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Clinical Images

"Bunch of grapes" on the spine-spinal hydatidosis

A 22-year-old woman was referred with a history of progressive back pain for two months, lower extremity numbness and weakness for two weeks, and bladder and bowel incontinence for seven days. Physical examination showed a mass and tenderness in the left paraspinal region, signs of spinal cord compression with T7 sensory and motor level. Laboratory test results showed elevated eosinophils, ESR, and CRP.

Computed tomography revealed cavitations and cystic destruction of T7 vertebra body, left pedicle, and left rib without subperiosteal reactive new bone (Fig. 1).[1] Magnetic resonance imaging showed a cystic lesion originating from T7 and extending to the paraspinal region and to the extradural space, as well as to the left rib (Fig. 2). Axial T2 images demonstrated the hyperintense cysts with clear boundaries, rounded or oval, flowing together, separated by a wall in the form of a "bunch of grapes", resulting in spinal cord compression.[2] According to these findings, the specific diagnosis method, Casoni skin test, was performed and turned out positive. The diagnosis of spinal hydatidosis was based on the unique appearance of the multiple cysts in the spinal canal and paraspinal areas. These cysts were thought to represent "daughter cysts" which are typical of hydatid disease.[3] There is enhancement of the inflammatory tissue surrounding the hypointense cysts on T1 post gadolinium images (Fig. 3).

Fig. 2 - Magnetic resonance imaging (MRI) showed cystic lesions originating from T7 and extending to the paraspinal region and the extradural space, as well as the left rib. Axial T2 weight scan demonstrated hyperintense cysts with clear boundaries, rounded or oval, flowing together, separated by a wall in the form of a "bunch of grapes", resulting in spinal cord compression.

Fig. 1 - Computed tomography revealed cavitations and cystic destruction of T7 vertebra body, left pedicle, and left rib without subperiosteal reactive new bone.

Fig. 3 - Enhanced magnetic resonance imaging (MRI) demonstrated enhancement of the inflammatory tissue surrounding the hypointense cysts on T1 post gadolinium images.

There were no involvements of the intervertebral disc, which in spinal hydatid disease is an extremely unusual finding (Fig. 4).

Therefore, albendazole (15 mg/kg for six months) was administrated orally. Anterior debridement, decompression, and fusion operation were performed. The multiple cysts (Fig. 5) were removed in operation. After surgery, the pain and neurologic symptoms were completely resolved.

Fig. 4 - Sagittal T2 magnetic resonance imaging (MRI) scan revealed no involvements of intervertebral disc.

Fig. 5 - The hydatid cysts of different sizes were removed.

Conflict of interest

All authors declare to have no conflict of interest.

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