INTRODUCTION

Juvenile xanthogranuloma (JXG) is a proliferative histiocytic disorder experienced during childhood and adolescents. JXG commonly presents as a solitary cutaneous lesion. Despite the term "juvenile", development of the disease during adulthood is possible, although spinal JXG is extremely rare in adults. We describe a 67-year-old female patient who presented with an intradural-extramedullary (IDEM) tumor of the spinal cord. Magnetic resonance imaging (MRI) findings indicative of JXG of the spinal cord were seen, which was then confirmed pathologically. A lumbar spinal MRI with contrast enhancement showed an oval-shaped, well-defined IDEM tumor at the L1 level. This tumor had mixed signal intensity on the T1-weighted image and high signal intensity on the T2-weighted image. Central homogenous enhancement was observed after contrast administration.

CASE REPORT

A 67-year-old female presented with a complaint of lower back pain with a tingling sensation in the left leg running from her left thigh to left calf of two months in duration. She had no other complaints. Her only significant past medical history was controlled hypertension. General physical and neurologic examination did not reveal any abnormalities apart from slight hyperactivity of the deep tendon reflex in both knee jerks. Muscle strength in all limbs, gait, and co-ordination were normal, and there was no bowel or bladder dysfunction. Cranial nerve ex-
The mononuclear cells were moderate to large round cells with small and uniform nuclei and lipid-laden cytoplasm (Fig. 2A). The cells stained positively for CD68, a histiocyte marker (Fig. 2B). The pathologic diagnosis was JXG.

Postoperatively the patient’s pain and tingling sensation were relieved. A postoperative MRI obtained at 1 and 3 years after surgery did not reveal any residual or recurrent tumor.

DISCUSSION

JXG is the most common form of non-Langerhans cell histiocytosis. The exact etiology or pathogenesis of JXG has not been determined, although it is regarded as a reactive process rather...
Ependymomas are generally hyper-intense on T2-WI and hypo-intense on T1-WI, which is often heterogeneous. Ependymomas nearly always show contrast enhancement, though are not always homogenous (9). Astrocytomas are the most common glioma and can occur in most parts of the brain and occasionally in the spinal cord. People can develop astrocytomas at any age. Astrocytomas are iso- to slightly hypo-intense on T1-WI, hyper-intense on T2-WI, and commonly have associated cysts. They enhance less intensely and are more eccentric than ependymomas (10). Schwannomas can be considered in the shape of the lesion. Schwannomas are generally hypo- or iso-intense on T1-WI and hyper-intense on T2-WI which is often heterogeneous, and are frequently associated with hemorrhage, intrinsic vascular changes, cyst formation, and fatty degeneration. The location of the spinal JXG is variable from the cervical spine to the sacrum. The age spectrum of the adult spinal JXG is also wide from twenty nine to sixty seven. Spinal JXG may appear with variable signal intensity, that is, a mixture of hypo-, iso-, and hyper-intense in T1-WI and T2-WI. Furthermore, the lesion may exhibit homogenous enhancement after contrast media administration (Table 1).
Upon gross anatomic examination, the JXG is a well-encapsulated and round lesion with a yellowish surface. JXG is confirmed by the microscopic pathologic identification of foamy histiocytic cells and an immunohistochemical finding of mononuclear cells, giant cells, and spindle cells positive for lysozyme stain and CD68 but negative for CD1a and S-100 proteins, which are all reactive markers of Langerhans cells (Fig. 2B).

These tumors may grow slowly without regression, and thus the symptoms worsen gradually. This is the distinguishing and important characteristic of JXG in adult patients compared with that found during childhood and adolescent JXG, which regresses spontaneous. Despite being a pathologically benign tumor, it is conventional to remove as much of the tumor as possible. There have been no reports of recurrence after total mass excision (4).

We have described the case of a 67-year-old female with a solitary tumor identified as a JXG involving the spinal column. Although JXG is very rare, JXG should be considered in the differential diagnosis of IDEM tumors of the spinal cord in adult patients.

**REFERENCES**

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척수에 발생한 연소성황색육아종의 자기공명영상 증례 보고

김세영 · 박희진 · 이소연 · 정은철 · 박해원 · 국신희 · 노명호 · 구지혜

연소성황색육아종(Juvenile xanthogranuloma; 이하 JXG)은 유소년기에 발생하는 조직구 증식성 질환이다. JXG는 주로 단독 피부병변으로 나타난다. 그러나 “연소성”이라는 명칭에도 불구하고, 성인에게서 발생할 수 있다. JXG가 피부 이외의 병변으로 나타나는 경우는 드물며, 특히 성인에게서 척수에 발생하는 경우는 극히 드물다. 저자들은 67세 여성에서 척수에 발생한 경수막내-수외의 종양을 발견하였다. 이 병변은 조직학적으로 확진되었으며, 이 환자에 대한 자기공명영상의 증례를 보고한다. 조영증강 자기공명영상에서 1번 요추 높이에서 경계가 분명한 타원형의 경수막내-수외의 종양을 볼 수 있었으며, 이 종양은 T1 강조영상에서 혼합된 신호강도를 보였고, T2 강조영상에서 고신호강도를 보였다. 조영증강시에는 종양 중앙부분에서 균질한 조영증강을 보였다.