

THE CONTRLATERAL MYELOGRAPHIC FILLING DEFECT

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SUMMARY

Contralateral myelographic filling defect (CMFD) is a situation in which the clinical findings and the myelographic appearance are not in accordance. A case with CMFD is presented and the surgical importance of this finding is discussed.

Key Words : Myelography, lumbar disc herniation

INTRODUCTION

Myelographic examination is still an indispensable diagnostic method in evaluating low back pain cases. Although this method is very useful in discal herniations, it must be kept in mind that the clinical findings and myelographic appearance do not always have a positive correlation (4,7). Contralateral myelographic filling defect (CMFD) is an example of this kind of situation.

The purpose of this paper is to present a case who revealed a contralateral filling defect on her myelography and to discuss the importance of this finding in the evaluation of a patient.

CASE REPORT

A 47 year old female patient was admitted to our hospital complaining of low back pain radiating to her right leg for more than a year.

On the physical examination the patient was normal. But the neurological examination revealed 2/5 motor deficiency in dorsoflexion of right foot and right toe; hypoesthesia in the L5 dermatome on the same side; a slight scoliosis to the opposite side and positive leg rising sign on the right side.

Routine laboratory findings and routine spine radiograms were normal. A myelography was performed with a water soluble contrast material. The myelography disclosed an extradural filling defect of contrast media on the left side between L4 and L5 vertebrae. (Fig. 1)

Surgical exploration was performed with bilateral hemilaminotomy. The left side was absolutely normal. On the right side exploration, a huge protruding intervertebral disc and an extremely compressed

root were detected. L4–5 discectomy was performed on the right side.

The patient had an uneventful postoperative period and been discharged with complete recovery on the 7th postoperative day.

DISCUSSION

It is known that clinical findings and the myelographic appearance do not always have a correlation. The patient's clinical findings and the results of the myelographic examination are in accordance with each other in 75–93 % of the cases.

On the other hand, the myelograms and the postoperative findings show the same pathology in only 46 % of the patients (1,4,5,6,8). One of the most interesting situations, in which clinical and the radiological findings do not support each other, is the contralateral myelographic filling defect. Contralateral myelographic filling defects, as previously mentioned by some authors are seen in 0.8 % of the lumbar disc herniation cases (2,3,5).

The explanation of the appearance of contralateral filling defect of contrast material was made as the cumulation of pushed nerve roots within the dural sac by herniated intervertebral disc pathology to opposite side.

Many clinicians fall in conflict when they see CMFD, whether to rely on the clinical examination or on the myelogram. We believe that myelography will be valuable only if it supports the neurological findings. If they differ from each other, we have to rely on the clinical observations and the neurological findings. Our presented case supports this conclusion.

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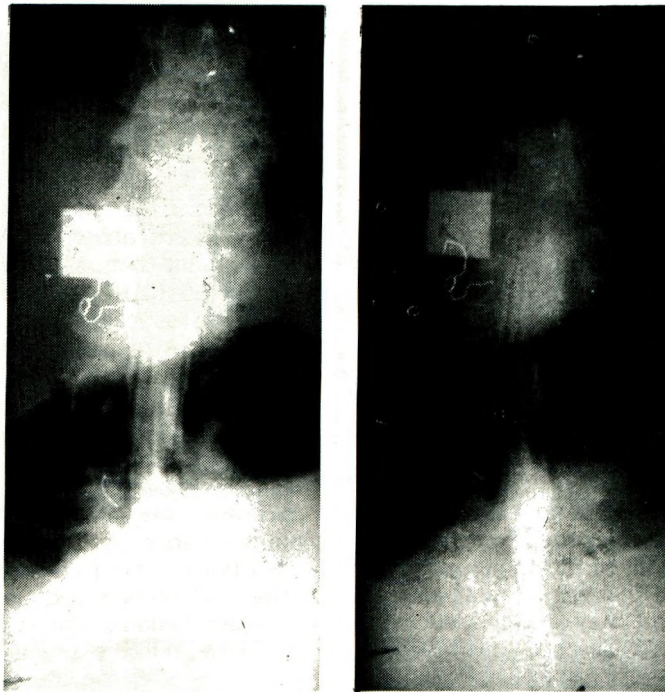


Fig. 1 : Myelogram showing an extradural filling defect of contrast material on the left side between L4 and L5 vertebrae.