

## Is Epidurogram a Reliable Tool for the Diagnosis of Epidural Adhesion?

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### LETTERS TO THE EDITORS

Commentary on Jo DaeHyen and Jang Sul: The Correlation Between Caudal Epidurogram and Low Back Pain, *Korean J Pain* 2012; 25(1): 22-7 [1].

In patients with chronic lower back pain, the epidurogram is a very useful and frequently used diagnostic method to check for epidural adhesion [2-5]. However, it has low clinical credibility since the relationship between the filling defect and painful area is unclear. In an actual example, although there was mild adhesion in the central epidural space, the contrast medium could not spread to the foramen, so it was problematic that the existence of the filling defect in the foramen could not be confirmed.

Although there are problems with credibility in this way, there are not many studies yet that have objectively evaluated the credibility. This study is an experiment which has investigated the relationships between the filling defect and back pain, thus is considered a very beneficial and important experiment. However, there are a few problems in evaluating the credibility of the epidurogram with only the results of this study. First, pain in the back and lower extremities show large differences in the development mech-

anism and cause. Therefore, the experiment would have benefitted if the subjects were divided into patients with back pain and patients with lower extremity pain. Also, there are no accurate reports of whether adhesion in the anterior epidural space or posterior epidural space is more common for the cause of lower back pain due to adhesion. Therefore, it is necessary to check the levels of the central filling defect shown in the epidurogram and determine whether it is in the anterior or posterior epidural space. Finally, compared to the number of subjects, there were a great variety of diseases, so there could have been errors in the decoding of the results. Herniated discs, spinal stenosis, degenerative disk formation, or post-lumbar surgery syndrome are all different in pathophysiology, so there is a need for further research, which can compare the severity of pain with the filling defect in the epidurogram according to the disease.

When there is an abnormality in the MRI, the relationship between the anatomical observation in the MRI and the symptoms of the patient are investigated. In the same way, further research is considered necessary in order to confirm the relationships between lower back pain and the adhesion shown in the epidurogram.

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## AUTHOR'S OPINION

Thank you for your concerns about our study. As you know, the epidurogram is a useful tool for the diagnosis of epidural adhesion. However, there are only a few studies, which is not enough for the understanding of the pathology of the epidural space. Our study is the first to measure the correlation between pain severity and the epidural adhesion. This study is just a preliminary trial for further studies in the usefulness of the epidurogram. As we mentioned in the discussion section, we need a more sophisticated study design and a sufficient number of patients. I believe this report is a success in terms of gathering close concerns regarding the epidurogram.