Vanderver A, Ghezzi D, van der Knaap MS. Novel (ovario) leukodystrophy related to AARS2 mutations [J]. Neurology, 2014, 82:2063-2071.

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·临床医学图像·

椎管内（髓内及硬脊膜下）脂肪瘤

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Intraspinal (intramedullary and subdural) lipoma

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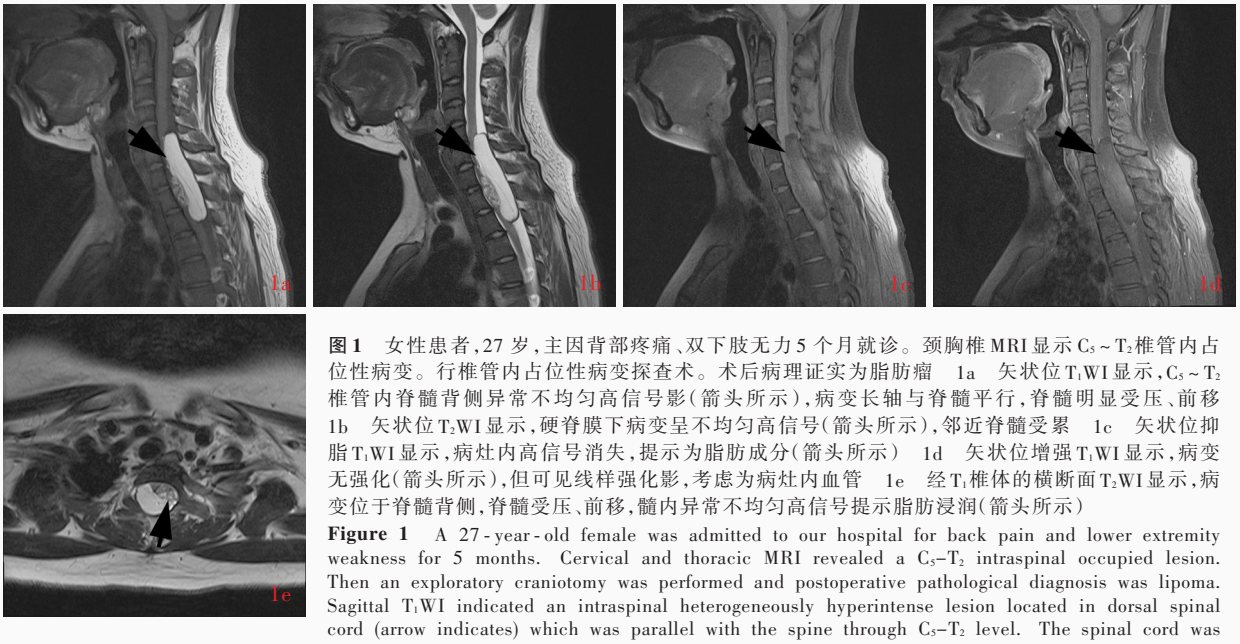

图1 女性患者，27岁，主因背部疼痛、双下肢无力5个月就诊。颈胸椎MRI显示C_5～T_2椎管内占位性病变。行椎管内占位性病变探查术。术后病理证实为脂肪瘤 1a 矢状位T_1WI显示，C_5～T_2椎管内脊髓背侧异常不均匀高信号影（箭头所示），病变长轴与脊髓平行，脊髓明显受压、前移 1b 矢状位T_2WI显示，硬脊膜下病变呈不均匀高信号（箭头所示），邻近脊髓受累 1c 矢状位抑脂T_1WI显示，病灶内高信号消失，提示为脂肪成分（箭头所示） 1d 矢状位增强T_1WI显示，病变无强化（箭头所示），但可见线样强化影，考虑为病灶内血管 1e 经T_1椎体的横断面T_2WI显示，病变位于脊髓背侧，脊髓受压、前移，髓内异常不均匀高信号提示脂肪浸润（箭头所示）

Figure 1 A 27-year-old female was admitted to our hospital for back pain and lower extremity weakness for 5 months. Cervical and thoracic MRI revealed a C_5–T_2 intraspinal occupied lesion. Then an exploratory craniotomy was performed and postoperative pathological diagnosis was lipoma. Sagittal T_1WI indicated an intraspinal heterogeneously hyperintense lesion located in dorsal spinal cord (arrow indicates) which was parallel with the spine through C_5–T_2 level. The spinal cord was compressed severely to the anterior part of spinal canal (Panel 1a). Sagittal T_2WI showed a subdural heterogeneously hyperintense lesion (arrow indicates) with involvement of the adjacent spinal cord (Panel 1b). Sagittal T_1WI with fat suppression showed the hyperintense signal within the lesion disappeared, indicating fatty content (arrow indicates, Panel 1c). Enhanced sagittal T_1WI with fat suppression showed no enhancement of the lesion (arrow indicates), but several linear enhancements which indicated vessels within the lesion (Panel 1d). Axial T_2WI on T_1 level showed the lesion was located in the dorsal spinal cord and spine cord was compressed forward obviously. The abnormal heterogeneously hyperintense signal revealed fatty infiltration (arrow indicates, Panel 1e).

椎管内（髓内及硬脊膜下）脂肪瘤与胚胎期原始脑膜残留和异常脂肪分化相关，若脂肪组织内陷于椎管，扰乱神经沟正常闭合，可合并脊柱裂、脊髓脊膜膨出、脊髓拴系、皮下脂肪瘤和皮毛窦等症状。脂肪瘤可发生于髓内，也可起源于脊膜下方且向外生长形成硬脊膜下脂肪瘤，通常位于脊髓背侧近中线处，累及数个椎体节段。发生于颈胸段椎管者多不伴硬脊膜囊缺损和皮肤异常；发生于腰骶段椎管者多伴硬脊膜缺损，可位于髓内、硬脊膜下和硬脊膜外，常合并脊髓膨出、脊髓脊膜膨出等发育畸形，以及皮下脂肪瘤和皮毛窦等。CT可见特征性极低密度影（脂肪成分CT值-80～-10 HU），边界清晰，可伴钙化，强化后低密度区不增强。硬脊膜下病灶与脊髓长轴平行，邻近硬脊膜下隙增宽，脊髓受压变形、移位。MRI呈短T_1（图1a）、长T_2（图1b）改变，瘤体两侧侧缘呈高和低信号带状影，系化学位移效应所致；抑脂序列可见病灶内高信号脂肪区域被抑制，呈极低或无信号（图1c），具有一定特征性；增强扫描病变无强化，病灶较大时可包绕邻近血管和神经成分，即血管穿过病变，呈线样强化（图1d），亦为特征性改变。病灶向髓内浸润性生长，可见短T_1、长T_2信号的脂肪成分，强度不均匀（图1e）。椎管内病变呈高信号、抑脂序列呈低信号、无强化征象是诊断椎管内脂肪瘤的重要影像学依据，应注意与同样含脂肪成分的皮样囊肿、畸胎瘤相鉴别。T_1WI呈高信号时还应与亚急性期出血性病变、黑色素瘤、肠源性囊肿、表皮样囊肿相鉴别。

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