
15	MIGRAINE	8/10	2/10	NO FOLLOW-UP