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·临床病例讨论·

睫状体无色素上皮腺瘤 1 例

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[摘　要]　1例35岁男性患者因为左眼视物模糊就诊，最初考虑睫状体黑色素瘤，术后病理提示为睫状体无色素上皮腺瘤。该患者否认家族史、外伤史及手术史。因“左眼视物模糊6年，左眼视力明显下降伴眼红眼胀2周”，初诊于湖南省人民医院眼科门诊，眼眶MRI提示左眼晶状体下方占位病变，性质待定，黑色素瘤诊断为“左眼继发性青光眼，左眼并发性白内障，左眼睫状体肿物，性质待查，双眼屈光不正”，给予降眼压药物处理后眼压下降，但左眼视物模糊及眼红症状无明显改善。随后就诊于中南大学湘雅二医院眼科。入院后专科检查及辅助检查均提示左眼睫状体占位，于全身静脉麻醉下行左眼经巩膜肿瘤切除+晶状体超声乳化吸除+人工晶体植入+玻璃体切割术。术后病理检查可见肿瘤组织由大量增生的柱状或立方状无色素上皮细胞构成，瘤细胞呈条索、片状或管状排列，免疫组织化学显示CK18(+)、S-100(+)、Vim(+)、GFA P(+)、CEA(−)、P63(−)、CK5/6(−)。最终诊断为睫状体无色素上皮腺瘤，提示临床医生面对睫状体肿瘤时应注意避免漏诊与误诊。

[关键词]　睫状体肿瘤；无色素上皮细胞；腺瘤；病理诊断

A case of adenoma of nonpigmented ciliary epithelium

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Abstract　A 35-year-old male patient was initially diagnosed with ciliary body melanoma due to blurred vision in the left eye, but postoperative pathology suggested adenoma of nonpigmented ciliary epithelium. He denied any family history, trauma or surgery history. He initially visited the ophthalmic outpatient department of Hunan Provincial People's Hospital due to “blurred vision in the left eye for 6 years, significant decrease in visual acuity of the left eye with red eye swelling for 2 weeks. The orbital MRI showed an occupying lesion under the lens of the left eye, but its property was to be determined. The melanoma was diagnosed as “secondary glaucoma in the left

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eye, complicated cataract in the left eye, ciliary body mass with undetermined property in the left eye, binocular refractive error". The intraocular pressure decreased after the treatment with drugs, but there was no significant improvement in the symptoms of visual blurring and ocular redness in the left eye. Then the patient was admitted to the Second Xiangya Hospital of Central South University. Both the speciality examination and the auxiliary examination indicated that the ciliary body of the left eye was occupied. Under general intravenous anesthesia, the left eye was treated with transscleral tumor resection, lens phacoemulsification, intraocular lens implantation and vitrectomy. Postoperative pathological examination showed that the tumor tissue was composed of a large number of proliferating columnar or cubic non-pigmented epithelial cells, and the tumor cells were arranged in cords, sheets or tubes. Immunohistochemistry showed CK18(+), s-100(+), Vim(+), GFA P(+), CEA(–), P63(–), ck5/6(–). The final diagnosis was adenoma of nonpigmented ciliary epithelium. It suggested that clinicians should pay attention to avoid missed diagnosis and misdiagnosis of ciliary body tumor.

Keywords ciliary body tumor; non-pigmented epithelial; adenoma; pathological diagnosis

睫状体无色素上皮腺瘤(adenoma of nonpigmented ciliary epithelium)是一种睫状体无色素上皮的良性肿瘤病变，临床上非常罕见，常被误诊为较常见的虹膜睫状体肿瘤甚至恶性黑色素瘤。自从1983年Shields等[1]第一次报告以来，国内外文献报道不超过50例，为了进一步提高对睫状体非色素上皮腺瘤的认识，现报道1例病例如下。

1 临床资料

患者男，35岁，建筑设计师。因左眼视物模糊6年，左眼视力明显下降伴眼红、眼胀2周，于2014年3月初来湖南省人民医院眼科门诊就诊，门诊检查发现左眼最佳矫正视力0.05，左眼眼压35 mmHg (1 mmHg=0.133 kPa)。眼眶MRI：左眼晶状体下方占位病变，性质待定，黑色素瘤？左眼球内晶状体下方可见一不规则稍短T_1短T_2信号灶，信号不均匀，边缘模糊，增强后明显强化(图1)。诊断为“左眼继发性青光眼，左眼并发性白内障，左眼睫状体肿物 性质待查，双眼屈光不正”，给予降眼压药物处理后眼压下降至22 mmHg，但左眼视物模糊及眼红症状无明显改善。2周后入住中南大学湘雅二医院眼科。入院后检查：右眼裸眼视力0.3，最佳矫正视力0.8，左眼裸眼视力0.02，最佳矫正视力0.05，右眼眼压20 mmHg，左眼眼压28 mmHg。左眼结膜无充血，角膜轻度水肿，Tyndall's sign(–)，左眼虹膜可见新生血管分布，瞳孔圆形，直径3 mm，对光反射存在，晶状体皮质可见点状混浊，前囊膜可见少许色素颗粒，后囊膜混浊，5:30至6:30方位睫状体部可见一肿块，表面有大量新生血管，向前与晶状体后囊粘连(图2A)。眼底视网膜隐约可见，未见明显异常(图2B)。右眼未见明显异常。眼部B超：左眼玻璃体内较多低回声光点，晶体后可探及一类圆形占位，边界清楚，形态规则，内回声偏低，约7 mm × 6 mm大小(图2C)。右眼内未见异常。超声生物显微镜检查(Ultrasonic Biological Microscope，UBM)：左眼前房深浅可，下方偏鼻侧虹膜后睫状体部可探及一类圆形占位，边界清楚，形态规则，内回声低，后界未能完全探及，约5.1 mm × 3.9 mm，考虑左眼睫状体占位，性质待定(图2D)。视网膜荧光血管造影(fundus fluorescein angiography，FFA)：左眼屈光介质混，下方晶体后一局限性隆起，造影早期显示斑点样及条纹状高荧光，随造影过程部分渗漏显示斑驳样强荧光，眼底视网膜血管弥漫性渗漏，右眼荧光图未见明显异常(图3)。于全身麻醉下行左眼经巩膜肿瘤切除+晶状体超声乳化吸除+人工晶体植入+玻璃体切割术，术中首先超声乳化吸除晶状体，随后在下方做巩膜板层切口，并在巩膜瓣两侧各做一组预置缝线，预先电凝肿瘤边缘巩膜防止出血，沿电凝处切开深层巩膜，剪开脉络膜，暴露瘤体，可见瘤体与晶状体悬韧带及睫状上皮部分粘连，经巩膜完整切除肿瘤组织，巩膜瓣复位缝合后完成玻璃体切除术，术毕玻璃体腔内填充空气，囊袋内植入人工晶体。完整切除肿物，可见肿物呈灰白色，约7 mm × 5 mm × 5 mm大小，包膜完整，表面较光滑(图4)，肿物送病理检查。

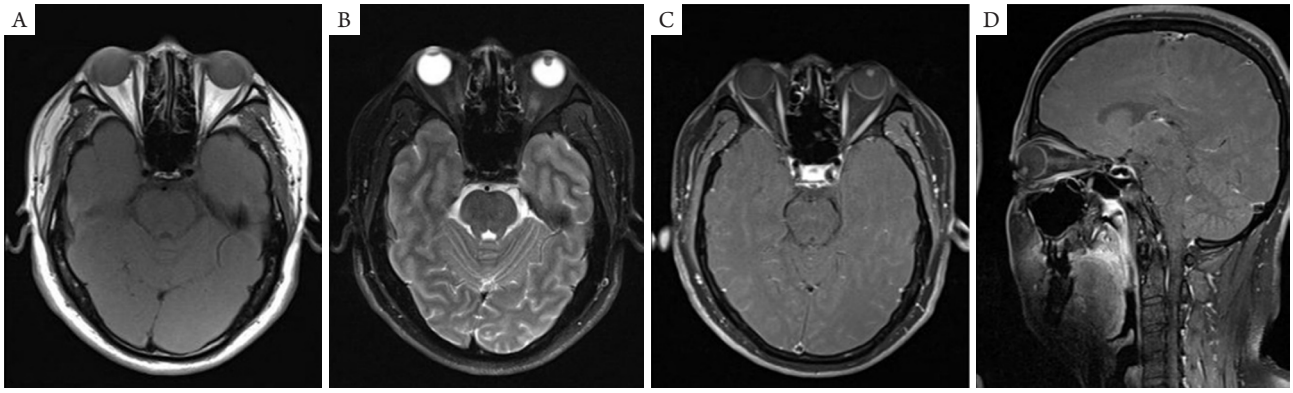

图1 MRI显示左眼内肿物位于晶状体后。平扫T_1像(A)和T_2像(B)均为短信号，增强后T_1像(C)和T_2像(D)信号增强

Figure 1 MRI shows a mass behind the lens in the left eye. The mass reveals both short signal in T_1 (A) and T_2 (B), and the signals were strengthened after MRI being enhanced in T_1 (C) and T_2 (D)

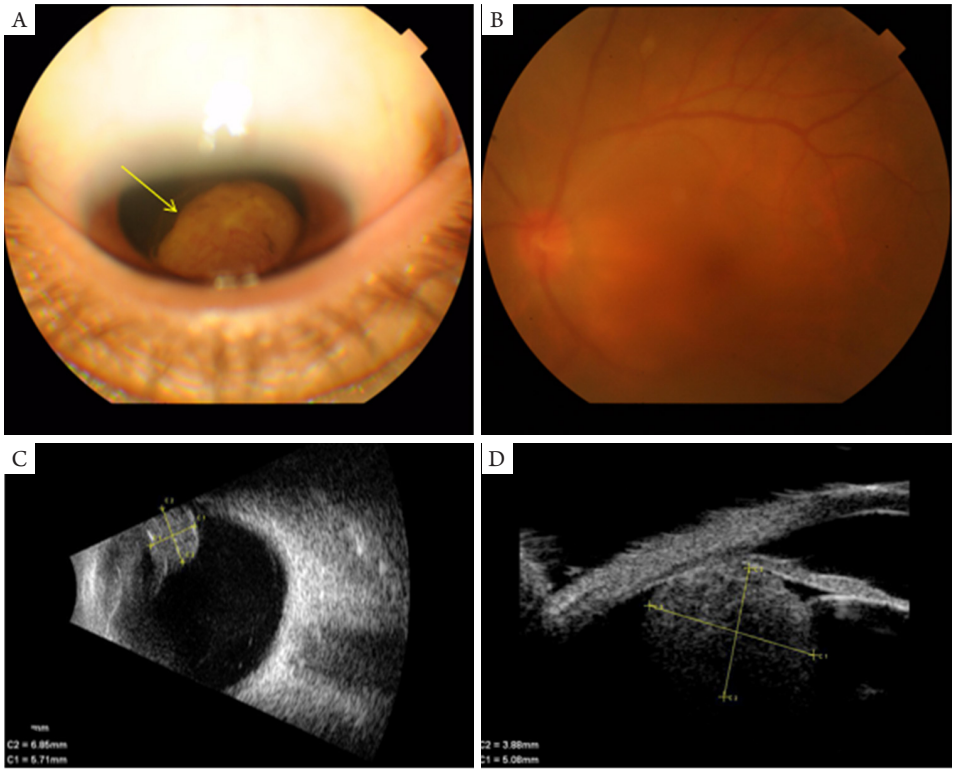

图2 左眼睫状体肿物

Figure 2 A mass in the left ciliary body

(A) 眼前节照相，黄色箭头显示5:30~6:30方位睫状体部可见一肿块，表面有大量新生血管，向前与晶状体后囊粘连。(B) 眼底照相，显示视网膜模糊，隐约可见，未见明显出血及渗出。(C) 眼部B超，显示晶状体后可探及一类圆形占位，边界清楚，形态规则，内回声偏低。(D) UBM显示下方偏鼻侧虹膜后睫状体部可探及一类圆形占位，边界清楚，形态规则，内回声低，后界未能完全探及。

(A) Slit-lamp photography of the anterior segment. The yellow arrow shows a mass in the ciliary body at the position from 5:30 to 6:30. There are many new blood vessels on the surface of the mass, which are anteriorly adhered to the posterior capsule of lens. (B) The fundus photography shows that the retina is blurred and dimly visible, with no obvious bleeding or exudation. (C) B ultrasound of the eye shows a round space-occupying lesion behind the lens, with clear boundary, regular shape and low internal echo. (D) UBM shows a round space-occupying lesion in the ciliary body posterior of the iris, on the lower side of the nasal side. The boundary is clearwith the regular shape and low internal echo, but the posterior boundary cannot be fully explored.

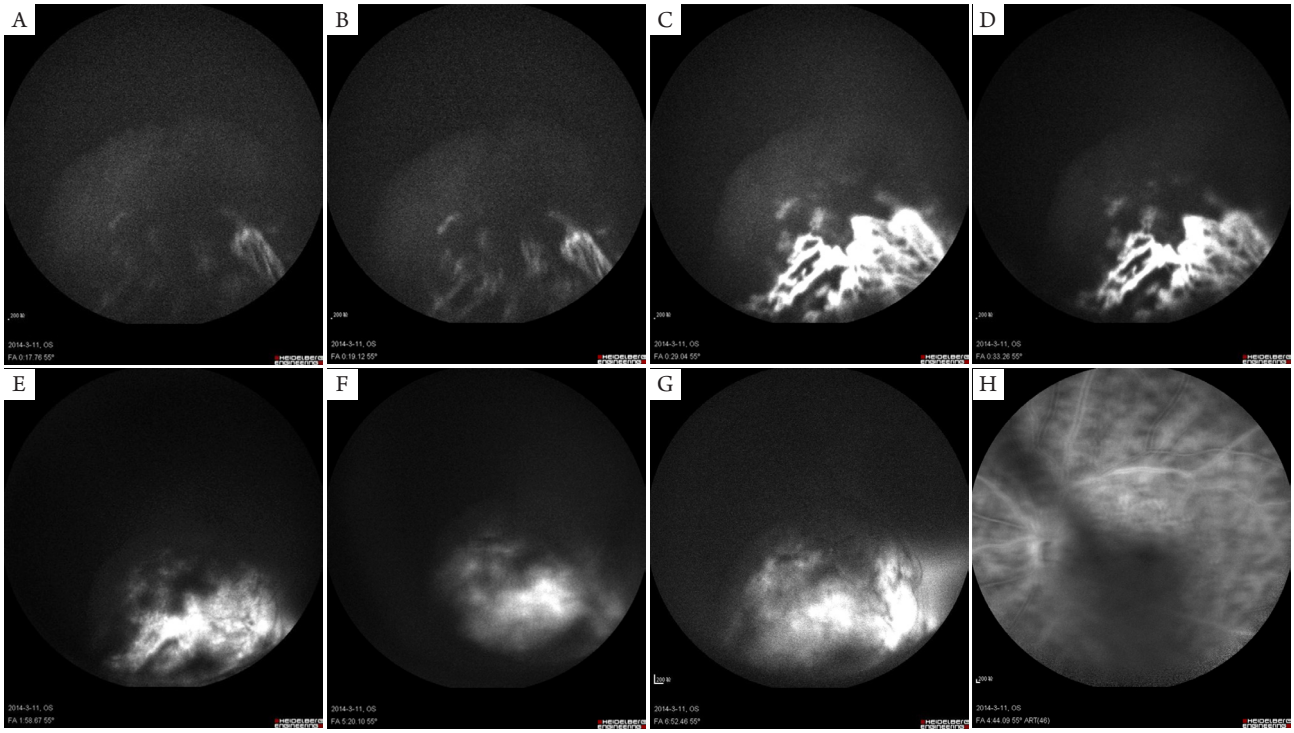

图3 FFA早期显示斑点样及条纹状强荧光，造影过程中部分渗漏显示斑驳样强荧光，眼底视网膜血管弥漫性渗漏

Figure 3 FFA shows high fluorescence of spots and stripes in the early stage, while some leakage during the angiography shows mottled high fluorescence, and there is diffuse leakage of retinal blood vessels in the fundus

(A，B) 造影早期可见肿块呈斑点及条纹状强荧光；(C~G) 随造影时间延长，肿块表面可见荧光渗漏，呈斑驳状强荧光；(H) 视网膜血管呈弥漫性渗漏。

(A,B) In the early stage, the mass is spotted and striated with high fluorescence; (C–G) With the extension of angiography time, the tumor surface shows fluorescence leakage, which shows mottle strong fluorescence; (H) The retinal blood vessels shows diffuse leakage.

图4 完整切除肿物。呈灰白色，约7 mm × 5 mm × 5 mm大小，包膜完整，表面较光滑

Figure 4 The tumor is completely excised. The appearance is gray and white, about 7 mm × 5 mm × 5 mm size, with complete envelope and smooth surface

病理结果：肿瘤组织由大量增生的柱状或立方状无色素上皮细胞构成，瘤细胞呈条索、片状或管状排列，细胞间有疏松排列的纤维和黏液状物质。瘤细胞胞质丰富，嗜酸性，无色素颗粒。核较小，呈圆形或卵圆形，核仁不明显。细胞异型性不明显，无病理性核分裂(图5)。免疫组织化学：CK18(+)、S-100(+)、Vim(+)、GFAP(+)、CEA(–)、P63(–)、CK5/6(–)(图6)。病理诊断：睫状体无色素上皮腺瘤。

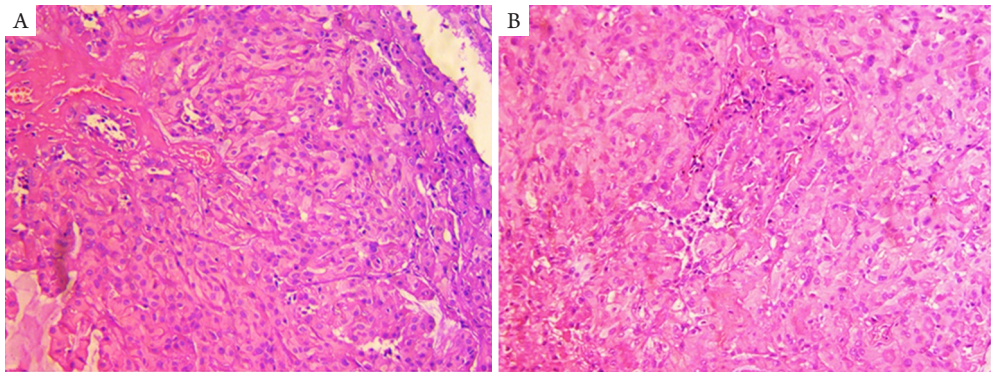

图5 病理检查（HE，×200）

Figure 5 Pathological examination (HE, ×200)

(A) 可见大量增生的柱状或立方状无色素上皮细胞，瘤细胞呈条索、片状或管状排列；(B) 细胞间有疏松排列的纤维和粘液状物质。未见病理性核分裂。

(A) A large number of proliferative columnar or cubic non-pigment epithelial cells can be seen. The tumor cells are arranged in cords, sheets or tubules; (B) There is a loose arrangement of fibers and slimy material between the cells. No pathological mitosis is observed.

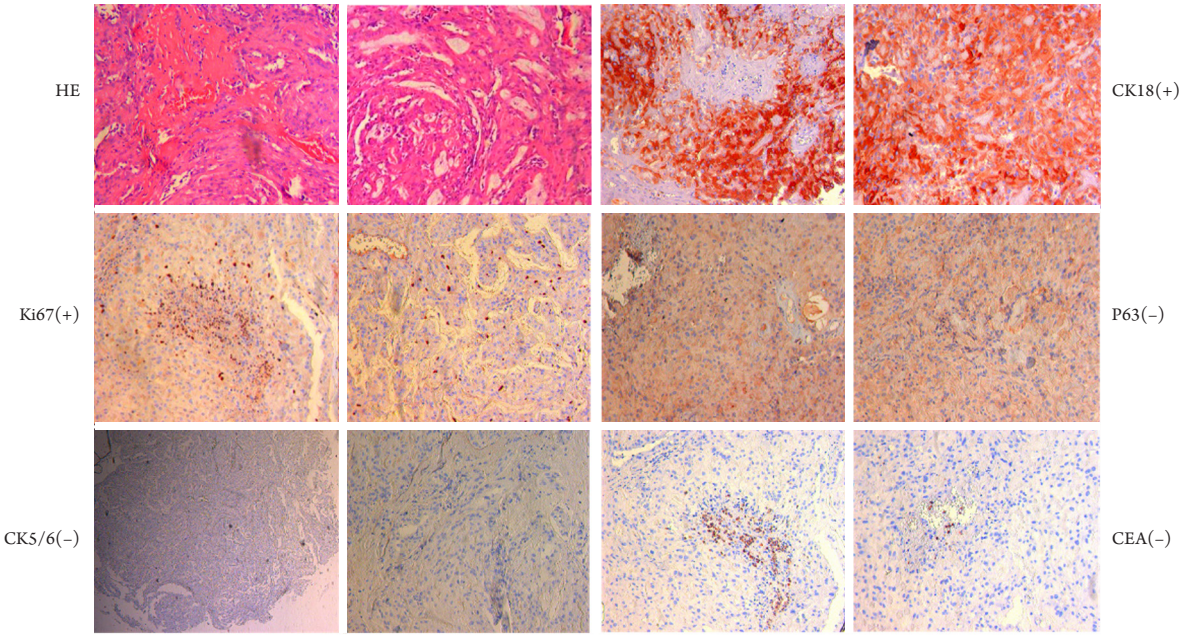

图6 免疫组织化学(×100)：CK18(+)，S-100(+)，Vim(+)，GFA P(+)，CEA(–)，P63(–)，CK5/6(–)

Figure 6 Immunohistochemical study(×100): CK18(+), S-100(+), Vim(+), GFA P(+), CEA(–), P63(–), CK5/6(–)

2 讨论

睫状体上皮细胞层由外层的色素上皮细胞及内层的无色素上皮细胞组成，其中睫状体无色素上皮与视网膜神经上皮层相延续[1-2]。睫状体无色素上皮来源的肿瘤可分为先天性病变和后天获得性病变，常见的先天性病变包括神经胶质瘤和髓上皮瘤，其中髓上皮瘤起源于髓上皮组织，因此而得名。而后天性病变则起源于发育成熟的睫状体无色素上皮层，包括良性无色素上皮腺瘤及腺瘤样增生和恶性无色素上皮腺癌[3]。

睫状体无色素上皮腺瘤多发生于眼内炎或者外伤后的患眼。肿瘤多为孤立性缓慢生长，早期瘤体较小，可无症状，不易被发现。但是当肿瘤生长对邻近组织造成压迫时，可表现为虹膜局部膨隆，对应部位前房变浅，局部晶状体混浊或位置变化，从而导致并发性白内障、继发性青光眼、玻璃体出血、葡萄膜炎及视网膜脱离等并发

症[4-6]，此时多数患者因为视力下降就诊。部分睫状体无色素上皮腺瘤表面呈灰黑色，难于与睫状体恶性肿瘤鉴别。钱江等[7]对17例睫状体肿瘤进行分析时发现2例为无色素上皮腺瘤，这2例腺瘤均呈现为特征性的灰白色胶冻状团块，并且因为肿瘤压迫出现并发性白内障、虹膜红变及继发性青光眼等并发症。本病例呈现相似的眼部体征和临床表现。

UBM可以用于早期诊断睫状体肿瘤，帮助确定肿瘤大小、部位及与周围组织的关系[8]。魏文斌等[9]研究发现睫状体无色素上皮腺瘤的UBM检查可以表现为内部回声不均匀，声衰减弱，部分可见高回声团，但是肿瘤高度超过5 mm时则无法测量其大小。尽管睫状体无色素上皮腺瘤不含色素，但是MRI检查可表现为类似黑色素瘤的特点，即呈现短T_1短T_2信号灶，增强后强化的特征，对明确诊断价值有限。睫状体黑色素瘤是葡萄膜黑色素瘤中的一种，约占9%，以中老年人多见，大多数睫状体黑色素瘤位于睫状体基质(睫状肌)内，往往呈棕黑色或棕褐色外观，质地较为致密，呈结节状或球形，少数睫状体黑色素瘤呈弥漫性生长，表现为睫状体区弥漫性不规则增厚，称为环状黑色素瘤，且肿瘤更易侵犯睫状体深部组织，部分患者会出现虹膜局部色泽加深，严重者会出现眼后节并发症，如玻璃体明显混浊、继发性视网膜脱离等[10-11]。而睫状体无色素上皮腺瘤多见于中青年男性，部分患者既往有眼内炎或眼外伤病史，瘤体多数位于睫状突部位，表面多呈灰白色或淡棕色，较少累及眼后节，尽管瘤体压迫会造成眼前节的变化，但较少引起虹膜色泽改变[12-13]。此外睫状体黑色素瘤增强后信号强化不如睫状体无色素上皮腺瘤强化明显[13]，部分睫状体黑色素瘤病变处巩膜有典型的“哨兵样”血管[14]。根据这几个特征可以做出初步判断。病理检查是明确睫状体肿瘤性质的金标准。睫状体无色上皮腺瘤外观多数呈现为边界清楚，圆形或类圆形，表面灰白色或淡棕色的实性肿物。显微镜下病理特点表现为细胞质淡染的无色素上皮细胞排列成条索状结构，细胞间为淡染黏液样物质，这些物质由无色素上皮细胞分泌，富含黏多糖[15]。本病例患者初次门诊就诊时眼部MRI检查显示短T_1短T_2信号灶，增强后明显强化，这与恶性黑色素瘤的眼部MRI特征极为相似，增加了诊断难度，我们给予手术切除肿瘤并对肿瘤组织行病理检查后，根据组织学特点及免疫表型可以支持该肿瘤为睫状体非色素上皮来源的良性肿瘤的诊断。

睫状体无色素上皮腺瘤是一种良性生物学行为的肿瘤，对于较小的胶冻状睫状体肿块，在无并发症出现时可予以观察等保守治疗。如果在肿瘤生长过程中对眼内组织造成破坏，及时切除肿瘤后疾病预后较好。对于累及范围较小，肿瘤扁平、无视网膜脱离的肿瘤可以采取板层巩膜睫状体肿瘤切除术，不仅可以保留患眼，而且可以挽救视力[16-17]。对于累及范围广，或者患眼已经丧失视功能且持续性高眼压无法用药物控制者，则可考虑眼球摘除术。蒋永强等[18]对1例睫状体无色素上皮腺瘤患者行经板层巩膜肿瘤切除术，术后患者最佳矫正视力0.04，该患者随访1年，未见复发，因未进行长期随访，其长远预后未知。本例患者术后随访6年，一般情况良好，术眼最佳矫正视力0.5，眼压正常，截至随访未见肿瘤复发及其他并发症发生。

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