INTRARADICULAR DISC HERNIATION*
(A Case Report)

Ufuk AKMİL ** **Murat HANCI ***** **E. DENİZ *****

Intraradicular herniated lumbar disc an unusual case is presented in which a fragment of herniated lumbar disc was found within the sheath of the S1 nerve root. The possible pathogenic factors are discussed.

Key Word: *Intervertebral disc displacement, Spinal nerve root.*

INTRODUCTION

Lumbar disc surgery, which is accepted to be first performed by Oppenheim and Krause in 1909 and have been clarified by Mixter and Barr in 1932 is the mostly applied neurosurgical procedure in today's clinical practice (4). Since the first publication about intradural disc herniation was done by Dandy in 1949, the first observation on the penetration of the dura of the radix by the extruded disc belongs to Barbara in 1984 (2). Experiences on similar cases were also later published in 1986 (1) and 1987 (3) from Turkey and in 1991 from Japan (5). We here present a rarely detectible case regarding of the possible factors in the pathogenesis.

CASE REPORT

38 years old male patient, complained of excruciating pain in his left leg and foot. No examination findings except a positive straight leg rising test at a minimal angle on the left. Iohexol myelography showed left S1 root amputation. Left unilateral hemilaminotomy was performed. The left S1 root was enormously dilated and any attempt to mobilize the root was impossible. After enlargement of the foraminotomy the dura of the S1 nerve root was opened longitudinally and the fragment between the nerve fibers was extirpated. The dura was then closed with interrupted stitches and then the remainder disc material at the L5-S1 level removed using the defect which was later detected on the posterior longitudinal ligament. Pain relief started early after operation and the patient was discharged at postoperative 7th day without any neurological deficit.

DISCUSSION

The penetration of the extruded disc material to the dura is explained by the adhesions between the dural sac and the posterior longitudinal ligament. These adhesions can both be occurring during the postoperative period or be present asemptomatically as shown by the postmortem studies (5). Those mentioned ligations, which can be present particularly at the low lumbar region, can also be found at the L4-5 level as dense as not permitting any dissection. Dura mater of this kind with so many tight connections can be perforated during the extrusion of the disc and be penetrated by the disc material (2). A similar mechanism may be the mode of action for the nerve root in our case. Beyond, a thin dura mater due to a congenital defect may have eased such a penetration. In our opinion, the rareness of the intraradiculary disc herniation diagnosis is particularly a result of underdiagnosis. We think that, since a portion of the cases who continue their symptomatology after discectomy are similar cses underdiagnosed, it would be beneficial to further investigate.

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** Neurosurgery Clinic, Çorlu State Hospital Tekirdağ Türkiye
*** Neurology Clinic, Çorlu Military Hospital, Tekirdağ Türkiye.
**** Neurology Clinic, Çoklu Military Hospital, Tekirdağ Türkiye