We were consulted as to the efficacy and safety of epidural blood patch in this patient. Our primary concern was the injection of HIVinfected blood into the epidural space of a patient who had no evidence of HIV involvement of the central nervous system. Our colleagues' opinions regarding this issue were solicited, and our concerns were shared with the patient. We discussed our lack of experience with this situation and informed the patient of the dearth of experience in the published literature; nevertheless, the patient agreed to blood patch therapy. An epidural blood patch was performed using a 17-G Hustead needle and 15 ml autologous blood. The patient had immediate relief of his PDPH symptoms and was discharged pain-free from the recovery room. He was transferred to domiciliary care 3 days after the procedure. Intermittent follow-up over the subsequent 19 months has revealed no signs of neurologic involvement as a result of the blood patch. The patient has been discharged from domiciliary care and is functioning well in an independent environment.

We present this case to share our single experience with long-term follow-up on epidural blood patch in an HIV-positive patient and solicit additional advice from other practitioners who have dealt with this dilemma.

BRIAN K. BEVACQUA, M.D. Chairman, Anesthesia Section

Assistant Professor, Clinical Anesthesia VA Medical Center 10701 East Boulevard

10701 East Boulevard Cleveland, Ohio 44106

ALEXEY V. SLUCKY, M.D. Resident, Anesthesiology Case Western Reserve University 2074 Abington Road Cleveland, Ohio 44106

REFERENCES

 Frame WA, Lichtmann MW: Blood patch in the HIV-positive patient. ANESTHESIOLOGY 73:1297, 1990

(Accepted for publication January 25, 1991.)

Anesthesiology 74:953, 1991

Post-dural Puncture Headache in the HIV-positive Patient

To the Editor:—The recent report by Frame and Lichtmann¹ about blood patch in the human immunodeficiency virus (HIV)-positive patient raises an interesting question-can injecting HIV-positive blood into the epidural space increase the risk of HIV infection in the central nervous system? The authors invite others to share their experiences with this problem. A 25-yr-old man, HIV-positive, was admitted for evaluation of shortness of breath and fever. As part of the diagnostic evaluation, a lumbar puncture was performed. During the next 2 days, the patient had a persistent positional headache believed to be related to the dural puncture. On the second day the patient was discharged receiving oral analgesics. The patient's headache increased in severity after discharge, and by the 6th day after the lumbar puncture the patient's internist asked me to perform an epidural blood patch because the headache was causing severe nausea and vomiting, as well as pain. It was apparent that the patient had not had a trial of conservative therapy; that is, although told to increase fluid intake he could not tolerate this. Therefore, the patient was admitted on the evening of the 6th day and received an intravenous infusion of 0.45% saline at 100 ml/h. On the evening of the 8th day the patient rated his headache as very mild (1 10), whereas on days 4 and 5 it had been very severe (10 10). His nausea and vomiting had resolved. Since admission he had been able to increase his oral intake. By the morning of the 9th day, his headache had completely resolved and he was discharged.

Most spinal headaches will spontaneously resolve, and until we have more information about the infectiousness of the HIV virus in the central nervous system, I believe that blood patch should be used only when conservative measures truly have failed. This, of course, means that if the patient is not able to tolerate oral hydration, intravenous hydration will be necessary. As in this case, conservative measures often are said to have failed, when in reality, because of nausea and vomiting, hydration has not really been given a chance. Had this patient not responded to intravenous hydration, intravenous caffeine therapy would have been tried next.² Does infusion of epidural saline have an advantage over epidural blood patch in this particular situation? If a blood patch is necessary, should it be performed with fresh HIV-negative blood from an appropriate donor? These and other issues need to be considered.

JAMES J. GIBBONS, M.D.
Assistant Professor of Anesthesiology
St. Louis University School of Medicine
3635 Vista Avenue
St. Louis, Missouri 63110-0250

REFERENCES

- Frame WA, Lichtmann MW: Blood Patch in the HIV-Positive Patient. ANESTHESIOLOGY 73:1297, 1990
- Jarvis AP, Greenawalt JW, Fagraeus L: Intravenous Caffeine for Postdural Puncture Headache. Anesth Analg 65:316-317, 1986

(Accepted for publication January 25, 1991.)

Anesthesiology 74:953-954, 1991

Does Arterial Baroreflex Play a Role in Response to Acute Hypovolemia during Induced Hypotension?

To the Editor:—I read with great interest the study by Taneyama et al.¹ on the arterial baroreceptor reflex response to acute hypovolemia

during induced hypotension. There are several questions that need to be addressed. To begin with, there is a question about the arterial