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非器质性视力下降误诊为儿童视神经炎1例

啜玉彩¹, 张丽芝², 靳韬², 宋宏鲁^{2,3}

(1. 联勤保障部队第九八〇医院特勤科, 石家庄 050082; 2. 联勤保障部队第九八〇医院眼科, 石家庄 050082;
3. 解放军总医院眼科医学部, 北京 100853)

[摘要] 非器质性视力下降也称为心因性或功能性视力下降, 除视力下降外, 还可伴有视野缺损, 多由于精神心理疾患导致的转换障碍引起, 部分患者为诈病以获取利益。本文报道1例6岁的女性患者, 主诉双眼反复视力下降1年余, 早期被误诊为儿童视神经炎, 给予糖皮质激素冲击治疗, 治疗后稍有好转。通过本例患者误诊的教训, 提醒我们在遇到儿童出现不明原因的视力下降时, 在没有明确器质性疾病证据时要想到非器质性视力下降的可能, 掌握识别非器质性视力下降的检查方法, 不能忽略相对性传入性瞳孔障碍(relative afferent pupillary defect, RAPD)等基础的神经眼科检查。

[关键词] 非器质性视力下降; 儿童视神经炎; 相对性传入性瞳孔障碍; 光学相干层析成像; 视觉诱发电位

Analysis of one case of non-organic visual loss misdiagnosed as optic neuritis in children

CHUAI Yucai¹, ZHANG Lizhi², JIN Tao², SONG Honglu^{2,3}

(1. Department of Special Service, the 980th Hospital of the Chinese PLA Joint Logistics Support Force, Shijiazhuang 050082;
2. Department of Ophthalmology, the 980th Hospital of the Chinese PLA Joint Logistics Support Force, Shijiazhuang 050082;
3. Senior Department of Ophthalmology, The Chinese People's Liberation Army General Hospital, Beijing 100853, China)

Abstract Non-organic vision loss is also known as psychogenic or functional vision loss. In addition to vision loss, it can also be accompanied by visual field defect. It is mostly caused by conversion obstacles caused by mental and psychological diseases. Some patients cheat to obtain benefits. This paper reports a 6-year-old female patient who complained of repeated visual acuity decline for more than one year. She was misdiagnosed as pediatric optic neuritis in the early stage and was treated with glucocorticoid shock therapy, which her condition improved slightly after treatment. The misdiagnosis of this patient teaches us that when children have unexplained visual acuity decline, we should think of the possibility of non-organic visual acuity decline when there is no clear evidence of organic diseases, master the examination methods to identify non-organic visual acuity decline, and cannot ignore

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通信作者 (Corresponding author): 啜玉彩, Email: 562324171@qq.com

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the basic neuro-ophthalmic examination such as relative afferent pupillary defect (RAPD).

Keywords non-organic vision loss; pediatric optic neuritis; relative afferent pupillary defect; optical coherence tomography; visual evoked potential

非器质性视力下降也称为心因性或功能性视力下降，除视力下降外，还可伴有视野缺损，多由于精神心理疾患导致的转换障碍引起，也有部分患者为诈病以获取利益^[1-2]。本文报道1例6岁的女性患者，早期被误诊为儿童视神经炎，回顾并总结了该患儿的临床特点及各种检查资料，旨在提高广大眼科临床医生对该病的认识。

1 临床资料

患者，女性，6岁。主因“双眼反复视力下降1年余”来诊。患者于2017年11月跌伤后发现双眼视力下降，至当地医院就诊。体格检查：双眼视力0.5，颅脑MRI未见明显异常，未予治疗。2019年3月感冒后出现双眼视物模糊、眼红、眼痒，至当地医院住院，查右眼视力0.3，左眼无光感，眼底检查未见视盘异常，诊断“儿童视神经炎”，给予静脉滴注甲强龙320 mg × 3 d、240 mg × 3 d、160 mg × 3 d、80 mg × 3 d，后改为口服甲泼尼龙序贯减量，治疗后稍有好转，左眼视力恢复至手动/30 cm。为求进一步诊断和治疗，患者于2019年7月10日来我科住院。既往体健，否认高血压、糖尿病、遗传性疾病等病史。体格检查：右眼视力1.0，左眼指数/20 cm(矫正不增)，双眼结膜无充血，角膜透明，瞳孔圆，直径约3 mm，对光反射正常，晶状体透明，眼底视乳头色淡红，边界清，C/D约0.3，视网膜血管走行大致正常，无出血、渗出，黄斑区未见异常。眼压：右眼15 mmHg(1 mmHg = 0.133 kPa)，左眼13 mmHg。为了明确患儿发病原因，完善下列相关检查：血常规、血生化、免疫学指标未见明显异常。血清水通道蛋白4(aquaporin 4, AQP4)抗体、髓鞘少突胶质细胞糖蛋白(myelin oligodendrocyte glycoprotein, MOG)抗体阴性。闪光视觉诱发电位(flash visual evoked potential, FVEP)(图1)：左眼P2波峰时值相对右眼稍延迟，右眼波幅相对左眼降低。闪光视网膜电流图(flash electroretinogram, FERG)：双眼FERG五项反应未见明显异常。视盘+黄斑光学相干层析成像(optical coherence

tomography, OCT)(图2)：未见明显异常。眼眶MRI平扫+增强：未见视神经长T2及T1增强信号(图3)。相对性传入性瞳孔障碍(relative afferent pupillary defect, RAPD)阴性。综合患儿病史、体征及现有辅助检查，不支持“儿童视神经炎”诊断，联系解放军总医院神经眼科专家会诊，疑似非器质性视力下降，安排“雾视法”检查：在右眼前放置+6.00DC镜片、左眼前放置-0.50DS镜片，查双眼视力为1.0，证实了患儿为左眼非器质性视力下降。追问家长病史，跟患儿交谈，发现患儿日常学习压力大，与同学交流少、性格偏内向，近1年来爸爸长时间到外地工作而忽视对女儿的关心和照顾，患儿想以诈病方式赶快让爸爸回到身边，住院期间爸爸特意赶回来陪伴女儿，经过医患双方充分沟通交流和心理疏导后患儿心结解开，并进行“面对面”视野检查，没有发现明显的视野缺损。最后诊断：左眼非器质性视力下降。建议家长积极开导、多谈心，多陪伴、营造轻松和谐的家庭氛围，引导患儿多去交朋友，保持心情愉悦，随访病情稳定，双眼视功能良好，未出现其他神经系统症状。

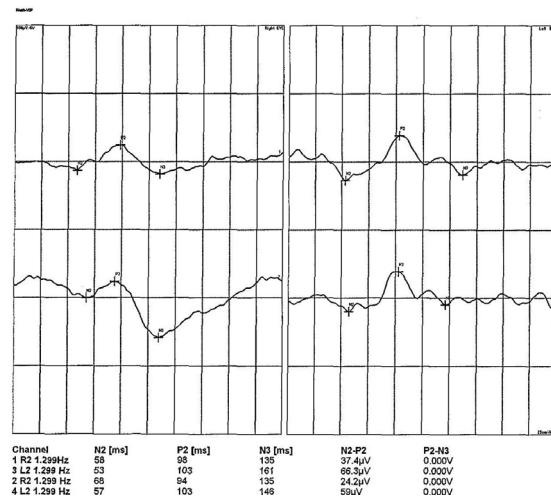


图1 FVEP示左眼P2波峰时值相对右眼稍延迟，右眼波幅相对左眼降低

Figure 1 FVEP indicated that the peak time of the P2 wave in the left eye was slightly delayed relative to the right eye, and the amplitude of the right eye was lower than that in the left eye.

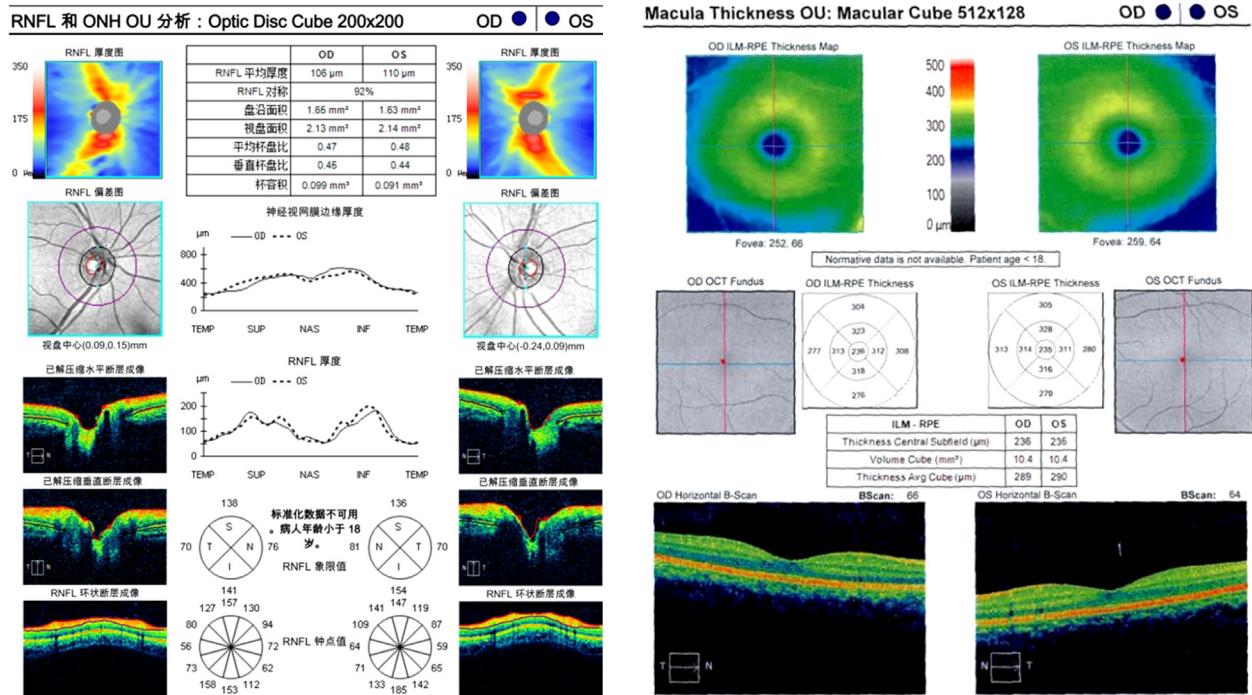


图2 双眼视盘+黄斑区OCT：未见明显异常

Figure 2 OCT of the optic disc and macula of both eyes showed no obvious abnormality

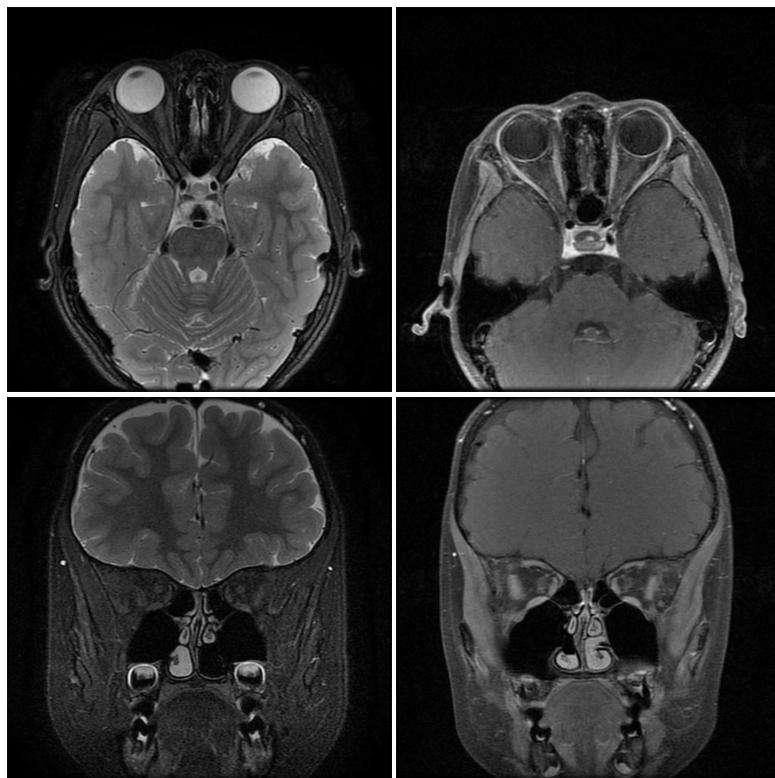


图3 眼眶MRI平扫+增强：双眼未见视神经长T2及T1增强信号

Figure 3 Orbital MRI scan with enhanced enhancement showed that there was no long T2 and T1 enhanced signal of the optic nerve in both eyes

2 讨论

非器质性视力下降也称为心因性或功能性视力下降，除视力下降外，还可伴有视野缺损，多由于精神心理疾患导致的转换障碍引起，也有部分患者为诈病以获取利益^[1-2]。患者主诉视力下降或伴有其他视觉功能障碍，但客观检查均未见任何能够解释症状的器质性疾病^[3]。非器质性视力下降患者最常见的视野缺损类型表现为向心性缩小，其中三叶草改变最具特征性^[4]；使用动态视野检查可以发现此类患者的视野范围随着检查的进行而逐渐缩小，需要注意与视网膜疾病引起的向心性视野缩小相鉴别^[5]。OCT能够准确测量视盘周围神经纤维厚度以及黄斑区神经节细胞厚度，利用OCT对可疑非器质性视力下降患者进行随访，可以进一步明确是不是存在视神经损害的证据^[6]。

儿童视神经炎的诊断需要找到客观证据，RAPD和OCT属于客观指标，尤其是不能忽略RAPD检查，视力和视野是视觉心理物理学检查，属于主观指标，既往的激素治疗并不能作为诊断儿童视神经炎的依据，我们要敢于对接诊患儿的既往诊疗提出质疑，重视患儿病史、客观体征及其疾病发生发展过程，以明确诊断，尽量减少糖皮质激素的滥用。本例患儿早期被误诊为儿童视神经炎，并进行相应的激素冲击治疗，说明该病的鉴别诊断值得引起眼科医师的注意。值得强调的是，诊断非器质性视力下降首先需要认真询问病史，做详尽的神经眼科检查以及神经电生理和相关影像学检查，以排除器质性疾病^[7-8]。特别要重视鉴别诊断，首先要除外球后视神经炎、Leber遗传性视神经病变、圆锥角膜、早期视锥细胞营养不良、视网膜色素变性(无色素)、视交叉后疾病、皮质盲、肿瘤相关性视网膜病变等疾病^[9-14]。

该病的确诊关键点在于客观体征、辅助检查与视力下降的程度不符^[3]。分析误诊的原因：1)患儿病程中两次出现视力下降，容易让接诊医师产生患者存在器质性疾病的推断，误诊为儿童视神经炎；2)不要轻易相信FVEP存在异常的结果，一般认为FVEP检查稳定性欠佳，患儿在配合不佳的时候会造成波形的明显变化，仔细查看患儿的FVEP检查结果大致正常，双眼P2波峰时值基本正常(约100 ms)，左眼P2波幅反而高于右眼，跟患者左眼视力极差明显不符，而在诊疗过程中忽视最基础的瞳孔RAPD检查^[15]；3)对病史及患

者发病诱因了解不够详尽，忽视了潜在的家庭成员情感波动、沉重的学习负荷、内向型性格及日常交朋友情况等多种精神社会因素对患儿视功能的影响^[16-19]；4)临幊上相对少见，基层眼科医师对于该病的认识不足。

非器质性视力下降的诊断有赖于细致的病史采集、全面的神经眼科查体及重要的辅助检查，着重寻找视神经病变的重要体征(视盘形态和颜色、瞳孔RAPD)、OCT、视觉电生理等超微结构和功能指标是否正常^[20]。若发现客观指标与患儿主观视力下降不匹配时，可以使用雾视法、1/2距离查视力等常用的鉴别手段^[21]，最后经过心理暗示及激励治疗后视力明显改善或恢复正常等这些重要的临床特征，快速诊断非器质性视力下降，若存在心理疾患时可以请精神心理科医生会诊协助诊疗^[22]。本例患者误诊提示在遇到儿童出现不明原因的视力下降时，在没有明确器质性疾病证据时要考虑非器质性视力下降的可能，了解该病的特征，掌握识别非器质性视力下降的检查方法，不要遗漏瞳孔RAPD等基础的神经眼科检查，以避免或者减少误诊，以节约医患双方经济成本与社会成本。

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