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· 中山眼科中心病例挑战专栏 ·

## 中医药治疗特发性黄斑中心凹旁毛细血管扩张症1例

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**[摘要]** 患者, 男, 38岁, 主因“右眼突然视力下降、视物变形1个月”就诊于河北省眼科医院。眼部检查: 右眼视力0.5, 眼底黄斑区可见一个约1/4 PD的黄白色病灶, 周围可见散在出血斑, 毛细血管扩张, 黄斑颞下方可见黄白色渗出。荧光素眼底血管造影+吲哚青绿血管造影(fluorescein angiography + indole green angiography, FFA+ICGA)示: 可动态观察到黄斑区毛细血管扩张渗漏及晚期黄斑区的囊样水肿。光学相干断层扫描成像(optical coherence tomography, OCT)示: 黄斑区局部神经上皮层隆起, 呈囊样水肿表现。诊断: 右眼特发性黄斑中心凹旁毛细血管扩张症(macular telangiectasia, MacTel)。中医辨证治疗, 早期以清热凉血、健脾除湿为主; 中期采用疏肝清热、健脾渗湿法; 后期以补肾健脾为原则。治疗后, 患者视力恢复正常, 视功能明显改善, 黄斑区水肿完全消退。随诊观察4年, 患者病情控制良好。

**[关键词]** 中心凹旁毛细血管扩张症; 黄斑; 中药治疗

## Traditional Chinese medicine treatment of idiopathic macular fovea paracentric telangiectasia: A case report

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**Abstract** The patient, male, 38 years old, was treated in Hebei Eye Hospital for the main cause of “sudden visual acuity of the right eye and visual deformity for 1 month”. Eye examination: visual acuity of the right eye was 0.5. A yellow-white lesion of approximately 1/4 diameter of visual nipple was seen in the macular area at the fundus of the eye. Around the macular area, there were scattered bleeding spots, telangiectasia, and yellow-white exudation was seen below the temporal lobe of the macula. Fluorescein angiography + indole green angiography (FFA+ICGA) showed that the telangiectasia leakage in macular area and cystic edema in late macular area was observed dynamically. Optical coherence tomography (OCT) showed local neuroepidermal bulges in macular area with cystic edema. Diagnosis: right eye idiopathic macular central fovea paravicular telangiectasia. Traditional Chinese medicine offer differentiation treatment, early to clear heat and cool blood, improve the function of spleen and dispel moisture; in the middle stage, the method

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of soothing liver and clearing heat and strengthening spleen infiltration; in the later period to invigorate the kidney and invigorate the spleen as the principle. After treatment, the patient's vision returned to normal, visual function improved significantly, and the edema in the macular area completely subsided. After 4 years of follow-up, the patient's condition was well controlled.

**Keywords** paraventricular dilatation of capillaries; macula; traditional Chinese medicine treatment

特发性黄斑中心凹旁毛细血管扩张症(macular telangiectasia, MacTel)指近黄斑中心凹或黄斑区的毛细血管扩张,是一种渐进的、潜在的致盲性视网膜血管疾病。该病多见于年轻男性,单眼发病,单纯应用西药治疗效果不佳,复发率较高,河北省眼科医院中医眼科通过运用中医辨证论治治疗该病取得满意疗效,现报告如下。

## 1 临床资料

患者,男,38岁,主因“右眼突然视力下降、视物变形1个月”于河北省眼科医院就诊。既往无眼部疾病及相似疾病家族史。眼部检查:右眼视力0.5(矫正不提高),左眼视力1.0,双眼眼压正常,屈光间质清,左眼眼底未见异常。右眼黄斑区可见1个约1/4 PD的黄白色病灶,周围见散在出血斑,毛细血管扩张,黄斑颞下方可见黄白色渗出(图1A)。荧光素眼底血管造影+吲哚青绿血管造影(fluorescein angiography + indole green angiography, FFA+ICGA)示:可动态观察到黄斑区毛细血管扩张渗漏以及造影晚期黄斑区的囊样水肿(图1B);右眼光学相干断层扫描成像(optical coherence tomography, OCT)示:黄斑区局部神经上皮层隆起,呈囊样水肿表现(图1C)。

就诊时患者同时伴有头重胸闷,食少口苦,小便黄少,舌质红,舌苔黄腻,脉弦数。西医诊断:右眼特发性黄斑中心凹旁毛细血管扩张症。中医诊断:右眼视瞻昏渺(肝经郁热,脾虚湿蕴)。早期治宜清热凉血,健脾除湿,给予利湿颗粒(经验方:猪苓、茯苓、女贞子、白术、泽泻、茺蔚子、薏苡仁、车前子、桂枝、陈皮)10 g,加用三七粉1.5 g日3次冲服。联合甲钴胺片0.5 mg、维生素B1片20 mg、维生素C片0.2 g日3次口服。15 d后第1次复诊,右眼底黄斑区视网膜出血明

显减轻。中期治宜疏肝清热、健脾渗湿,改予利湿颗粒加用黄芩(精)10 g、龙胆草(精)6 g以疏肝清热、泽兰(精)10 g日3次冲服以健脾渗湿,联合复方血栓通胶囊1.5 g日3次口服。2个月后第2次复诊,右眼视力提高至0.6,复查右眼眼底照相和OCT,视网膜出血消失,黄白色渗出较前吸收(图2A),但黄斑区囊样水肿仍存(图2B)。1个月后第3次复诊,右眼视力提高至0.8,眼底改变同前,多焦视网膜电图(multifocal electroretinogram, mfERG)曲线图示:黄斑中心b波峰值轻度下降;3D图示:黄斑(旁中心固视)中心反应密度轻度下降;环图示:第1~3环峰值轻度下降,第4,5环峰值大致正常(图3)。治疗改予陈皮(精)6 g、半夏(精)9 g、浙贝(精)10 g、云苓(精)10 g、川楝子(精)10 g、甘草(精)3 g日3次冲服。3个月后第4次复诊,右眼视力0.8,眼底黄斑区毛细血管扩张,复查OCT示:黄斑区囊样水肿略减轻(图4)。继续予利湿颗粒加用黄芩(精)10 g、龙胆草(精)6 g日3次冲服,以健脾渗湿。1个月后第5次复诊,OCT示:右眼黄斑区液性暗腔面积较前明显缩小(图5A);光学相干断层扫描血管成像(optical coherence tomographic angiography, OCTA)精确显示:黄斑中心凹无血管区扩大,后极部微血管扩张迂曲、部分丢失(图5B),发现FFA没有发现的深层毛细血管扩张的形态,并对于拱环的破坏程度也尽览无余(图5C)。2个月后第6次复诊,右眼视力1.0,右眼底黄斑区出血和黄白色渗出完全吸收,黄斑区液性囊腔消失,水肿完全消退(图6)。复查FFA示:黄斑中心凹囊样水肿消退(图7)。复查OCTA示:黄斑区毛细血管密度增加,水肿消失,拱环相对缩小,椭圆体带完整(图8)。复查mfERG显示黄斑区功能明显改善(图9)。继续以上药物巩固1个月后停药观察,随诊观察4年,右眼视力1.0,未再复发。

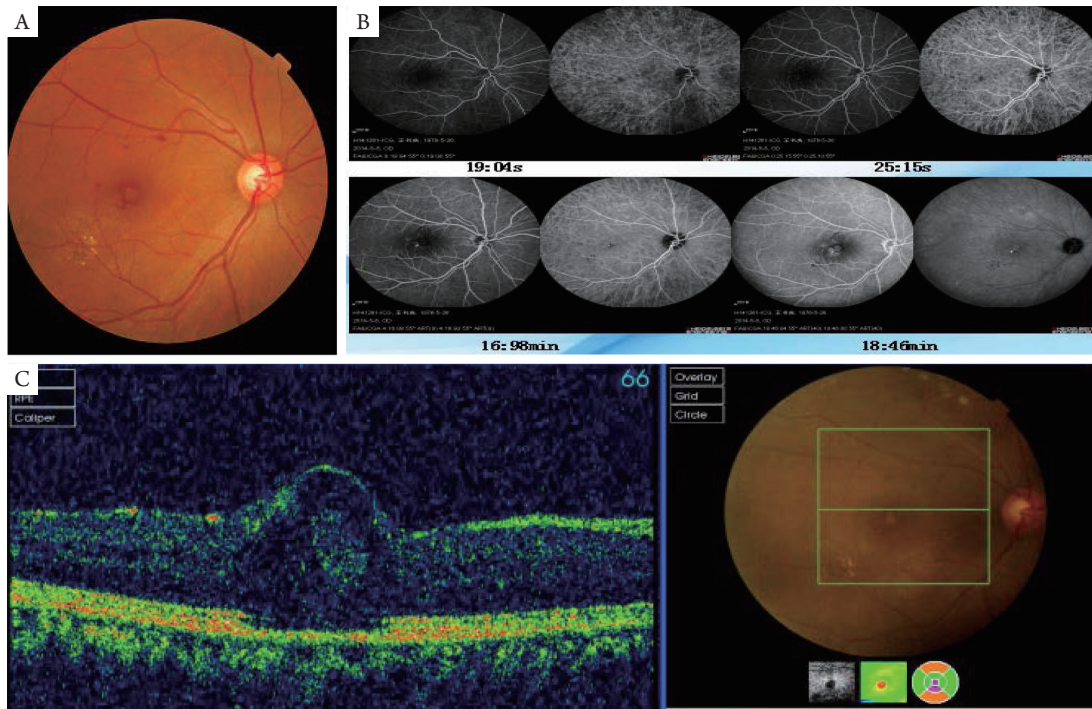


图1 首次就诊的眼部情况

Figure 1 Eye condition at first visit

(A)右眼底照相: 黄斑区一个约1/4 PD的黄白色病灶, 周围见散在出血斑, 毛细血管扩张, 黄斑颞下方见黄白色渗出; (B)FFA+ICGA示: 可动态观察到黄斑区毛细血管扩张渗漏及造影晚期黄斑区的囊样水肿; (C)右眼OCT示: 黄斑区局部神经上皮层隆起, 呈囊样水肿表现。

(A) Right ocular fundus photography: a yellow-white lesion about 1/4 diameter of visual nipple in the macular area was seen scattered around the bleeding spot, with telangiectasia and yellow-white exudation under the temporal of the macular area; (B) FFA + ICGA showed that telangiectasia leakage in macular area and cystic edema in macular area during late angiography could be dynamically observed; (C) OCT in right eye: local neuroepidermal bulges in macular area with cystic edema.

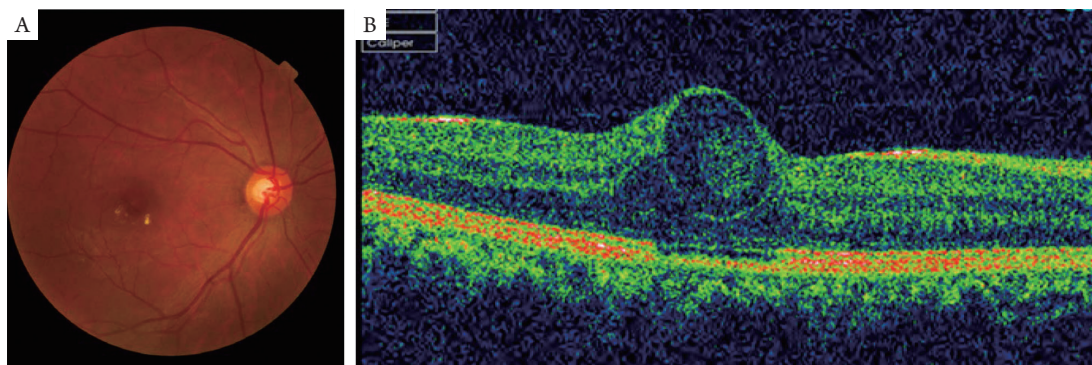
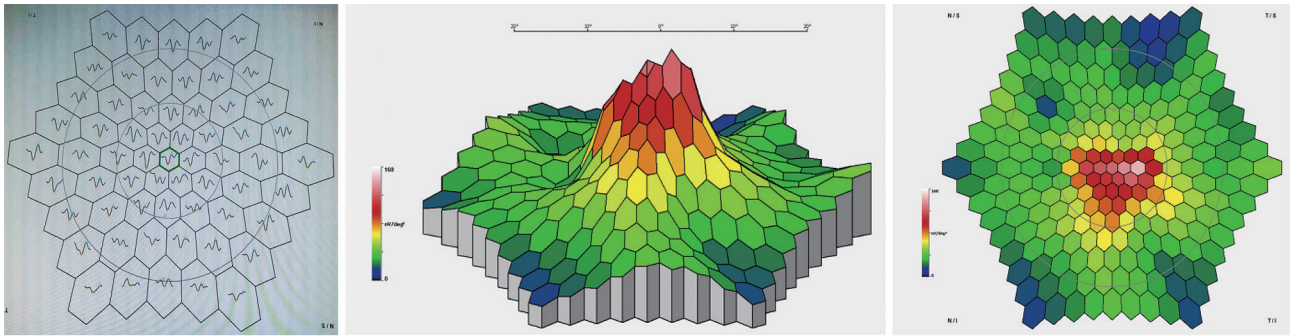


图2 用药2个月后复诊情况

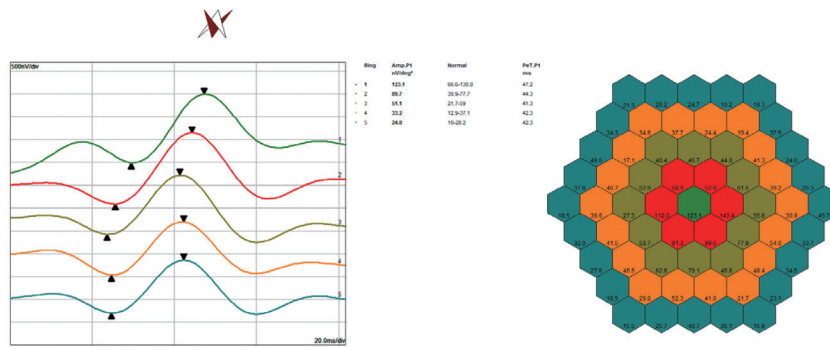
Figure 2 Follow-up after 2 months of treatment

(A)右眼底照相: 视网膜出血消失, 黄白色渗出较前吸收; (B)右眼OCT示: 黄斑区囊样水肿。

(A) Right fundus photography: retinal hemorrhage disappeared, yellow-white exudation was more absorbed than before; (B) Right eye OCT showed cystic edema in macular area.



Rings - Amp.P1 (averages, area-normalized)



RA

图3 mfERG成像

Figure 3 Imaging of mfERG

曲线图示黄斑中心b波峰值轻度下降；2D, 3D图示黄斑(旁中心固视)中心反应密度轻度下降；环图示第1~3环峰值轻度下降，第4~5环峰值大致正常。

The curve showed a slight decrease in the peak value of b wave in the center of macula; 2D, 3D images: macular (peripheral central fixation) central response density was decreased slightly; the ring peak value of the first to third ring was decreased slightly and the fourth to fifth ring peak value was roughly normal.

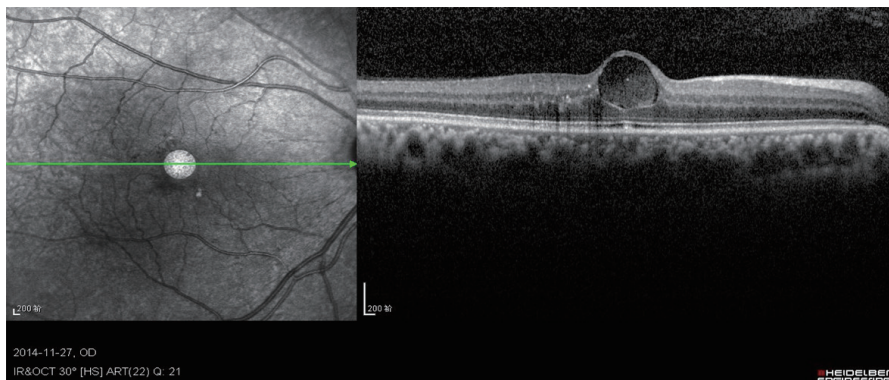


图4 黄斑区泡性液性暗腔略缩小

Figure 4 A slight narrowing of the bubble liquid dark cavity in the macular area

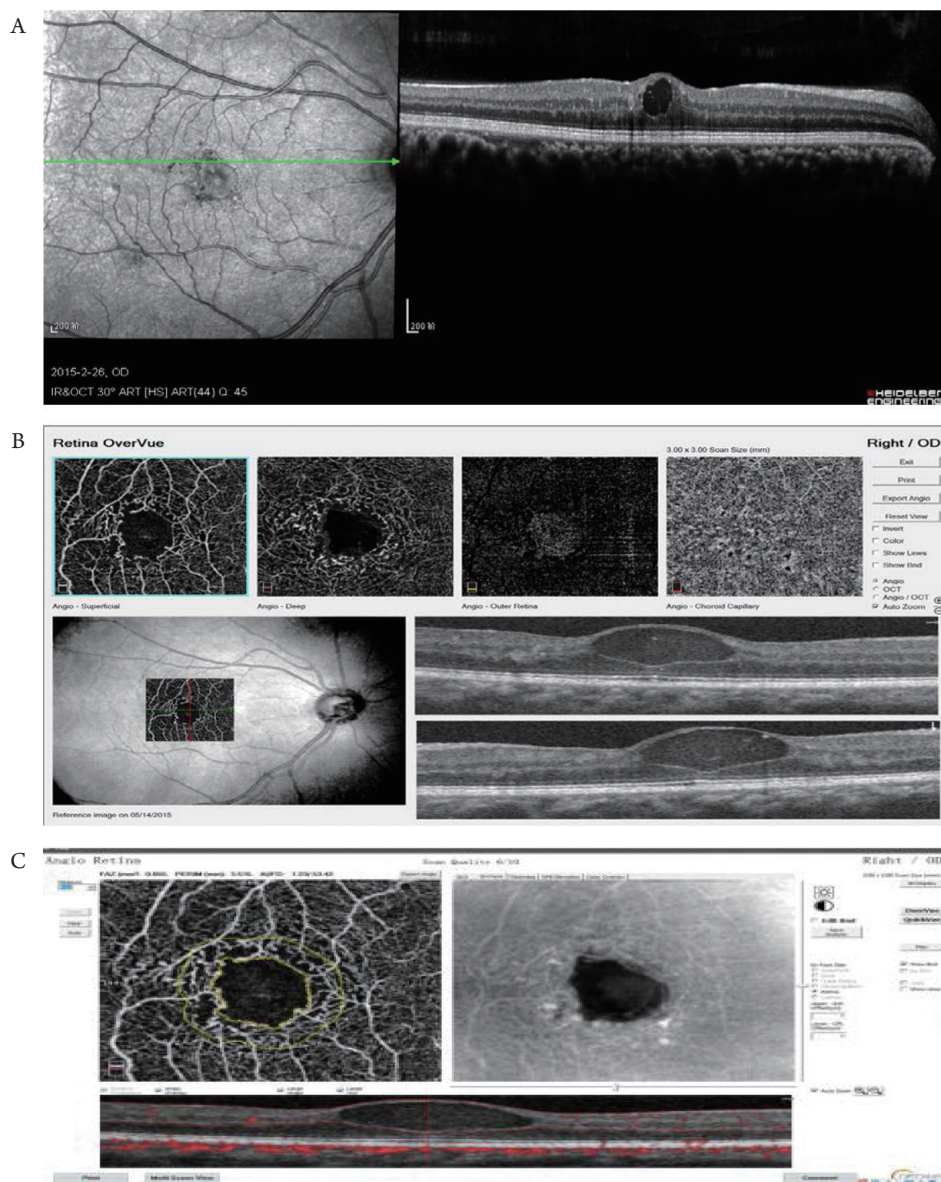


图5 用药7个月后复诊情况

**Figure 5 Follow-up at 7 months after treatment**

(A) OCT示右眼黄斑区液性暗腔面积明显缩小; (B) OCTA示精确显示黄斑中心凹无血管区扩大, 后极部微血管扩张迂曲、部分丢失; (C) 清晰显示深层毛细血管扩张的形态和拱环的破坏程度。

(A) OCT showed that the area of the liquid dark cavity in the macular area of the right eye was significantly reduced; (B) OCTA showed that accurate indication of expansion of the vascularized area in macular fovea, and tortuous and partial loss of microvasculature in the posterior pole; (C) The images revealed the morphology of deep telangiectasia and the degree of destruction of the arch ring.

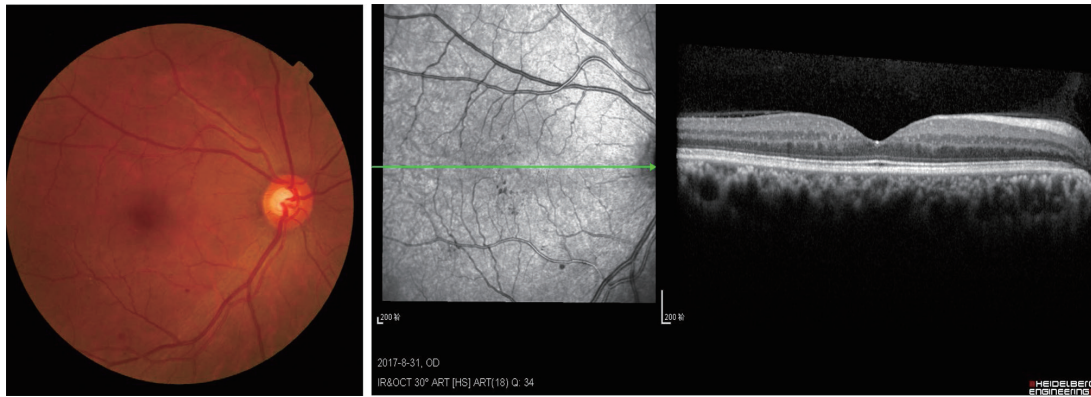


图6 用药9个月后复诊情况

Figure 6 Follow-up at 9 months after treatment

(A)右眼底照相: 黄斑区出血和黄白色渗出完全吸收; (B)右眼OCT示黄斑区液性囊肿消失, 水肿完全消退。

(A) Right base photograph: macular hemorrhage and yellow-white exudation were completely absorbed; (B) Right eye OCT showed the fluid cyst cavity in macular area disappeared and edema was completely subsided.

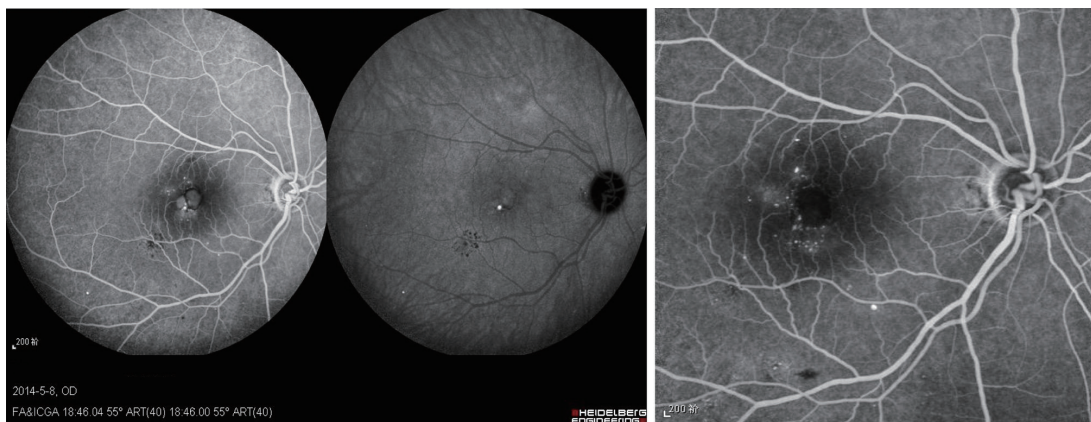


图7 FFA治疗前后对比: 黄斑囊样水肿消退

Figure 7 OCT imaging before and after FFA: macular cystoid edema was subsided

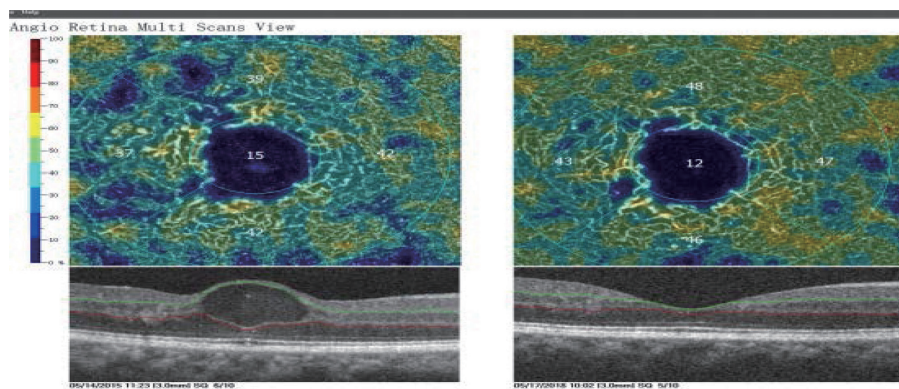


图8 OCTA治疗前后对比: 黄斑区毛细血管密度增加, 水肿消失, 拱环相对缩小, 椭圆体带完整

Figure 8 Comparison before and after OCTA treatment: increased capillary density in macular area, edema disappeared, arch ring was relatively reduced, and ellipsoid band was complete

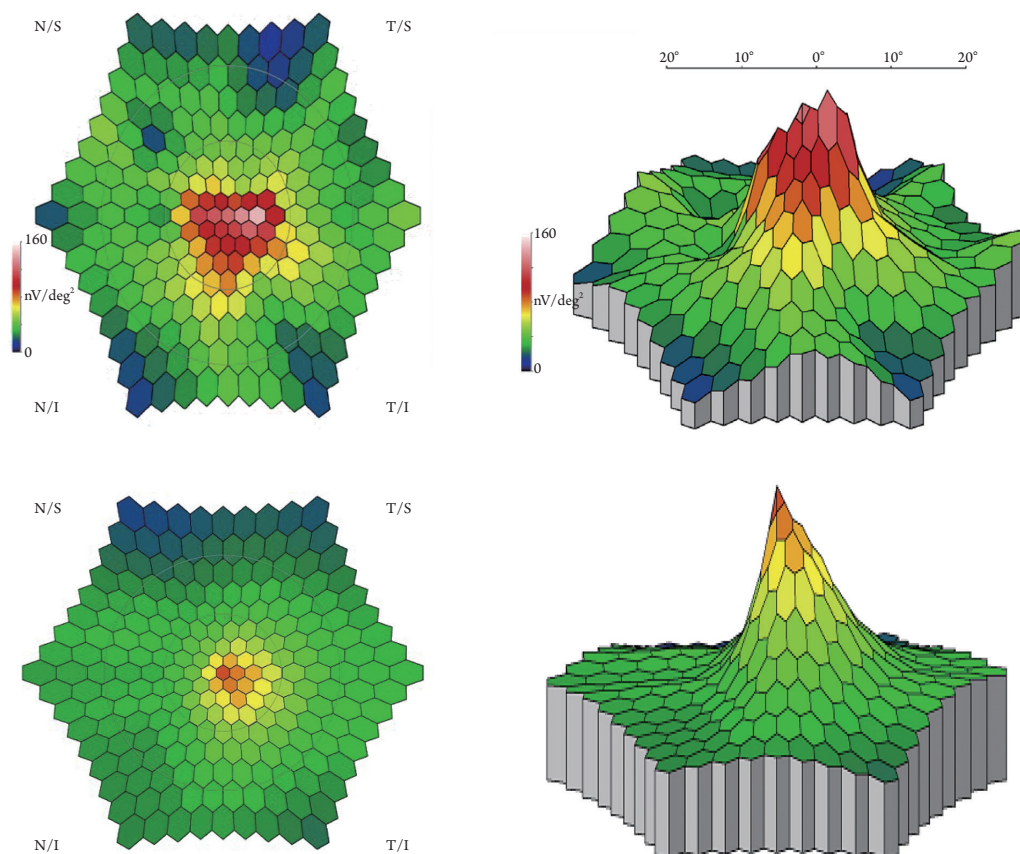


图9 mfERG治疗前后对比: 2D, 3D图直观显示黄斑区波峰增高, 视功能改善

Figure 9 Comparison before and after mfERG treatment: 2D, 3D graphs visually showed increased peaks and visual function improvement in macular area

## 2 讨论

1968年Gass<sup>[1]</sup>首先提出将MacTel作为一种独立的临床诊断。该病临床表现为黄斑区水肿, 水肿边缘有黄白色硬性渗出环, 黄斑旁中心凹毛细血管扩张、迂曲和渗出, 偶有小的出血斑, 视网膜增厚, 荧光素眼底血管造影晚期见黄斑旁中心凹出现荧光渗漏<sup>[2]</sup>。MacTel的发病机制和病理生理进程目前尚未阐明, 但近年来随着各种新兴影像学检查, 如OCTA、视网膜色素显像等出现为该病发病机制的研究提供了有效工具。有学者<sup>[3]</sup>曾推论Müller细胞和黄斑色素发挥核心作用, 经后期实验证实, 本病是由Müller细胞病变引起的黄斑部退行改变, 继发出现血管网的异常和渗出。治疗上目前仍未达成共识, 因该病手术治疗无效, 目前采用治疗方法包括格栅激光光凝、光动力学疗法、激素、前列腺素、玻璃体腔注射类固醇药

物(曲安奈德)和抗血管内皮细胞生长因子(vascular endothelial growth factor, VEGF)药物(康柏西普、雷珠单抗等)<sup>[4]</sup>。其中抗VEGF药物的应用因效果较好, 无明显毒副作用, 被认为是目前最为有效、安全的治疗方法。但此种方法治疗的作用结果存在争议。Rouvas等<sup>[5]</sup>通过临床观察证实: 使用雷珠单抗治疗MacTel可显著减少血管渗漏, 但对提高视力作用弱, 且治疗后部分患者有复发, 不能根治。目前, Chew等<sup>[3]</sup>正在进行把封闭的细胞植入眼内, 递送睫状神经营养因的试验, 目前仍处在临床试验阶段。一项致力于基因研究的报道<sup>[6]</sup>发现: 5q14.3 rs73171800, 2q34 rs715和1p12 rs477992此3个位点突变与该病相关, 仍在进一步深入研究中。对于MacTel的患者数年后发生脉络膜新生血管的可能性是5%<sup>[3]</sup>, 故应定期随访, 及早干预。

中医认为本病归属“视瞻昏渺”“视直如

曲”的范畴, 多由肝经郁热或痰湿血瘀所致。根据六经相属学说, 黄斑区属脾, 视网膜属肝, 故黄斑区疾病与肝脾两经有关。肝郁脾虚, 清阳不升, 浊阴不降, 痰湿阻络而发本病; 感受湿热之邪而致湿热内蕴上泛于目, 导致黄斑区水肿渗出。根据五轮学说, 瞳神属肾, 肝肾同源, 故治疗本病应从肝脾肾入手, 中医辨证论治可较快地促进黄斑区水肿的消退和渗出的吸收, 从而达到保护视功能、提高视力的目的。

本例患者给予中医辨证治疗后, 视网膜出血和渗出吸收, 黄斑区液性囊腔消失, 水肿完全消退, 视力恢复正常, 视功能改善, 证实了中医药治疗MacTel的有效性, 故临床上可通过玻璃体腔注入抗VEGF药物联合中药辨证治疗; 对于拒绝或不能耐受玻璃体腔注药的患者, 单纯应用中药辨证治疗亦可获得良效。中药的运用在减轻病情、缩短病程、提高视力等方面作用肯定, 可在临床工作中灵活运用, 以提高临床疗效。

### 参考文献

1. Gass JD. A fluorescein angiographic study of macular dysfunction secondary to retinal vascular disease. V. Retinal telangiectasis[J]. Arch Ophthalmol, 1968, 80(5): 592-605.
2. 金庆新. 特发性黄斑中心凹旁毛细血管扩张症一例[J]. 中华眼

底病杂志, 2014, 30(3): 320-321.

JIN Qingxin. A case of idiopathic macular foveolar telangiectasia[J]. Chinese Journal of Ocular Fundus Diseases, 2014, 30(3): 320-320.

3. Chew EY, Clemons TE, Peto T, et al. Ciliary neurotrophic factor for macular telangiectasia type 2: results from a phase 1 safety trial[J]. Am J Ophthalmol, 2015, 159(4): 659-666.
4. 张伟, 黄红深, 张恒. 旁中心凹视网膜毛细血管扩张症一例[J]. 中国实用眼科杂志, 2013, 31(2): 245.  
ZHANG Wei, HUANG Hongshen, ZHANG Heng. A case of paracentral fovea retinal telangiectasia[J]. Chinese Journal of Practical Ophthalmology, 2013, 31(2): 245.
5. Rouvas A, Malamos P, Douvali M, et al. Twelve months of follow-up after intravitreal injection of ranibizumab for the treatment of idiopathic parafoveal telangiectasia[J]. Clin Ophthalmol, 2013, 7: 1357-1362.
6. Scerri TS, Quagliari A, Cai C, et al. Genome-wide analyses identify common variants associated with macular telangiectasia type 2[J]. Nat Genet, 2017, 49(4): 559-567.

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