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Case Report

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Primary lumbosacral intradural hydatid cyst revealed by a cauda equina syndrome

Abstract

Hydatid disease is a serious public health problem in developing countries. Spinal hydatid cysts account for 1% of all cases of hydatid disease and the primary intradural extramedullary hydatid cyst is exceptional.

We report a case of 75-year-old women presented with a history of backache, leg pain, difficulty in walking, and bladder incontinence. Thoraco-lumbar MRI has showed an intradural process extending from L2 to S5, a low intensity signal on T1 weighted images and a high-intensity signal on T2 weighted images, which were not enhanced after gadolinium injection. There was no vertebral involvement.

The patient underwent surgery, by a posterior approach we perform L2S1 laminectomy. After opening the dura multiple vesicles were found scattered among the roots, with no adhesion to meninges or nervous structures. The outcome was good. Albendazole therapy is obligatory.

Keywords: hydatid disease, intradural, laminectomy, spinal, cyst, lumbar

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Introduction

Hydatid disease is caused by infection with the larval stage of Echinococcus granulosus. The parasite is frequent in sheep and cattle. Hydatid cyst of the spine is very rare and present 1% of all cases of hydatidosis and most commonly is localized to the dorsal spine then the lumbar, sacral, and cervical spine. Primary intradural extramedullary hydatid disease is very rare.[1] We present a case of intradural extramedullary hydatid cyst.

Case report

75-year-old women consult for backache, and progressive difficulty in walking. The symptomatology worsened with the appearance urinary and faecal incontinence. Neurological evaluation showed paraparesis and hyposensitivity on both sides. Power was 3/5 in both lower limbs. Magnetic resonance imaging (MRI) of the thoraco-lumbosacral region revealed a cystic lesion, multiloculated, complex and huge, extending from L2–S5 level (Figures 1). There was no contrast enhancement. A computed tomography of the abdomen, lung was done to look for other localization and didn't show abnormality.

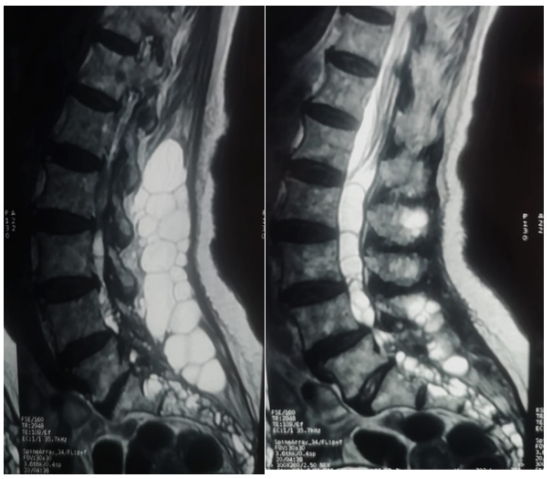

Figure 1 Preoperative sagittal MRI of the lumbar spinal cord

The patient underwent L2 to S1 laminectomy, after this a lot of hydatid cysts located intradural extramedullary (Figure 2) and the cavity was irrigated with hypertonic saline. Albendazole treatment 10 mg/kg was given for six months, separated by 15-day intervals. The post-operative stage was normal and the outcome was good.

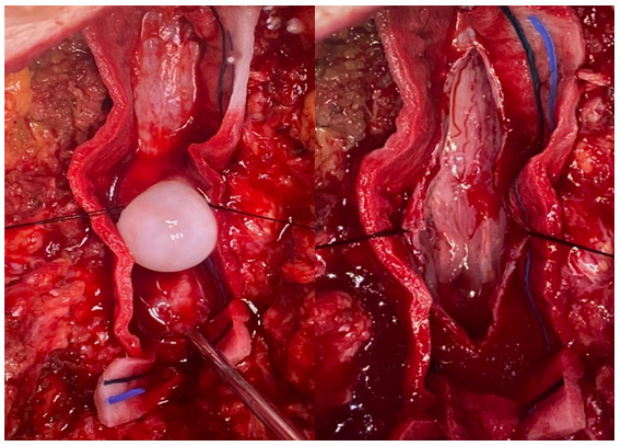

Figure 2 Perioperative view showing intradural vesicles after the opening of the dura mater and the spinal cord after removal of the lesion

Discussion

Hydatidosis is caused by an infection by echinococcus granulosus and prevalent in most of sheep-raising regions of the world, particularly in Mediterranean countries. The infection mainly affects the lung, the abdomen but rarely the bone and more rarely the spine.

The route of spread of the infection to spine is not well clear.[2] Usually, spinal hydatid infection is by direct spread from the abdomen, lung or pelvis. It affects in the first-place thoracic spine (52%), then lumbar (37%) and rarely cervical spine.[1] Unfortunately, there is no specific sign, which is the main cause of delayed diagnosis. The treatment consists of excision of the cysts without rupturing them, which remains a challenge for the surgeon given the fragility of the cysts.[2] Recurrence is a major problem which complicates the

prognosis.[2] The literature cites rates of 30-100%. Patient should receive antihelmintic drug therapy, directly in postoperative, it allows the control of the disease locally, to avoid systemic spread and the recurrence.[3–5]

Conclusion

Primary intradural hydatid cyst was very rare, it could be revealed by a simple backache to a neurological deficit. The diagnosis has improved with MRI technology and the treatment consist of excision of the cysts. The prognosis is very poor despite the development of surgical techniques and medical therapy.

Acknowledgments

None.

Conflicts of interest

The authors declare no conflicts of interest.

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