

# Targeted Cervical Epidural Blood Patch for the Treatment of Spontaneous Orthostatic Headache

Robert DeMatteo, MD, Zafeer Baber, MD

## Introduction

A 39-year-old female with no significant past medical history presented to neurology with a two-month history of bilateral frontal headaches which were orthostatic in nature. The acute pain service was consulted and a blind lumbar epidural blood patch was performed. Unfortunately, the patient did not get sustained pain relief from the procedure. She then underwent a CT myelogram that demonstrated a ruptured perineural cyst at the level of C6-C7 as the likely etiology of the CSF leak.

## Materials and methods

Under fluoroscopic guidance, a 20-gauge, 3.5-inch Tuohy needle was inserted into the C6-C7 epidural interspace. A 20-gauge IV was inserted into the patient's hand by nursing and blood was withdrawn in usual sterile fashion. 8mL of sterile blood was administered into the epidural space. The patient reported no pain or radicular symptoms from this administration. The patient was monitored post-operatively with no untoward complications and was discharged home in stable condition.

## Results/Case report

The patient reported immediate improvement in her headaches with complete resolution by one-month post-procedure.

## Discussion

The initial therapy for a spontaneous orthostatic headache is conservative treatment consisting primarily of bedrest and caffeine. If these measures fail, a blind lumbar epidural blood patch is commonly performed. However, there is a growing body of research suggesting that radiographically targeting the level of the blood patch to the level of CSF leak will be more likely to completely cure the patient's headaches as compared to a blind blood patch (Cho 2011). There is some hesitation among practitioners regarding cervical epidural blood patches given anatomical concerns for complications. However, successful blood patches have been reported at levels as high as C2 without complication (Rai, 2005). As we have demonstrated with this case, cervical blood patches can be performed without complication using fluoroscopic guidance and can provide complete resolution of refractory orthostatic headaches.

## References

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