Spinal metastasis in childhood-onset craniopharyngioma – Case report and experiences in the German Craniopharyngioam Registry

M Jaspers[1,2], A Hoffmann[1], A Brentrup[3], HL Müller[1]

[1]Department of Pediatrics, Klinikum Oldenburg, Medical Campus University Oldenburg, Germany;
[2]University of Groningen, The Netherlands; [3]Department of Neurosurgery, University of Münster, Münster, Germany.

KLINIKUM OLDENBURG
Medizinischer Campus Universität Oldenburg

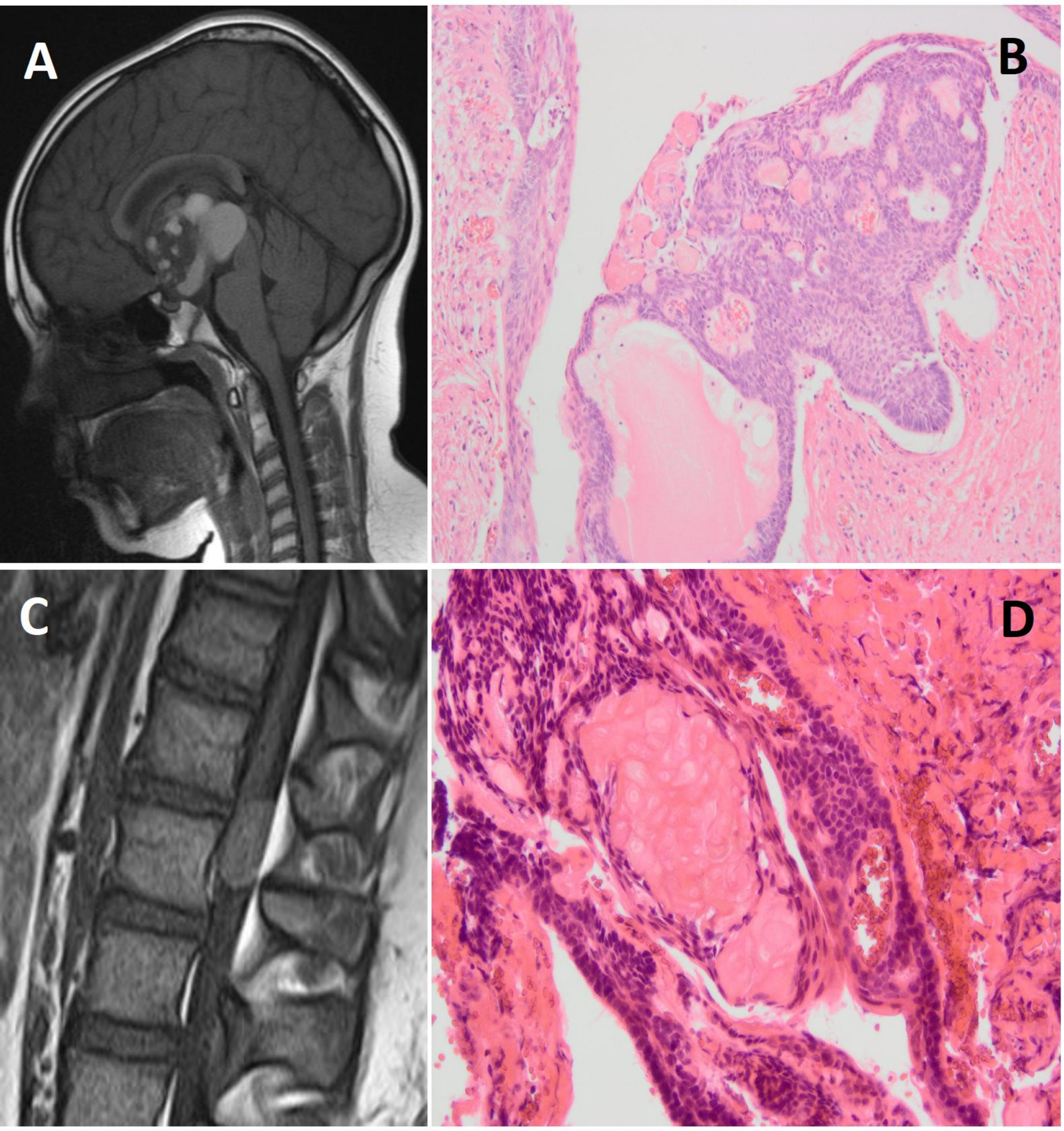

Figure 1

Cranial magnetic resonance imaging (MRI) (Figure 1A) at initial diagnosis of an adamantinomatous childhood-onset craniopharyngioma (ACP) and spinal MRI (Figure 1C) 7 yrs after initial diagnosis showing a spinal metastasis at level T12/L1.
Figure 1B depicts the histology of the initial sellar/parsellar mass: ACP showing cyst formation and wet keratin.
The tumor is well delineated from brain tissue showing reactive changes and Rosenthal fibers (right) in hematoxylin and eosin staining. Figure 1D shows the histology of the spinal metastasis: Cystic ACP with wet keratin abutting spinal connective tissue.

(Courtesy of W. Paulus, Institute of Neuropathology, University Münster, Germany).

Introduction

Background: Remote recurrence and metastasis are unusual complications in childhood-onset adamantinomatous craniopharyngioma (CP) mainly occurring either along a previous surgical route or by seeding via cerebrospinal fluid.

Case report

Case description: An eleven year old female patient initially presented with headache and neck pain as well as nausea over the course of 2 months. A sellar/suprasellar mass (4.0 cm x 4.0 cm 5.0 cm) was detected on magnetic resonance imaging (MRI). Initial surgery resulted in complete resection (CR) based on intraoperative microscopic inspection. CR was confirmed by postoperative MRI. The tumor was histologically determined to be an adamantinomatous CP. Seven yrs after initial CR, the patient presented with back pain spreading to the ventral side of the upper legs as well as a loss of strength. MRI showed a spinal neoplasm at the level of T12/L1 without any sign of local sellar/suprasellar recurrence. The patient underwent a spinal tumor resection without complications. Histological analysis confirmed the spinal tumor to be a metastasis of the initial adamantinomatous craniopharyngioma.

Case report

Clinical complaints due to the spinal metastasis ceased after CR. Currently, the patient is in complete remission 9 yrs after CR of the sellar/suprasellar CP and 2 yrs after CR of a spinal metastasis of CP.
Only one case of an adult patient with spinal metastasis of an adamantinomatous CP has been reported in the literature up to now. Our case represents the first case of childhood-onset CP with spinal metastasis in the total cohort of 582 patients, recruited prospectively in the German Craniopharyngioma Registry.

Conclusions

We report the first case of spinal recurrence of a childhood adamantinomatous CP. Spinal metastasis is a very rare complication and should be considered in follow-up of childhood CP patients with peripheral neurological complaints and symptoms.

Literature

1. Lermen O, Frank S, Hassler W (2010) Postoperative spinal recurrence of craniopharyngioma. Acta Neurochir 152 (2):309-311; discussion 311.
2. Lee DK, Jung HW, Kim DG, Paek SH, Gwak HS, Choe G (2001) Postoperative spinal seeding of craniopharyngioma. Case report. J Neurosurg 94 (4):617-620.

ECE 2016 249--EP
Clinical case reports - Pituitary/Adrenal
Hermann L.
Poster presented at: ECE2016 28 – 31 May 2016 MUNICH, GERMANY 18th EUROPEAN CONGRESS OF ENDOCRINOLOGY
PosterSessionOnline.com