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世界中医药学会联合会

World Federation of Chinese Medicine Societies

SCM **-20**

国际中医临床实践指南

非动脉炎性前部缺血性视神经病变

International Clinical Practice Guideline of Chinese Medicine

Nonarteritic Anterior Ischemic Optic Neuropathy

世界中联国际组织标准

International Standard of WFCMS

20**-**-**发布实施

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前 言

请注意本文件的某些内容可能涉及专利。本文件的发布机构不承担识别专利的责任。

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引 言

本文件为进一步规范非动脉炎性前部缺血性视神经病变的中医临床诊断与治疗,为国际中医师临床实践提供了非动脉炎性前部缺血性视神经病变的中医药治疗策略与方法。本文件简明实用,可操作性强,可作为临床实践、诊疗规范和质量评价的重要参考依据。

目前中国已发布的《中医临床诊疗指南》、《第三批中医临床路径和诊疗方案(24个专业,104个病种)》、《中医临床诊疗指南释义眼科疾病分册》自施行以来,对非动脉炎性前部缺血性视神经病变的中医药诊疗发挥了较好的指导作用。但既往指南限于条件,制定过程中多以专家共识作为推荐标准,国际认可度较低。随着循证医学研究在中医药领域的快速发展,证据级别较高的研究成果不断涌现,本文件在既往指南的基础上,在证据级别较高的中医药治疗非动脉炎性前部缺血性视神经病变高质量研究中筛选临床疗效可靠、安全、便于推广的治疗方法,以提高中医药治疗非动脉炎性前部缺血性视神经病变的临床疗效。

本文件是依据现有的研究证据、特定的方法制定出的声明性文件。在临床实践中,医师可参考本文件并结合患者具体情况进行个体化治疗。

国际中医临床实践指南 非动脉炎性前部缺血性视神经病变

1 范围

本文件规定了非动脉炎性前部缺血性视神经病变的中医术语和定义、诊断、辨证和治疗等。

本文件适用于各级医疗机构的中医眼科和中西医结合眼科临床从业医师，作为对非动脉炎性前部缺血性视神经病变的诊断和中医药治疗依据。西医眼科从业医师和其他学科中医师也可参照本文件中的相关内容。

2 规范性引用文件

下列文件对于本文件的应用是必不可少的。凡是注日期的引用文件，仅所注日期的版本适用于本文件；凡是不注日期的引用文件，其最新版本（包括所有的修改版）适用于本文件。

GB/T 16751.1 中医临床诊疗术语 疾病部分

GB/T 16751.2 中医临床诊疗术语 证候部分

GB/T 16751.3 中医临床诊疗术语 治法部分

2012 中医临床诊疗指南 非动脉炎性前部缺血性视神经病变（2012年版）

2013 第三批中医临床路径和诊疗方案（24个专业，104个病种）非动脉炎性前部缺血性视神经病变（2013年版）

2012 中医眼科常见病诊疗指南 非动脉炎性前部缺血性视神经病变（2012年版）

3 术语和定义

下列术语和定义适用于本文件。

3.1 非动脉炎性前部缺血性视神经病变

是由于睫状后短动脉短暂无灌注或低灌注所致，临床上以突然视力下降、视盘水肿和与生理盲点相连的象限性视野缺损为特征。

注：需排除脱髓鞘疾病、遗传性疾病、颅内占位性病变、颞动脉炎等，本病归属中医“暴盲”或“视瞻昏渺”范畴。

3.2 暴盲

眼外观正常，一眼或双眼视力骤然急剧下降，甚至盲而不见的急性内障眼病。

注：西医眼科多种疾病均可诊断为暴盲，如视网膜动脉阻塞、急性视神经炎、非动脉炎性前部缺血性视神经病变等。

3.3 视瞻昏渺

外眼正常，一眼或双眼视功能受损，视力下降较轻的患者。

注：西医眼科主要涉及非动脉炎性前部缺血性视神经病变和视神经炎等。

4 诊断

4.1 临床症状

患者以中老年人为主，通常单眼发病，也可双眼发病；临床表现为突然无痛性视力下降或视野缺损，常于晨起时发现；部分患者发病前可有有一过性视物模糊或黑矇。如患者视野中心无受累，视力可正常；当视野中心受累时，可出现不同程度的视力下降。

4.2 临床检查

患眼相对性传入性瞳孔障碍（relative afferent pupillary defect, RAPD）常为阳性，眼底检查可见患眼小视盘、小视杯甚至无视杯等先天解剖特点，发病早期可出现局限性或弥漫性视盘水肿，可伴有视盘充血和盘周出血，晚期视盘颜色常变淡或苍白。

4.3 辅助检查

4.3.1 视野

最常见的视野改变是与生理盲点相连的象限性视野缺损，多见于鼻侧和下方，但其他形式的视野损害亦可见到。

4.3.2 视觉电生理检查

视觉诱发电位检查常表现为 P₁₀₀ 振幅下降、峰时延长，多以振幅下降为主，视网膜电图常无异常。

4.3.3 荧光素眼底血管造影

在发病的初期，荧光素眼底血管造影（fundus fluorescein angiography, FFA）动脉早期可看到循环受损及其部位，表现为视盘局限性或弥漫性充盈迟缓，视盘周围脉络膜和（或）脉络膜分水岭区的充盈缺损和迟缓，可伴有臂视网膜循环时间延长，造影晚期视盘荧光素渗漏。

4.3.4 光学相干断层扫描

早期视盘水肿，光学相干断层扫描（optical coherence tomography, OCT）影像上可见盘周视神经纤维层增厚，晚期视神经纤维层变薄，严重的病例可伴有黄斑区视网膜浆液性脱离。

4.3.5 其他检查

患者需行红细胞沉降率、C 反应蛋白等检查以除外动脉炎性前部缺血性视神经病变，后者需要系统使用糖皮质激素治疗。颈动脉超声、球后血管血流超声、24h 动态血压监测、睡眠监测以及颅脑 CT 或 MRI 等检查有助于明确患者全身状况，查找发病原因。

4.4 鉴别诊断

4.4.1 动脉炎性前部缺血性视神经病变

为巨细胞动脉炎导致，表现为单眼视力急性下降，甚至失明，常伴有疼痛，表现为头痛和颞动脉或头皮压痛、下颌跛行、食欲不振、厌食和发热、关节和肌肉疼痛等。视盘为灰白色或苍白色水肿，红细胞沉降率（ESR）升高（高达 70-120mm/min）和/或血清 C 反应蛋白（CRP）可有助于诊断。

4.4.2 视神经乳头炎

多为青壮年发病，表现为视力急剧下降，可伴眼球转动痛，眼底表现为视盘充血性水肿，颜色较红，边界不清，视野表现为中心暗点或弥漫性视野损害。

4.4.3 视乳头水肿

多为颅内原发疾病引起，颅内压增高，一般双眼发病，视盘水肿明显，隆起度一般超过 3D 周围视网膜水肿，静脉迂曲扩张。早期视力正常，病程较久者可有阵发性黑朦。视野表现为生理盲点扩大。

4.4.4 Foster-Kennedy 综合征

表现为一侧视盘水肿，而对侧眼视神经萎缩，为额叶底部肿瘤或蝶骨嵴、嗅沟脑膜瘤压迫一侧视神经，同时导致颅压升高所致。临床表现为视力严重减退，病变侧视神经萎缩和嗅觉缺失，对侧视盘水肿。查头颅 CT 和 MRI 可以确诊。

还需排除视盘血管炎、糖尿病性视乳头病变等引起视盘水肿的疾病。

5 辨证

5.1 气滞血瘀证

眼外观端好，突然视力下降或视野缺损，无眼球疼痛，眼底见视盘水肿，颜色偏淡，晚期视盘色淡或局限性苍白，视盘周围见条线状出血或渗出，兼见情志不畅，胸胁满闷，胀痛不适，唇暗心悸，头晕头痛等，舌淡红或紫暗，有瘀斑，苔薄白，脉弦涩。

5.2 肝阳上亢证

眼部症状及检查同前，伴急躁易怒，头痛眼胀，头晕目眩，面赤烘热，心悸不安，失眠多梦，口苦咽干，舌质红，脉弦数。

5.3 痰湿阻络证

眼部症状及检查同前，兼见头晕头重，周身困重，四肢沉重，咳吐痰涎，口淡不渴，舌淡胖暗，苔白或白腻，脉滑。

5.4 肝肾阴虚证

病程较久，视盘色淡或苍白，兼见眼干眼涩，腰膝酸软，耳鸣耳聋，失眠盗汗，口咽乏味，舌质偏红，苔少，脉细数。

6 治疗

6.1 治疗原则

本病的基本病机为“目络瘀阻”，治疗以活血化瘀，理气通络为原则，发病早期治以活血化瘀，通络明目，兼见气滞者佐以疏肝理气，兼气虚者佐以健脾益气，兼血虚者佐以益气养血，兼阴虚者佐以滋阴补肾，兼阳亢者佐以平肝潜阳，兼痰浊者佐以化痰祛瘀，晚期以滋阴明目为主。

6.2 方药

6.2.1 气滞血瘀证

治法：活血化瘀，理气通络。

方药：血府逐瘀汤（《医林改错》）：桃仁、红花、当归、生地黄、牛膝、川芎、桔梗、赤芍、枳壳、甘草、柴胡。（证据级别 D，强推荐）

加减：兼半身麻木，短气乏力，倦怠懒言等气虚症状者，加用黄芪、党参、白术；兼面色无华，心悸失眠，神疲乏力等血虚症状者，加用熟地、阿胶、鸡血藤等；伴头昏、头痛者加天麻；失眠多梦者加夜交藤、炒酸枣仁；体胖痰多加清半夏、白附子。

6.2.2 肝阳上亢证

治法：平肝熄风，清热活血。

方药：天麻钩藤饮（《中医内科杂病证治新义》）：天麻、钩藤、石决明、山栀、黄芩、川牛膝、杜仲、益母草、桑寄生、夜交藤、朱茯神。（证据级别 D，强推荐）

加減：心悸健忘，失眠多夢者，加磁石；兼五心煩熱、潮熱盜汗者，加熟地黃、山茱萸、丹皮；視盤水腫較重加車前子、澤蘭；眼脹刺痛加菟蔚子、丹參等。

6.2.3 痰濕阻絡證

治法：滌痰通絡，理氣活血。

方藥：滌痰湯（《奇效良方》）加減：半夏、陳皮、茯苓、枳殼、竹茹、石菖蒲、丹參、水蛭、甘草。（證據級別 D，強推薦）

加減：有熱象者加用黃芩、黃連；濕盛者加澤蘭、益母草、車前子；頭昏目眩者加天麻、鉤藤；伴乏力納差者，加黨參、白朮等。

6.2.4 肝腎陰虛證

治法：滋補肝腎，通絡明目。

方藥：明目地黃丸（《審視瑤函》）加減。熟地黃、生地黃、山萸肉、山藥、澤瀉、茯苓、丹皮、當歸、柴胡、五味子。（證據級別 D，強推薦）

加減：五心煩熱、潮熱盜汗者，加黃柏、知母；口干咽燥者，加石斛、天花粉；伴手足萎軟者，加杜仲、桑寄生、川斷；失眠多夢者，加炒棗仁、遠志、雞血藤。

6.3 中成藥

6.3.1 氣滯血瘀證：血府逐瘀丸（膠囊）、復方丹參片、丹紅化瘀口服液。（證據級別 D，強推薦）

6.3.1 肝腎陰虛證：明目地黃丸、杞菊地黃丸。（證據級別 D，強推薦）

6.3.1 肝陽上亢證：天麻鉤藤顆粒、腦立清丸、滌痰丸。（證據級別 D，強推薦）

6.4 其他療法

6.4.1 體針

根據針刺辨證取穴論治干預非動脈炎性前部缺血性視神經變化的臨床文獻相關教材，結合專家共識整理而得。（證據級別 D，強推薦）

主穴：睛明、球後或承泣、瞳子髎、太陽、足三里、三陰交；

配穴：氣滯血瘀證：百會、內關、陽陵泉、太溪；

肝陽上亢證：風池、攢竹、內關、行間、太沖；

痰濕阻絡證：風池、合谷、太陽、尺澤、列缺。

肝腎陰虛證：上明、太溪、尺澤、大敦

6.4.2 耳穴壓豆

取穴：眼、目1、目2、肝、腎。（證據級別 D，強推薦）

附录 A
(资料性附录)
证据评价及推荐原则

A.1 证据评价和分级标准

参照 GRADE 分级方法，随机对照试验最初被定为高质量证据，其质量可因 5 个因素下降；观察性研究被定为低质量证据，其质量可因 3 个因素上升；最终证据质量被分为高、中、低、极低 4 级。

文献筛选和评价过程由两名评价员独立进行，如双方意见不一致，通过协商解决或由第三方裁决。具体内容见表 A.1:

表 A.1 证据评价和分级标准

研究设计	最初证据级别	降级/升级因素	证据级别	描述		
随机对照试验	高	偏倚风险	-1 严重	高 (A)	非常确信真实值接近效应估计值	
			-2 非常严重			
		不一致性	-1 严重	中 (B)		
			-2 非常严重			
		间接性	-1 严重	中 (B)		对效应估计值有中等程度信心：真实值可能接近估计疗效，但也可能有很大差别
			-2 非常严重			
		不精确性	-1 严重	低 (C)		
			-2 非常严重			
		发表偏倚	-1 可能	低 (C)		对效应估计值信心有限：真实值与估计值可能有很大差别
			-2 非常可能			
观察性研究	低	效应量大	+1 大	低 (C)	对效应估计值几乎没有信心：真实值与估计值可能有很大差别	
			+2 非常大			
		剂量-效应关系	+1 明显关联	极低 (D)		
		混杂因素	+1 效应增加			
			+1 效应显著降低			

A.2 推荐原则

由于中医药治疗非动脉炎性前部缺血性视神经病变的文献研究多数存在报告内容不全面、设计欠规范、辨证选方多样、疗效标准不统一等问题，使研究结果可信性偏低，因此本文件的推荐原则为结合传统中医理论、文献研究和专家经验等综合因素考虑后制定，所有证据均需取得专家共识后方可列入推荐。

推荐强度确定原则：凡是对某项治疗措施强推荐人数超过总人数 75%，则强推荐使用该治疗措施；如果不推荐使用人数比例 $\geq 50\%$ ，则为不推荐；其他情况为弱推荐。

附录 B
(资料性附录)
利益冲突的宣言

《国际中医临床实践指南 非动脉炎性前部缺血性视神经病变》指南制定小组所有成员均声明，完全独立进行本指南的编制工作，未与任何利益团体发生联系。

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Foreword

Please note that some contents of this document may refer to some patents. The issuer of this document would not assume the responsibility to identify these patents

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Introduction

This guideline aims to further standardize the international TCM clinical diagnosis and treatment of nonarteritic anterior ischemic optic neuropathy, and to provide TCM therapeutic strategies and methods of nonarteritic anterior ischemic optic neuropathy for international TCM practitioners. The guideline is concise and practical with strong operability, guidance, universality and reference, which meets medical regulations and legal requirements. It could be regarded as a valuable reference for clinical practice, diagnosis and treatment regulations and quality evaluation.

The published *Guideline for Clinical Diagnosis and Treatment of Traditional Chinese Medicine, The Third Batch of Clinical Routes and Plans for Diagnosis and Treatment of Traditional Chinese Medicine (24 specialties, 104 diseases)*, and *Ophthalmic Diseases Volume of Clinical Diagnosis and Treatment Guidelines of Traditional Chinese Medicine* have played a guiding role in the diagnosis and treatment of nonarteritic anterior ischemic optic neuropathy. However, previous guidelines were subject to contemporaneous conditions, and expert consensus were often used as the recommendation standards in the formulation process, which won low international recognition. With the rapid development of evidence-based medicine research in the field of Chinese medicine, the research results with higher level of evidence are emerging. On the basis of previous guidelines, this guideline selects the treatment methods with reliable, safe clinical efficacy and easy to promote in the high-quality research on the treatment of nonarteritic anterior ischemic optic neuropathy with higher level of evidence, so as to improve the clinical efficacy of TCM treatment on nonarteritic anterior ischemic optic neuropathy.

The guideline is a declaration file based on available research evidences and specific methods rather than medical behavior standards or regulations. Clinical practitioners could regard the guideline as reference and make the individualized treatment according to the combination of concrete clinical situations and the guideline.

International Clinical Practice Guideline of Chinese Medicine

Nonarteritic Anterior Ischemic Optic Neuropathy

1. Scope

This guideline provides the basic requirements for diagnosis, syndrome differentiation and treatment for nonarteritic anterior ischemic optic neuropathy.

As a diagnosis and treatment basis for nonarteritic anterior ischemic optic neuropathy, this guideline applies to TCM ophthalmologists, integrated Traditional and Western medicine ophthalmologists at various levels. This guideline can also be a reference for Western medicine ophthalmologists or doctors of other TCM departments.

2. Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced guideline (including any amendments) applies.

GB/T 16751.1—1997 Clinic terminology of traditional Chinese medical diagnosis and treatment—Diseases

GB/T 16751.2—1997 Clinic terminology of traditional Chinese medical diagnosis and treatment—Syndromes

GB/T 16751.3—1997 Clinic terminology of traditional Chinese medical diagnosis and treatment—Therapeutic methods

2012 Clinical Practice Guidelines for Diagnosis and Treatment of Traditional Chinese Medicine-- Non-arteritic Anterior Ischemic Optic Neuropathy

2015 Expert consensus on diagnosis and treatment of nonarteritic anterior ischemic optic neuropathy in China

2013 Clinical Pathway of Traditional Chinese Medicine for diagnosis and treatment (24 disciplines, 104 diseases)-- Non-arteritic Anterior Ischemic Optic Neuropathy, 3rd Edition

2012 Guidelines for Diagnosis and Treatment of Common Diseases of Ophthalmology in Traditional Chinese Medicine-- Non-arteritic Anterior Ischemic Optic Neuropathy

3. Terms and definitions

The following terms and definitions apply to this document.

3.1 Nonarteritic anterior ischemic optic neuropathy (NAION)

NAION is caused by transient non-perfusion or hypo-perfusion of the short posterior ciliary artery, and clinically characterized by sudden visual decrease, edema of optic disc and quadrant visual field defect connected with physiological blind spot.

Note: Demyelinating disease, hereditary disease, intracranial space occupying disease and temporal arteritis should be excluded. NAION belongs to the category of "sudden blindness" or "dim vision".

3.2 Sudden blindness

Acute eye disease with normal eye appearance, sudden and sharp decline of visual acuity in one or both eyes, and even blindness.

Note: Many diseases can be diagnosed as sudden blindness, such as retinal artery occlusion, acute optic neuritis, etc.

3.3 Dim vision

Mild or moderate visual damage with normal eye appearance.

Note: It mainly involves nonarteritic anterior ischemic optic neuropathy and optic neuritis.

4. Diagnosis

4.1 Clinical manifestations

Most of the NAION patients are mid-aged or elderly. Generally, single eye is affected, but both eyes could be involved occasionally. The symptoms include sudden painless visual loss or visual field defect, which usually happens while waking up in the morning. Some patients may have transient blurred or dark vision before onset. The visual acuity could be normal if the central visual field is not involved. When the central visual field is involved, visual acuity decreased to varying degrees.

4.2 Signs

Relative afferent pupil defect (RAPD) is usually positive in the involved eye. The fundus examination often reveals small optic disc with absent or small optic cup. Localized or diffuse optic disc edema and peripapillary hemorrhage may be observed in early phase. Optic disc often turns pale in late phase.

4.3 Auxiliary Examination

4.3.1 Visual field

The most common visual field change is the quadrantal visual field defect connected with the physiological blind spot, which is mostly seen on the nasal side and below, but other patterns of visual field damage can also be seen.

4.3.2 Visual Electrophysiological Examination

Visual evoked potential (VEP) in NAION is characterized by prolonged latency and/or decreased amplitude of P₁₀₀ wave, mostly decreased amplitude. Electroretinogram (ERG) could be normal.

4.3.3 Fundus fluorescein angiography

Fundus fluorescein angiography (FFA) shows early optic disc fluorescein filling delay or defect, and peripapillary choroid filling delay or no filling. In the late phase there is optic disc fluorescein leakage. Sometimes arm-retina circulation time prolongs.

4.3.4 Optical coherence tomography

Optical coherence tomography (OCT) reveals optic disc edema and optic nerve fiber layer thickening at the acute stage, and optic nerve fiber layer thinning at the late stage. Serous retinal detachment in the macular region may be seen in severe cases.

4.3.5 Other examinations

Erythrocyte sedimentation rate (ESR) or C reactive protein could help differentiate arteritic AION. Carotid ultrasonography, retrobulbar blood flow ultrasonography, 24-hour ambulatory blood pressure monitoring, sleep monitoring and brain CT or MRI could help to reveal the systemic condition to detect the causes of the disease.

4.4 Differential diagnosis

4.4.1 Arteritic AION

Arteritic AION is caused by giant cell arteritis. It may suddenly severely damage the vision,

and often accompany with temporal headache and scalp tenderness, as well as fever, fatigue, myalgia, arthralgia, jaw claudication and anorexia. Pale and edematous optic disc is observed ophthalmoscopically. Lab test could show elevated ESR (usually 70-120 mm/hr) and C-reactive protein. Temporal artery biopsy has been considered as the most reliable way to diagnose giant cell arteritis, whose specificity can be as high as 100%.

4.4.2 Optic papillitis

Optic papillitis mostly involve the young adults. Acute visual impairment is the main complaint. Eye pain may be seen in some patients, which is worsened by eye movement. Fundus examination reveals congestive edema of optic disc with unclear boundary, and visual field exam shows central scotoma or diffuse visual field damage.

4.4.3 Papilledema

Papilledema is caused by increased intracranial pressure due to intracranial diseases. Generally both eyes are involved, and the disc edema is severe, bulging into the vitreous cavity to more than 3D, leading to peripapillary retinal edema or hemorrhage, and tortuous vein expansion. The visual acuity is normal at the early stage, and paroxysmal amaurosis may occur in patients. The visual field showed the enlargement of physiological blind spot.

4.4.4 Foster-Kennedy syndrome

Foster-Kennedy syndrome is caused by the basal frontal tumor or sphenoid ridge/olfactory sulcus meningioma, which compress the ipsilateral optic nerve and lead to intracranial pressure increase. It is characterized by ipsilateral optic atrophy and contralateral papilledema. CT and MRI examination of the brain helps to confirm the diagnosis.

In addition, other diseases that may cause optic disc edema such as optic disc vasculitis or diabetic papillopathy should also be excluded.

5. Syndrome differentiation

5.1 Qi stagnation and blood stasis syndrome

The external eye is normal. Sudden painless visual acuity decrease or visual field defect. Fundus examination shows optic disc edema with blurred border, peripapillary hemorrhage or exudative and attenuated retinal vessels. Systemic examination shows emotional disorder, fullness and pain of chest and stomach, dark lips, palpitation, dizziness and headache. The tongue could be reddish or dark purplish, with ecchymosis sometimes. The coating of the tongue is thin and white. And the pulse is astringent and stringy.

5.2 Hyperactivity of liver Yang syndrome

The symptoms and signs of the eye are the same as the above, accompanied by irritability, headache, eye swelling, dizziness, hot face, palpitation, insomnia, dreaminess, bitter taste in the mouth and dry throat. The tongue is red and the pulse is rapid and stringy.

5.3 Phlegm and dampness obstructing collaterals syndrome

The symptoms and signs of the eye are the same as the above, accompanied by dizziness, heavy body or limbs, cough, spitting and salivation, tastelessness in the mouth and adipsia, pale fat tongue, white or greasy tongue coating, slipping pulse.

5.4 Liver-Kidney Yin Deficiency Syndrome

Advanced stage of AION, the disc is pale disc, accompanied with dry eye, limp aching lumbus

and knees, tinnitus, deafness, insomnia, night sweats, lack of saliva in the mouth, red tongue with little coating, thin and rapid pulse.

6. Treatment

6.1 Therapeutic Principles and Methods

The basic pathogenesis of NAION is blood stasis in the eye collateral, so the treatment principle is promoting blood circulation, removing blood stasis, regulating Qi and dredging collaterals of the eye. Soothing the liver and regulate Qi is added in those with Qi stagnation. Invigorating the spleen and Qi is also applied in those with Qi deficiency. For those with blood deficiency, replenish Qi and nourish blood is applied. Those with Yin deficiency is further treated with nourishing Yin and tonifying the kidney. Calming the liver and suppressing Yang is applied in those with Yang hyperactivity. Resolving phlegm and removing blood stasis is applied in those with phlegm turbidity. At the late stage, herbs to nourishing Yin and improving eyesight would be added.

6.2 Prescriptions

6.2.1 Qi stagnation and blood stasis syndrome

Therapeutic principle: promoting blood circulation and removing blood stasis, regulating Qi to unblock the collaterals.

Prescription: Xuefu Zhuyu Decoction (Yi Lin Gai Cuo): Taoren (Peach Kernel), Honghua (Chinese Angelica), Danggui (Angelica Root), Shengdihuang (Rehmannia glutinosa), Niuxi (Achyranthes Bidentata), Chuanxiong (Rhizome of Chuanxiong), Jiegeng (Platycodon Grandiflorum), Chishao (Radix Paeoniae Rubra), Zhiqiao (Aurantium Aurantii), Gancao (Licorice), Chaihu (Chinese Thorowax Root).

Modification: For those with signs of Qi deficiency, such as hemiplegia, shortness of breath, fatigue and laziness, add Huangqi (Astragalus Membranaceus), Dangshen (Codonopsis pilosula), Baizhu (white atractylodes rhizome); For those with signs of blood deficiency, such as pale complexion and palpitations, insomnia or fatigue, add Shudihuang (Prepared Rehmannia Glutinosa), E'jiao (donkey-hide gelatin), Jixueteng (Caulis Spatholobi); For those with dizziness and headache, add Tianma (Rhizoma Gastrodiae). For cases with insomnia, add Yejiaoteng (Caulis Spatholobi) and fried Suanzaoren (Semen Ziziphi Spinosa). For the fat with phlegm, add Qingbanxia (Pinellia), Baifuzi (Radix Aconiti Alba).

6.2.2 Hyperactivity of liver Yang syndrome

Therapeutic principle: Calming the liver and wind, clearing heat and activating blood circulation.

Prescription: Tianma Gouteng Decoction (Zhong Yi Nei Ke Za Bing Xin yi): Tianma (Gastrodia elata), Gouteng (uncaria), Shijueming (Cassia obtusifolia), Shanzhizi (Gardenia jasminoides), Huangqin (Scutellaria baicalensis), Niuxi (Achyranthes bidentata), Duzhong (Eucommia ulmoides), Yimucao (motherwort), Sangjisheng (parasitic mulberry), Yejiaoteng (cauliflower), Fushen (root poria).

Modification: For those with palpitations, forgetfulness, insomnia and dreaminess, add Cishi (Magnetite). For those with fever in chest, palm or sole, and those with hot flushes and night sweat, add Shudihuang (radix rehmanniae), Shanzhuyu (Cornus officinalis) and Mudanpi (cortex moutan). For those with severe disc edema, add Zelan (Eupatorium), Cheqianzi (Plantago asiatica). For those with eye pain, add Chongyuzi (motherwort fruit).

6.2.3 Phlegm and dampness obstructing collaterals syndrome

Therapeutic principle: Removing phlegm, unblocking collaterals, regulating qi and improving blood circulation.

Prescription: Modified Ditan Decoction (*Qi Xiao Liang Fang*): Banxia (Pinellia Ternata), Chenpi (Tangerine Peel), Fuling (Poria Cocos), Zhiqiao (Aurantium Aurantii), Zhuru (Zhuru), Shichangpu (Acorus Tatarinowii), Danshen (Salvia Miltiorrhiza), Shuizhi (Leech), Gancao (Licorice). (Evidence level: D, strongly recommended)

Modification: For those with heat, add Huangqin (Scutellaria) and Huanglian (Coptis); For those with severe dampness, add Zelan (Herba Lycopi), Yimucao (Motherwort), and Cheqianzi (Plantago asiatica). For those with fatigue, add Dangshen (Codonopsis pilosula) and Baizhu (white atractylodes rhizome).

6.2.4 Liver-Kidney Yin Deficiency Syndrome

Therapeutic principle: Nourishing liver and kidney, unblock the collaterals to improve vision.

Prescription: Mingmu Dihuang pill (*Shen Shi Yao Han*). Shengdihuang (Unprocessed Rehmannia Root), Shudihuang (Prepared Rehmannia Root), Shanzhuyu (Asiatic Cornelian Cherry Fruit), Shanyao (Common Yam Rhizome), Zexie (Rhizoma Alismati), Mudanpi (Tree Peony Root Bark), Fushen (Indianbread with Pine), Danggui (Chinese Angelica), Chaihu (Chinese Thorowax Root), Wuweizi (Chinese Magnoliavine Fruit). (Evidence level: D, strongly recommended)

Modification: For those those with fever in chest, palm or sole, and those with hot flushes and night sweat, add Zhimu (Anemarrhena asphodeloides) and Huangbai (Phellodendron amurense); For those with dry mouth and throat, add Shihu (Dendrobium) and Tianhuafen (Trichosanthin). For those with weak hands and feet, add Duzhong (Eucommia ulmoides), Sangjisheng (Parasitic loranthus), Chuanduan (Kawasaki); For cases with insomnia, add fried Suanzaoren (Semen Ziziphi Spinosa), Yuanzhi (Polygala root), Jixueteng (Caulis Spatholobi).

6.3 Chinese patent medicine

The selection of Chinese patent medicine must be suitable for the syndrome type of the disease, and blind use must be avoided.

Xuefu Zhuyu pill: used for qi stagnation and blood stasis syndrome, 1-2 pills once, twice a day. (Level of evidence D, strongly recommended)

Fufang Danshen Tablet: for qi stagnation and blood stasis syndrome, 3 tablets at a time, 3 times a day. (Level of evidence D, strongly recommended)

Danhong Huayu oral solution: used for qi stagnation and blood stasis syndrome, 1-2 at a time, 3 times a day. (Level of evidence D, strongly recommended)

Mingmu Dihuang Pill: used for deficiency of liver and kidney yin, 9g once, twice a day. (Level of evidence D, strongly recommended)

Qiju Dihuang Pill: used for deficiency of liver and kidney yin, 1 pill at a time, 2 times a day. (Level of evidence D, strongly recommended)

Tianma Gouteng Granule: used for hyperactivity of liver Yang, one bag at a time, three times a day. (Level of evidence D, strongly recommended)

Naoliqing pill: used for hyperactivity of liver Yang, 10 pills at a time, twice a day. (Level of evidence D, strongly recommended)

Ditan pill: used for phlegm heat syndrome, 6g at a time, once a day. (Level of evidence D, strongly recommended)

6.4 Other therapies

6.4.1 Acupuncture

Compiled from the clinical literature and relevant teaching materials of acupuncture syndrome differentiation and treatment in the intervention of NAION, combined with the consensus of experts. (Evidence level: D, strongly recommended)

Main acupoints: Jingming, Qiuhou(or Chengqi), Tongziliao, Taiyang, Zusanli, Sanyinjiao;

Matching acupoints:

Qi stagnation and blood stasis syndrome: Baihui, Neiguan, Yanglingquan, Taixi

Hyperactivity of liver yang syndrome: Fengchi, Zanzhu, Neiguan, Xingjian, Taichong

Phlegm heat accumulation syndrome: Fengchi, Hegu, Taiyang, Chize and Lieque

Liver-kidney yin deficiency syndrome: Shangming, Taixi, Chize, Dadun

6.4.2 Pressing beans on ear acupoints

Acupoints: Eye, Eye 1, Eye 2, Liver and Kidney. (Evidence level: D, strongly recommended)

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ANNEX A
(Informative Appendix)

Evidence Evaluation and Recommendation Principle

A.1 Evaluation and Grading of Evidence

The process of screening and evaluation of the literature is carried out independently by two evaluators. If the views of the two parties are inconsistent, they would resolve through negotiation or adjudication by a third one. See the table below for details:

Study design	Initial level of evidence	Upgrading/Downgrading factor	Level of evidence	Description
Randomized controlled trials	High	Risk of Bias	-1 Serious -2 Very serious	High(A) Confident that the true effect is similar to the estimated effect
		Inconsistency	-1 Serious -2 Very serious	Moderate(B) Moderately confident that the true effect is close to the estimated, but there could be also markedly difference
		Indirection	-1 Serious -2 Very serious	
		Imprecision	-1 Serious -2 Very serious	Low(C) The true effect might be markedly different from the estimated effect
Observational studies	Low	Publication bias	-1 Likely -2 Very likely	Very low(D) The true effect is probably markedly different from the estimated effect
		Large effect size	+1 Large +2 Very large	
		Dose-effect relationship	+1 Obvious correlated	
		Confounding factor	+1 Increased effect +1 Markedly decreased effect	

A.2 Recommended principle

The fact that most of studies on the treatment of nonarteritic anterior ischemic optic neuropathy in TCM are not comprehensive, the design of studies is often less standardized, the selection of formula is diverse, and the efficacy standard is not uniform, which attribute to the outcome bias. Therefore, all the evidences are required to obtain expert consensus before being included into the recommendation.

The general principle of the expert consensus is that if the total number of experts who strongly recommend one treatment exceeds 75%, then it is strong recommendation. If the number of experts who recommend it is below or equal to 50%, then it is not recommended; other situations are sorted into the weak recommendation.

ANNEX B
(Informative Appendix)
Announcement of Interest Conflicts

All the participants of the drafting Committee declared that no conflicts of interest with any group.

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