

## 鞍区软骨样脊索瘤

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**【摘要】** 目的 探讨鞍区软骨样脊索瘤的临床病理学特征,复习相关文献。方法与结果 男性患者,66岁。临床表现为反复性低钠血症,MRI显示鞍区类圆形、边界清楚占位性病变。经右侧鼻腔入路行内镜下鞍区肿瘤切除术,术中可见肿瘤呈实性,质地坚韧,边界清楚;组织形态学表现为典型的脊索瘤组成,肿瘤组织内呈灶性软骨样分化;肿瘤细胞表达细胞角蛋白、上皮膜抗原和S-100蛋白,Ki-67抗原标记指数约为1%,病理诊断为鞍区软骨样脊索瘤。术后随访11个月,一般状况良好,肿瘤无复发。**结论** 软骨样脊索瘤多生长于中轴骨骼,具有特殊的组织学构象和免疫表型,患者预后较典型脊索瘤好,诊断时应注意与典型脊索瘤和软骨肉瘤相鉴别。

**【关键词】** 脊索瘤; 软骨细胞; 蝶鞍; 免疫组织化学

### Sellar chondroid chordoma

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**【Abstract】 Objective** To investigate the clinical and pathological characteristics of sellar chondroid chordoma and discuss differential diagnosis of sellar chondroid chordoma with literature review. **Methods** The clinical manifestations of a patient with chondroid chordoma occurring in sellar area were stated. The morphological characteristics and immune phenotype were analyzed by using HE and immunohistochemical staining, and related literatures were reviewed. **Results** A 66-year-old male mainly presented with repeated hyponatremia. MRI revealed a well-circumscribed, round and space-occupying mass in sellar area. The tumor was removed under endoscope via the right nasal cavity. During the resection, the tumor could be seen locating in sellar region with solid, tough quality and clear boundaries. Histologically, part of the tumor showed the chondroid differentiation in classical chordoma. The immunohistochemistry of this tumor was positive for cytokeratin (CK), epithelial membrane antigen (EMA) and S-100 protein (S-100), and Ki-67 labeling index was about 1%. The pathological diagnosis was sellar chondroid chordoma. During the follow-up period of 11 months, the patient was in good condition and no tumor recurrence was found. **Conclusions** Despite low incidence, chondroid chordoma usually develops in the midline regions with distinctive histological features and immunohistochemical phenotypes. In general, the prognosis is better than general type of chordoma, and the diagnosis should be differentiated from general types of chordoma and chondrosarcoma.

**【Key words】** Chordoma; Chondrocytes; Sella turcica; Immunohistochemistry

脊索瘤临床少见,为起源于胚胎残留脊索组织的恶性肿瘤,呈缓慢侵袭性生长,主要沿中轴骨骼分布,以骶尾区和颅内枕骨斜坡常见。软骨样脊索瘤为其亚型,发病率极低,年发病率约1/100万<sup>[1]</sup>。我们报告1例发生于66岁男性患者鞍区的软骨样

脊索瘤诊断与治疗经过,并通过文献复习对其组织形态学特点、免疫表型、诊断与鉴别诊断,以及治疗和预后等特点进行初步探讨。

### 病历摘要

患者 男性,66岁。因外院MRI检查发现鞍区占位性病变1个月,于2012年11月22日入院。患者1年前开始出现纳差,伴疲乏无力,至当地医院就诊,经实验室检查诊断为“低钠血症”,予对症治疗

doi: 10.3969/j.issn.1672-6731.2014.02.007

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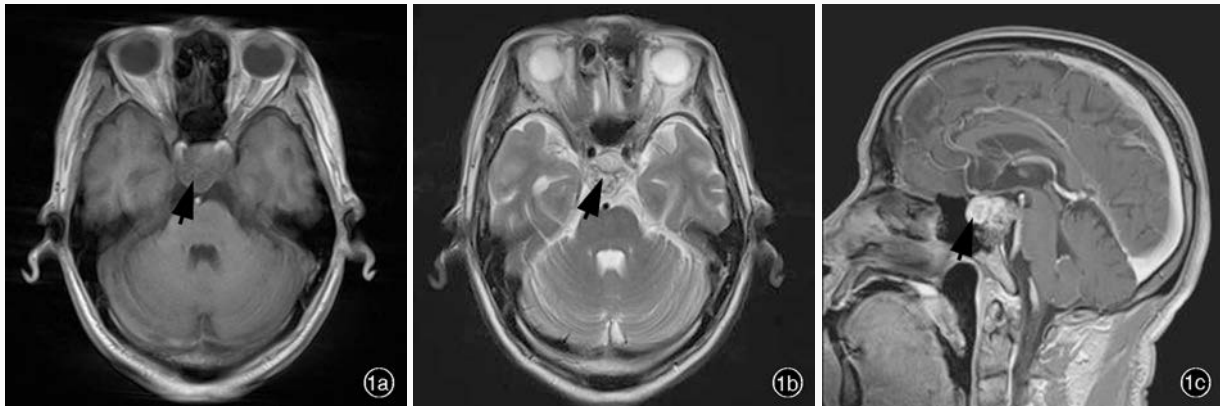


图 1 头部 MRI 检查所见 1a 横断面 T<sub>1</sub>WI 显示鞍区占位性病变,呈等信号,边界清楚(箭头所示) 1b 横断面 T<sub>2</sub>WI 显示鞍区占位性病变,呈混杂信号(箭头所示) 1c 矢状位增强 T<sub>1</sub>WI 扫描显示肿瘤灶部分强化(箭头所示)

**Figure 1** MRI findings of the lesion. Axial T<sub>1</sub>WI demonstrated a well-circumscribed and space-occupying lesion located at sellar area with isointensity (arrow indicates, Panel 1a). Axial T<sub>2</sub>WI showed mixed signal of sellar lesion (arrow indicates, Panel 1b). Sagittal enhanced T<sub>1</sub>WI showed the tumor lesion was partially reinforced (arrow indicates, Panel 1c).

后病情改善(具体方案不详)。出院后反复出现低钠血症,外院头部 MRI 检查显示鞍区占位性病变。为求进一步明确诊断与治疗收入我院。患者平素身体状况良好,9 年前行右半结肠癌根治术,否认肝炎、结核等传染病病史,否认食物、药物过敏史,预防接种史不详。无疫区、疫水、特殊化学品或放射线接触史。父母已故,兄弟姐妹健在,否认家族遗传性疾病病史。

**体格检查** 患者体温 36.3 ℃,脉搏 70 次/min,呼吸 20 次/min,血压 120/80 mm Hg (1 mm Hg = 0.133 kPa)。神志清楚,语言流利,自主体位。全身浅表淋巴结未触及、无肿大。脊柱无畸形,四肢活动自如,双下肢无浮肿、无静脉曲张,未见杵状指。脑膜刺激征阴性,四肢肌力、肌张力正常;腱反射阴性,病理征未引出。

**诊断与治疗经过** 实验室检查血常规、肝肾功能试验及各项凝血指标均于正常值范围。胸部 X 线检查无异常。头部 MRI 检查可见鞍区类圆形、界限清楚的占位性病变(图 1),临床拟诊为脑膜瘤。于 2012 年 11 月 29 日经右侧鼻腔入路行内镜下鞍区肿瘤切除术,术中可见肿瘤呈白色、实性,质地坚韧,边界清晰,局部有包膜。完整切除肿瘤,并行组织病理学检查。(1)大体标本观察:手术切除标本为带骨破碎组织块,体积约 3.00 cm × 2.50 cm × 1.00 cm 大小,呈灰白、灰红色,质地中等。(2)组织形态学观察:脑组织标本经体积分数为 10% 的中性甲醛溶液固定,常规脱水、石蜡包埋,4 μm 连续切片,行 HE 染

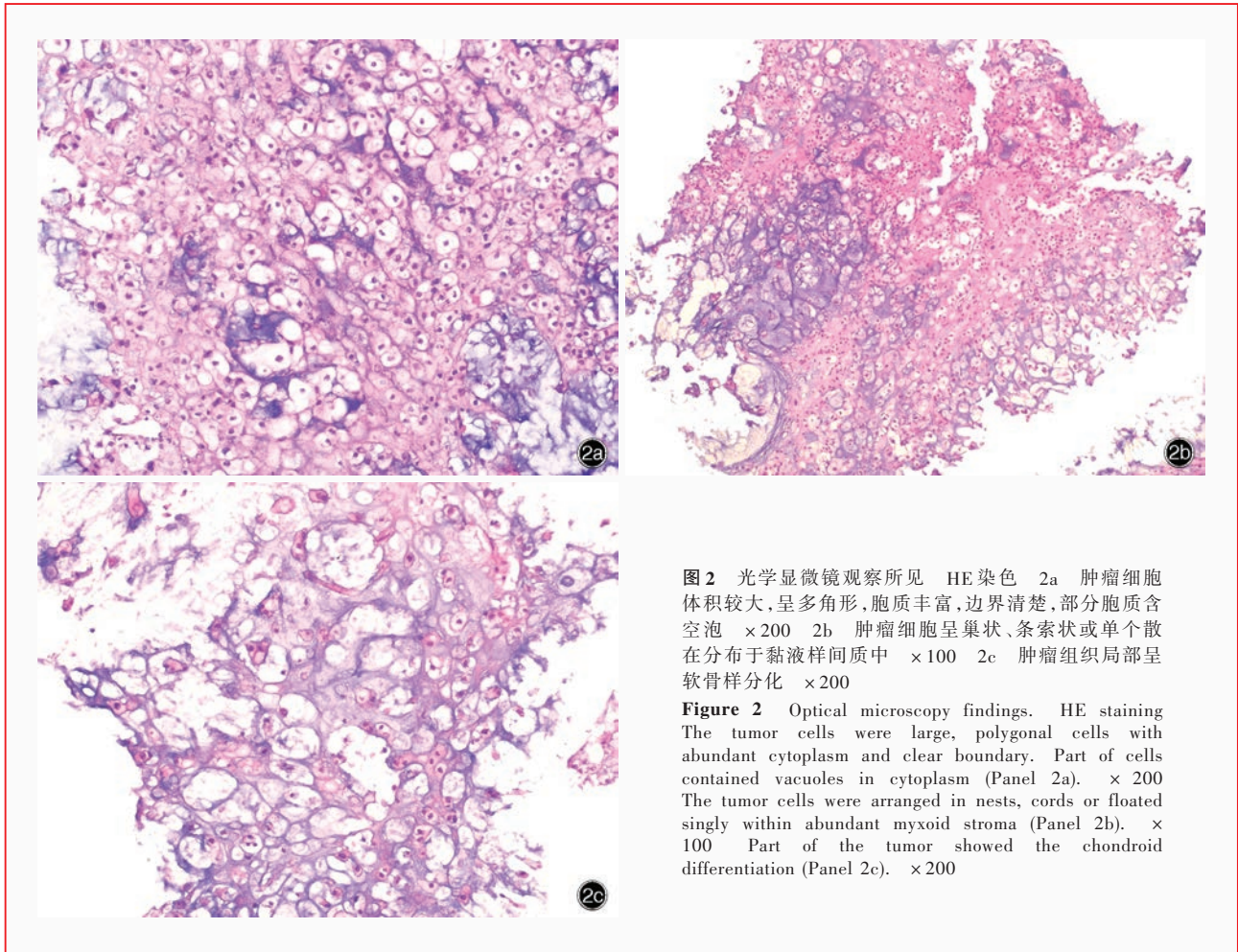
色。光学显微镜下观察,肿瘤细胞体积较大,呈多角形,胞质丰富,边界清楚,部分胞质含空泡;肿瘤细胞呈巢状或条索状分布,间质富含黏液,局部呈软骨样分化(图 2)。(3)免疫组织化学染色:脑组织标本脱蜡后,采用 Dako EnVision™ 二步法行免疫组织化学染色,二氨基联苯胺(DAB)显色,苏木素核复染后封片。所用 I 抗为细胞角蛋白(CK)、上皮膜抗原(EMA)、S-100 蛋白(S-100)和 Ki-67 抗原,均购自丹麦 Dako 公司。结果显示,肿瘤细胞表达 CK、EMA 和 S-100, Ki-67 抗原标记指数约为 1%(图 3)。最终病理诊断:软骨样脊索瘤(鞍区)。患者术后一般状况良好,经对症治疗,痊愈出院。随访 11 个月,全身状况良好,肿瘤未复发。

## 讨 论

1973 年,Heffelfinger 等<sup>[2]</sup>首次将含类似透明软骨区域的脊索瘤定义为软骨样脊索瘤,至今全世界共报道 100 余例。脊索瘤几乎均发生于中轴骨骼,主要发生于骶尾区(50%)、颅底(35%)及其他部位(15%)<sup>[3]</sup>,其中 28%~34% 的颅底脊索瘤为软骨样亚型<sup>[2]</sup>。软骨样脊索瘤也可以发生于椎体、棘突和鼻中隔等部位<sup>[4-7]</sup>,典型脊索瘤发病年龄为男性 36 岁、女性 38 岁,且以女性好发<sup>[8-10]</sup>;临床主要表现为头痛、复视、第 III 或第 VI 对脑神经麻痹<sup>[8]</sup>;MRI 显示肿瘤为分叶状,呈等信号,增强扫描病灶呈不均匀强化。本文患者为男性,且发病年龄较大。

自 1973 年 Heffelfinger 等<sup>[2]</sup>首次定义软骨样脊





**图 2** 光学显微镜观察所见 HE 染色 2a 肿瘤细胞体积较大,呈多角形,胞质丰富,边界清楚,部分胞质含空泡 ×200 2b 肿瘤细胞呈巢状、条索状或单个散在分布于黏液样间质中 ×100 2c 肿瘤组织局部呈软骨样分化 ×200

**Figure 2** Optical microscopy findings. HE staining The tumor cells were large, polygonal cells with abundant cytoplasm and clear boundary. Part of cells contained vacuoles in cytoplasm (Panel 2a). × 200 The tumor cells were arranged in nests, cords or floated singly within abundant myxoid stroma (Panel 2b). × 100 Part of the tumor showed the chondroid differentiation (Panel 2c). × 200

索瘤后,关于其组织起源颇有争议。Walker 等<sup>[11]</sup>发现,软骨样脊索瘤免疫表型与软骨肉瘤相同,而不同于脊索瘤。Rosenberg 等<sup>[12]</sup>的观察结果则与之相反,并指出 Walker 等所报告的软骨样脊索瘤与 Hefelfinger 等提出的软骨样脊索瘤诊断标准不符。郑晓刚等<sup>[13]</sup>通过电子显微镜观察发现,软骨样区域的肿瘤细胞周围无典型的软骨基质,而是由无数蛋白糖细颗粒和丰富而纤细的原纤维网所组成的基质,软骨样脊索瘤细胞与非软骨样区域属于同一起源,为独特的类型。本文患者表现为典型的脊索瘤肿瘤组织内出现灶性软骨样分化,且免疫组织化学染色细胞角蛋白、上皮膜抗原和 S-100 蛋白均表达阳性,符合诊断标准。

软骨样脊索瘤的诊断标准为:典型的脊索瘤区域与透明软骨灶相邻或并列。由于软骨样脊索瘤较为罕见,且大多数患者无临床症状或体征,影像学表现无明显特征,组织形态学观察易与软骨肉瘤相混淆,明确诊断须依赖组织形态学观察和免疫组

织化学检测相结合。如果肿瘤组织呈软骨样分化,应仔细寻找胞质内是否含有空泡,是否有将胞核挤压至一侧的肿瘤细胞等典型的脊索瘤组织学形态。如有上述组织形态学表现,应高度怀疑软骨样脊索瘤,最终可通过免疫组织化学染色细胞角蛋白和上皮膜抗原表达阳性,以资鉴别。

由于脊索瘤样脑膜瘤与脊索瘤均有液滴状细胞和黏液样基质,且发生部位亦可相同,故二者易混淆。因此,在临床诊断过程中应注意鉴别诊断:(1)脊索瘤样脑膜瘤除脊索瘤样区域外,大多有典型的脑膜瘤区域或不伴淋巴细胞和浆细胞浸润等特点,且在脑脊膜存在部位均可发生,常与脑膜粘连。而脊索瘤为胚胎脊索条残留发生,多发生于斜坡和骶尾部。(2)免疫组织化学染色,脊索瘤样脑膜瘤上皮膜抗原、波形蛋白(Vim)和 S-100 蛋白等表达阳性;细胞角蛋白多呈阴性或少数阳性;而脊索瘤细胞角蛋白、S-100 蛋白表达阳性,少数患者波形蛋白亦可呈阳性<sup>[14]</sup>。脊索瘤的局部复发率约为



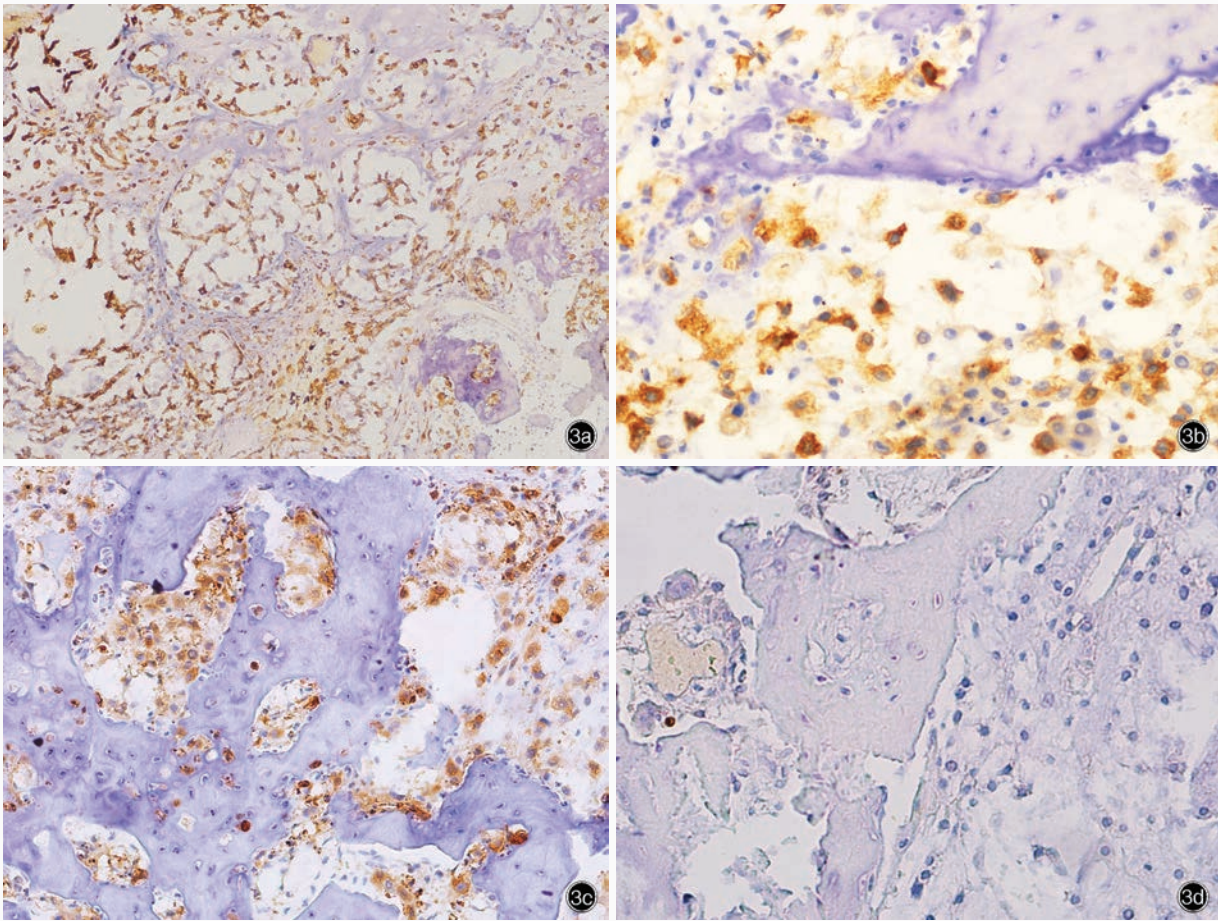


图3 光学显微镜观察所见 免疫组织化学染色(EnVision二步法) 3a 肿瘤细胞弥漫表达CK ×100 3b 肿瘤细胞弥漫表达EMA ×400 3c 肿瘤细胞弥漫表达S-100 ×200 3d 肿瘤细胞Ki-67抗原标记指数约为1% ×200

**Figure 3** Optical microscopy findings. Immunohistochemical staining (EnVision) Tumor cells were diffusely positive for CK (Panel 3a). ×100 Tumor cells were diffusely positive for EMA (Panel 3b). ×400 Tumor cells were diffusely positive for S-100 (Panel 3c). ×200 Ki-67 labeling index was about 1% (Panel 3d). ×200

77%,而软骨样脊索瘤的局部复发率为38%,且其预后明显优于前者<sup>[15]</sup>。药物化疗对脊索瘤无明显作用,目前仍采用手术治疗和放射治疗这两种手段。发生于颅底的脊索瘤,肿瘤邻近脑干,术中显露困难,也有不少学者尝试采用内镜下切除肿瘤灶的方法,取得了较好的临床治疗效果<sup>[16-17]</sup>。

本文报告1例临床罕见的发生于鞍区的软骨样脊索瘤,发生于鞍区的软骨样脊索瘤由于无特殊的影像学特征,极易误诊为垂体腺瘤<sup>[18]</sup>。因此,对于鞍区占位性病变应考虑到临床罕见的软骨样脊索瘤的可能性。由于预后不同,软骨样脊索瘤应注意与典型的脊索瘤和软骨肉瘤进行鉴别诊断。

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(收稿日期:2013-12-18)

## 29th CINP World Congress of Neuropsychopharmacology

Time: June 22–26, 2014

Venue: Vancouver Convention Center, Vancouver, Canada

Email: cinp@northernnetworking.co.uk

Website: www.cinp2014.com

The 29th CINP World Congress will be held in June 22–26, 2014 in Vancouver, Canada. The main purpose of this CINP World Congress is to provide a truly outstanding scientific and educational program featuring leading figures from around the world who are literally changing the face of neuropsychopharmacology.

The Plenary Speakers will include nobel laureates, and other innovators who are transforming our ability to visualize and manipulate the brain with a specificity that was undreamed just a few years ago. Medical practice will be informed by leading clinical researchers who are spearheading new treatment regimens for brain disorders where sensory - motor disturbance and cognitive (emotional) difficulties often reflect two sides of the same coin. These memorable lectures will be complimented by 36 Symposia spanning the broad spectrum of neuropsychopharmacology from both preclinical and clinical perspectives.

Scientific and Educational Workshops will provide interactive discussions on the latest techniques along with opportunities to learn firsthand about new and successful clinical approaches to mental ill-health. Lively Pro and Con Debates will ensure that different perspectives are given the respect they deserve.

## European Stroke Conference

Time: May 6–9, 2014

Venue: Nice, France

Email: hennerici@eurostroke.eu

Website: www.eurostroke.eu; www.eurostroke.org

Deadline for abstract submission: January 12, 2014

The European Stroke Conference (ESC) was founded in 1990 by J. Bogousslavsky (Switzerland) and M.G. Hennerici (Germany). The first meeting was held in Düsseldorf and was attended by about 500 people and proved to be a great success. At that time only the North American conference existed for clinical researchers and basic scientists to present data from stroke research. The prospect to establish another European stroke meeting was highly challenging. After biannual meetings, 1992 in Lausanne and 1994 in Stockholm and increasing attendance, however, the European Stroke Conference became an annual, international, well-received and continuously growing stroke conference. In the meantime this meeting became a highly successful conference with more than 4200 attendees 2013 in London, UK.