

# An Alternative Treatment for Spinal Headache

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In a series of 9,277 cases of patients receiving spinal anesthesia studied by Dripps et al in 1977,<sup>1</sup> they reported the overall incidence of spinal headache at 11 percent. Headaches ranged from 3 percent to 18 percent, depending on the patient's age and gauge of the needle used. Following vaginal delivery, 22 percent of patients in this group complained of spinal headache. Traditional therapy involves bed rest, hydration (3,000 mL/d), and analgesics, and often this is all that is required.

Traditional methods failing, epidural blood patch has been advocated to relieve spinal headache. A total of 10 mL of autologous blood is withdrawn aseptically and placed at the same interspace as the dural puncture. The patient lies flat for 30 to 60 minutes and an intravenous solution of saline is administered (1000 mL). Relief of headache occurs in from 90 percent to 98 percent of patients, and only rarely is a second or third blood patch required. Failure usually is due to faulty technique or the wrong diagnosis.<sup>2</sup>

Complications following epidural blood patch include backache and lower extremity neurologic symptoms such as paresthesias. Infectious complications such as meningitis and epidural abscess are of concern but fortunately are rare.

Epidural blood patch does, however, require technical expertise, equipment, and time beyond that available to many practitioners. Intravenous or intramuscular parenteral caffeine sodium benzoate (CSB) (0.5 g/2 mL) offers an alternative modality that is both successful and has decreased

potential risks. CSB can also be given on a ward or in an outpatient setting.

## Case Illustration

Mrs. E.P., a 30-year-old, gravida 3, para 1, abortus 1, white woman had an estimated date of confinement of October 3, 1981, and an uncomplicated prenatal course. Her labor was remarkable for a prolonged second stage of labor with 1 hour 41 minutes of pushing and vertex descent to only 1+ station. The patient received a saddle block, utilizing 30 mg of 5 percent lidocaine via a 22-gauge needle.

The patient was delivered by indicated midforceps of a 9 lb 6 oz boy with Apgar scores of 8 and 9 at one and five minutes, respectively. The mother sat to breast feed within 20 minutes of delivery for approximately 30 minutes but otherwise remained supine for four hours following the saddle block. On the first postpartum day the patient complained of a throbbing headache while erect that resolved when supine and became progressively less symptomatic with hydration and bed rest until her discharge on her second postpartum day. The patient did well at home for 24 hours but then complained of an intense throbbing headache when upright at 48 to 72 hours, subjectively graded by the patient as a 10 over 10. The headache was unresponsive to bed rest, oral hydration, and narcotic analgesics taken orally. At 72 hours after discharge the patient received 0.5 g of intramuscular CSB for her spinal headache, and within the hour she was feeling better with only a mild to moderate headache. Administration of CSB (0.5 g intramuscularly) was repeated in four hours, and the headache resolved completely and permanently. The patient was up and ambulatory and had no untoward reactions.

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## Comment

Spinal headache is an unfortunate and not infrequent sequela of lumbar puncture. Unfortunately, treatment modalities range from conservative to invasive, with no middle ground. The collective experience of this clinic has found caffeine sodium benzoate to be a very effective treatment for this problem. The literature, however, seems to overlook this modality, and few studies have examined CSB use in any detail. Standard textbooks offer little more.

Sechzer and Abel<sup>3</sup> reported on 104 patients with spinal headache and the use of intravenous CSB (0.5 g/2 mL) in 41 of those patients who did not respond to the usual conservative measures. In a double-blind demand method they found a highly significant difference ( $P < 0.0001$ ) when compared with control. Seventy-five percent of those patients initially receiving CSB had relief of the headache. With a second injection, headache relief increased to 85 percent. In 70 percent the headache did not return. Other than mild central nervous system stimulation, no other side effects were reported.

The causal mechanism is felt to be lowered cerebral blood volume and decreased cerebral spinal

fluid pressure, brought about by increased vascular resistance and thus decreased cerebral blood inflow. In short, caffeine sodium benzoate seems to reverse the abnormal cerebral dynamics present in precipitating a spinal headache.<sup>3</sup>

## Summary

Caffeine is often used in the treatment of headaches. Parenteral caffeine sodium benzoate is a single and safe modality for the treatment of spinal headache. Its application is easy and it is approved for this use.<sup>4</sup> Headache usually responds after one injection, but occasionally a second or third can be used at four- to eight-hour intervals when necessary. Other than mild central nervous system stimulation, side effects are rare.

## References

1. Dripps RD, Eckenhoff JE, Vandam LD: *Introduction to Anesthesia*, ed 5. Philadelphia, WB Saunders, 1977, pp 273-277
2. Albright G: *Anesthesia in Obstetrics—Maternal, Fetal and Neonatal Aspects*. Reading, Mass, Addison-Wesley, 1978, pp 205-207
3. Sechzer PH, Abel L: Post-spinal anesthesia headache treated with caffeine: Evaluation with demand method: Part I. *Curr Ther Res* 24:307, 1978
4. *Physicians' Desk Reference*, ed 34. Oradell, NJ, Medical Economics, 1980, p 1019

# Laxative Abuse Causing Gastrointestinal Bleeding

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Laxative ingestion for the purpose of weight reduction is occasionally seen in clinical practice. Numerous metabolic abnormalities and bowel motility disorders can occur, but the etiology of

these problems may be difficult to ascertain because such patients do not always admit they use laxatives. Many of these patients have underlying psychological problems, of which depression is the most common.

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## Case Report

A 24-year-old white woman was first seen in the emergency department at the University of Ari-

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