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世界中医药学会联合会

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国际中医临床实践指南 睑板腺功能障碍

International clinical practice guideline of Chinese medicine
Meibomian gland dysfunction
(征求意见稿, CD)

世界中联国际组织标准

International Standard of WFCMS

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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。

主要起草单位：湖南中医药大学第一附属医院、中国中医科学院眼科医院、山东中医药大学附属医院、山东中医药大学附属眼科医院。

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本文件的起草程序遵守了世界中医药学会联合会发布的 SCM1.1-2021《标准化工作导则第1部分：标准制修订与发布》。

本文件翻译人员为***。若发生异议，以中文文本为准。

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引 言

本文件制定的目的在于进一步规范了睑板腺功能障碍的中医临床诊断与治疗，为国际中医师临床实践提供了睑板腺功能障碍的中医药治疗策略与方法。本文件简明实用，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。

已发布的《干眼临床诊疗专家共识（2013 年）》、《我国睑板腺功能障碍诊断与治疗专家共识（2017 年）》、《中国干眼专家共识（2020 年）》、《中国睑板腺功能障碍专家共识：定义和分类（2023 年）》、《中国睑板腺功能障碍专家共识：诊断和治疗（2023 年）》、《中国干眼临床诊疗专家共识（2024 年）》、《中医临床诊疗指南释义眼科疾病分册》自施行以来，对睑板腺功能障碍的中医诊疗发挥了较好的指导作用。但既往中医临床指南限于研究条件，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和应用，证据级别较高的研究成果不断涌现，在既往指南的基础上，从证据级别较高的中医药治疗睑板腺功能障碍高质量研究中筛选出临床疗效可靠、安全、便于推广的治疗方法，以提高中医药治疗睑板腺功能障碍的临床疗效。

本文件是依据现有研究证据和科学评价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 睑板腺功能障碍

1 范围

本文件规定了睑板腺功能障碍的中医术语和定义、诊断、辨证和治疗等。

本文件适用于中医眼科临床执业医师对睑板腺功能障碍的诊断和治疗依据，中西医结合、西医眼科执业医师和其他学科中医师也可参照本文件相关内容。

2 规范性引用文件

本文件无规范性引用文件。

3 术语和定义

下列术语和定义适用于本文件。

3.1

睑板腺功能障碍

一种以睑板腺终末导管阻塞和（或）睑酯分泌的质或量异常为主要特征的慢性、弥漫性睑板腺病变，临床上可引起泪膜异常和眼表炎性反应，从而导致眼部刺激症状，严重时可能损伤角膜而影响视功能。

注：睑板腺功能障碍属于中医学“白涩症”“睑弦赤烂”范畴。

3.2

白涩症

双眼常干涩不爽，瞬目频频，异物感，烧灼感，眼痛，眼痒，视物昏蒙，目倦，眵多粘滞，胞睑发红。

注：《审视瑶函·卷之三·白痛》谓：“不肿不赤，爽快不得，沙涩昏朦，名曰白涩。”类似于《证治准绳》中记载“目自觉干涩不爽利，而视物昏花也”的“干涩昏花”之名。

3.3

睑弦赤烂

睑弦（眼睑边缘）红赤、肿胀、溃烂；或见鳞屑附着，或见脓疱、溃疡、黄痂。患者自觉刺痒、灼热、畏光、流泪，严重者可致睫毛脱落或倒生。

4 诊断

无特异性临床症状，主要症状有眼干涩，尤其晨起重，下午轻，眼痛、眼磨、烧灼感、眼痒、异物感、搔抓感，视物模糊，视力波动，晨起明显，眼部分泌物增多，晨起眼睑发黏、睁眼困难、睑缘发红。常见典型体征包括睑缘改变、睑板腺分泌异常和睑板腺缺失。

5 辨证

5.1 风热外袭证

双眼睑缘红赤灼热，肿胀疼痛；睑缘可见黄色黏稠眼眵，晨起睫毛黏连；自觉眼睑刺痒、干涩，或伴异物感、畏光、流泪。或见轻微发热、头痛、鼻塞流涕等风热表证，舌质偏红，舌苔薄黄，脉浮数。

5.2 脾胃湿热证

双眼干涩隐痛，灼热感，白睛稍有赤脉，睑缘红赤，眦部泡沫样眼眵等；并伴有口黏或口臭，便秘不爽，溲赤而短；舌红，苔黄腻，脉濡数。

5.3 脾肾阴虚证

双眼眼睑干涩、灼热感，甚至轻微刺痛，久视后加重；睑缘干燥少泽，或见细小鳞屑；伴视物模糊、不耐久视；白睛轻微红赤。或伴口干咽燥、食欲减退、腰膝酸软、头晕耳鸣、五心烦热、大便偏干，舌质红，舌苔少或剥苔，脉细弱或细数。

5.4 痰湿阻胞证

双眼睑弦油腻黏着，可见黄色黏稠眼眵，晨起时黏附睫毛，难以睁眼；自觉眼睑发沉、肿胀感，甚至轻度下垂，晨起时明显；视物模糊，眨眼后稍缓解。或伴有头面油腻，口黏腻，食欲不振，脘腹胀满。大便黏滞不爽，小便浑浊。舌体胖大，舌苔白腻或黄腻，脉滑或濡缓。

5.5 脾胃气虚证

双眼自觉眼睑沉重，睁眼费力，甚至轻微下垂感，久视后加重；睑弦颜色淡红或苍白，伴有眼睛干涩不适，视物模糊、不耐久视；白睛淡红，但无显著肿痛。面色萎黄或苍白，精神不振，肢体倦怠，少气懒言；或伴食欲减退，食后腹胀；大便溏薄或不成形，舌质淡胖，边有齿痕，舌苔薄白，脉细弱或缓弱。

5.6 肝郁脾虚证

双眼干涩不爽，眼胀，眼睑频眨，胞睑重坠，不耐久视；伴有失眠，焦虑，纳差等症状；舌淡红，舌体胖大边有齿痕，苔滑腻，脉弦。

5.7 肝肾阴虚证

双眼干涩，异物感，白睛隐隐淡红，视物欠佳，久视则诸症加重；伴有口干少津，腰膝酸软，头晕耳鸣，夜寐多梦等；舌红少苔，脉细。

5.8 肝血不足证

双目干涩，视物疲劳，视力减退，目痒时作，眉骨酸痛；伴头晕，倦怠，面白无华等；舌淡苔白，脉弦细弱。

6 治疗

6.1 治疗原则

中医治疗原则根据其病因病机有所不同，分别采用清利湿热、调理肠胃、疏肝健脾、补益肝肾、滋阴养血等疗法。本病当从肝脾肾着手，辨明虚实，对症治疗。

6.2 方药

6.2.1 风热外袭证

治法：疏风清热、解毒通络。

主方：银翘散加减。

常用药：金银花、连翘、薄荷、黄芩等。（证据级别 D，强推荐）

6.2.2 脾胃湿热证

治法：清利湿热、调理肠胃。

主方：三仁汤加减。

常用药：杏仁、白豆蔻、薏苡仁、制半夏、厚朴、滑石、通草、竹叶等。（证据级别 D，强推荐）

加减：眼睑肿胀、睑缘红赤、睑板腺液排泄不畅者汤剂中加白僵蚕、桔梗、玄参。

6.2.3 脾肾阴虚证

治法：滋阴润燥，补益脾肾。

主方：杞菊地黄丸合生脉饮加减。

常用药：熟地黄、山茱萸、枸杞子、菊花、麦冬、山药、女贞子、旱莲草等。（证据级别 D，强推荐）

加减：若脾阴虚明显，可加沙参麦冬汤。

6.2.4 痰湿阻胞证

治法：健脾化痰，利湿通络。

主方：二陈汤合平胃散加减。

常用药：茯苓、白术、苍术、半夏、陈皮、薏苡仁、泽泻等。（证据级别 D，强推荐）

加减：若湿热明显，可加黄芩、栀子、薏苡仁。

6.2.5 脾胃气虚证

治法：健脾益气，升阳通络。

主方：补中益气汤加减。

常用药：黄芪、党参、白术、茯苓、山药、炙甘草等。（证据级别 D，强推荐）

加减：若兼血虚，加当归、白芍；若湿重，加茯苓、薏苡仁。

6.2.6 肝郁脾虚证

治法：疏肝清热、健脾养血。

主方：加味逍遥散加减。

常用药：柴胡、白芍、薄荷、当归、牡丹皮、党参、茯苓、白术、菊花、密蒙花、炙甘草等。（证据级别 D，强推荐）

加减：有明显的失眠、焦虑、心烦、纳差等自觉症可加入夜交藤、酸枣仁、五味子等养心安神。

6.2.7 肝肾阴虚证

治法：滋补肝肾、清热明目。

主方：杞菊地黄汤加减。

常用药：菊花、枸杞子、熟地黄、山药、山萸肉、泽泻、牡丹皮、茯苓等。（证据级别 D，强推荐）

加减：方中可加百合、生地黄以增养阴生津之力。

6.2.8 肝血不足证

治法：养血润目。

主方：四物汤加减。

常用药：熟地、当归、白芍、川芎。

加减：黑睛星翳者可加密蒙花、菊花、蝉蜕退翳明目；视物昏花加枸杞、菊花；眼睑瞤动加钩藤、天麻；干涩严重加女贞子、旱莲草。

6.3 其他疗法

6.3.1 针刺疗法

根据针灸辨证论治干预视神经萎缩的临床文献和相关教材，结合专家共识整理而得。

选取睛明、上睛明、攒竹、四白、承泣、太阳、丝竹空、阳白等眼周穴位，远穴选取养老、合谷、三阴交，每次选 3~4 穴，平补平泻手法，每日一次，每次留针 30 分钟，10 日为 1 个疗程。（证据级别 D，强推荐）

6.3.2 中药熏蒸

选用菊花、枸杞子、金银花、密蒙花、夏枯草、刺蒺藜、石决明、生地黄等清肝养阴明目，煎汤熏症患眼，每日 2~3 次。（证据级别 D，强推荐）

6.3.3 雾化法

可选用柴胡、密蒙花、鬼针草、玄参、枸杞子等清肝养阴之品，煎煮取汁，经超声雾化设备直接作用于眼局部，每日 1 次。（证据级别 D，强推荐）

附录 A
(资料性)
睑板腺功能障碍诊断

A.1 中医诊断标准

(ZYXH/T 287-305-2012 中医眼科常见病诊疗指南 *Guidelines for Diagnosis and Treatment of Common Internal Diseases in Chinese Medicine—Diseases of Chinese Medicine*, 《中国睑板腺功能障碍专家共识: 定义和分类(2023 年)》, 《中国睑板腺功能障碍专家共识: 诊断与治疗(2023 年)》)

诊断 MGD 应重点关注 2 个方面体征, 即睑板腺开口状态和睑板腺分泌情况。

①睑板腺开口异常: 包括睑板腺开口堵塞、狭窄、移位、闭锁、先天性缺乏等。

②睑板腺分泌异常: 包括睑板腺排出能力异常和(或)分泌物性状异常。

①和②出现任意一条, 即可诊断为 MGD。

当患者具备以上任意一条但无临床症状时, 诊断为无症状型 MGD。及时对此类患者进行诊断并启动治疗, 有助于延缓和阻止疾病进展。

A.2 辅助检查

A.2.1 裂隙灯显微镜检查

观察睑缘及睑板腺开口形态: 睑缘充血, 出现毛细血管扩张、过度角化、形态不规整、新生血管, 睑板腺口出现脂帽、隆起、脂栓等, 提示睑板腺功能障碍(meibomian gland dysfunction, MGD)。

A.2.2 睑板腺排出能力及分泌物性状评分

使用睑板腺检查器, 每只眼上下眼睑各检测鼻侧、中间、颞侧 3 个部位, 每个部位观察 5 个腺体。(参考《中国干眼临床诊疗专家共识(2024 年)》)

注: 评分标准: ①睑板腺分泌物排出评分: 所有腺体开口均有分泌物排出为 0 分; 3~4 个腺体开口有分泌物排出为 1 分; 1~2 个腺体开口有分泌物排出为 2 分; 所有腺体开口均无分泌物排出为 3 分。每只眼的上下眼睑分别评分, 总分最高为 9 分, 3 分及以上为异常。②睑板腺分泌物性状评分: 透明清亮液状分泌物为 0 分, 混浊样液状分泌物为 1 分, 混浊颗粒状分泌物为 2 分, 浓稠牙膏状分泌物或无法排出为 3 分。每只眼的上下眼睑分别评分, 0 分为正常, 1 分及以上为异常。

A.2.3 睑板腺结构形态检查

睑板腺红外成像技术观察和评估睑板腺的状况, 确定睑板腺组织的缺失范围和程度。每只眼的上下睑分别进行评分记录, 0 分为正常, 1 分及以上为异常。

注: 评分标准: 0 分: 睑板腺无缺失; 1 分: 睑板腺缺失比例 $<1/3$; 2 分: 睑板腺缺失比例为 $1/3\sim 2/3$; 3 分: 睑板腺缺失比例 $>2/3$ 。

A.2.4 泪膜和眼表的检查

检测和分级标准按照《中国干眼临床诊疗专家共识(2024 年)》: (1) TBUT: TBUT $>10s$ 为正常。目前常使用荧光素染色泪膜破裂时间(fluorescein breakup time, FBUT)和非侵入性泪膜破裂时间(non-invasive tear breakup time, NIBUT)。荧光素的量和浓度可影响检测结果, 须去除试纸中多余的液体, 或者采用窄试纸(宽度为 1 mm); 此外, 可用无菌滴管吸取 2 μ l

荧光素钠点入结膜囊，自然瞬目 3 次后观察。FBUT 一般检测 3 次，取平均值；部分研究者建议取 3 次检测的最大值。眼表综合分析仪可自动评估 NIBUT。NIBUT 较传统 FBUT 检测值高。泪膜迅速破裂常见于睑板腺疾病和水液缺乏型干眼。（2）角膜荧光素染色：钴蓝滤光片下分区域观察角膜荧光素染色情况，并进行评分。临床常采用三分法：将角膜分为上、中、下 3 个区域，根据每个区域角膜上皮荧光素染色情况进行评分，无染色为 0 分，染色点数 1~30 个为 1 分，染色点数>30 个且染色点未融合为 2 分，出现角膜片状染色融合、丝状物及溃疡等为 3 分；总分为 9 分。

A.2.5 泪膜脂质层厚度的检查

使用眼表干涉仪，根据图像的颜色和亮度估计脂质层厚度。脂质层厚度应为 15~157 nm，平均厚度为 42 nm。诊断 MGD 的脂质层厚度界值为 75 nm，灵敏度为 65.8%，特异度为 63.4%，其在干眼诊断中的价值尚不明确。

附录 B
(规范性)

睑板腺功能障碍中医治疗模式图

睑板腺功能障碍中医治疗模式见图 B.1。

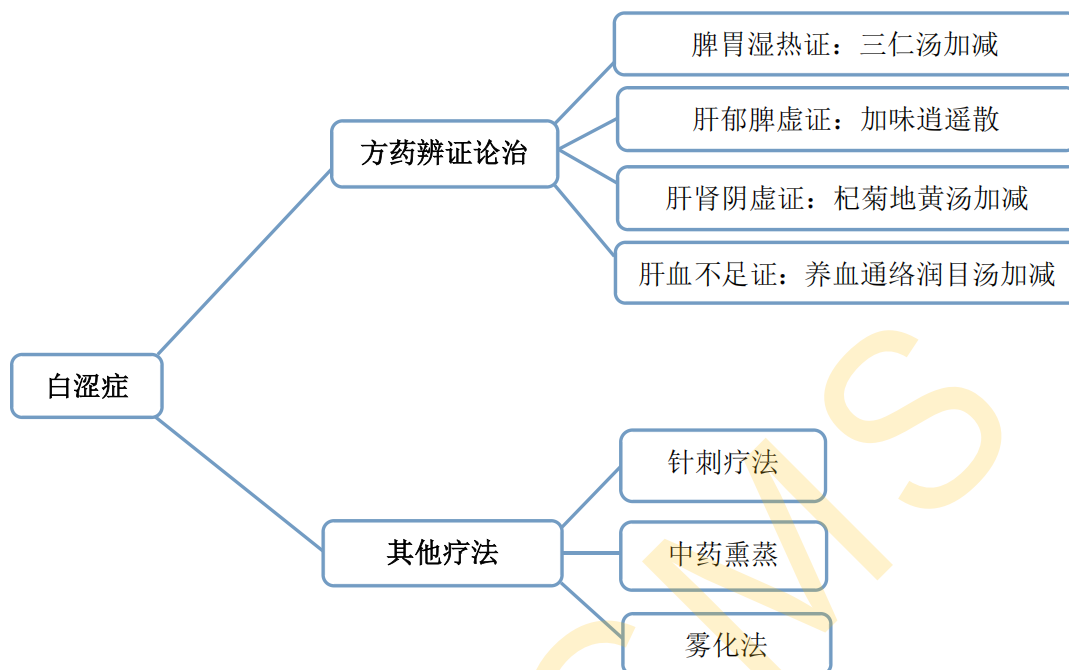


图 B.1 睑板腺功能障碍中医治疗模式

附录 C
(资料性)
证据评价及推荐原则

C.1 证据的评价和分级标准

参照 GRADE (Grading of Recommendations Assessment, Development and Evaluation) 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 C.1。

表 C.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		
			-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		
			-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		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 混杂因素	+1 明显关联	极低 (D)	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
			+1 效应增加		
			+1 效应显著降低		

C.2 推荐原则

由于中医药治疗睑板腺功能障碍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 D
(资料性)
利益冲突的宣言

《国际中医临床实践指南 甲状腺功能障碍》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。

WFCMS

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Foreword

Please note that certain contents of this document may involve patents. The issuing body of this document assumes no responsibility for identifying patents.

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Introduction

The purpose of formulating this document is to further standardize the clinical diagnosis and treatment of meibomian gland dysfunction with traditional Chinese medicine (TCM), and provide TCM treatment strategies and methods for international TCM practitioners in clinical practice against the disease. This document is concise, practical and highly operable, and can serve as an important reference for clinical practice, diagnosis and treatment norms as well as quality evaluation.

Since their implementation, the documents issued in China including <Expert Consensus on Clinical Diagnosis and Treatment of Dry Eye (2013)>, <Expert Consensus on the Diagnosis and Treatment of Meibomian Gland Dysfunction in China (2017)>, <Chinese Expert Consensus on Dry Eye (2020)>, <Chinese Expert Consensus on Meibomian Gland Dysfunction: Definition and Classification (2023)>, <Chinese Expert Consensus on Meibomian Gland Dysfunction: Diagnosis and Treatment (2023)>, <Expert Consensus on Clinical Diagnosis and Treatment of Dry Eye in China (2024)> and <Annotation of Clinical Diagnosis and Treatment Guidelines of Traditional Chinese Medicine - Ophthalmology Volume> have played a positive guiding role in the TCM diagnosis and treatment of meibomian gland dysfunction. However, restricted by research conditions, previous TCM clinical guidelines mostly adopted expert consensus as the recommendation standard, resulting in low international recognition. With the rapid development and application of evidence-based medicine research in the field of TCM, an increasing number of research results with high levels of evidence have emerged. On the basis of previous guidelines, this document screens out the treatment methods with reliable clinical efficacy, good safety and easy popularization from the high-quality research on TCM treatment of meibomian gland dysfunction with high levels of evidence, so as to improve the clinical efficacy of TCM in the treatment of meibomian gland dysfunction.

This document is a declarative one formulated based on existing research evidence and scientific evaluation methods. In clinical practice, physicians may refer to this document and conduct individualized treatment for patients in combination with their specific conditions.

International Clinical Practice Guideline of Traditional Chinese Medicine Meibomian Gland Dysfunction

1 Scope

This document specifies the TCM terms and definitions, diagnosis, syndrome differentiation and treatment of meibomian gland dysfunction (MGD).

It serves as the basis for the diagnosis and treatment of MGD for clinical practitioners of TCM ophthalmology, and can also be referred to by practitioners of integrated traditional Chinese and Western medicine, Western ophthalmology, as well as TCM practitioners of other disciplines.

2 Normative References

There are no normative references in this document.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Meibomian Gland Dysfunction

A chronic and diffuse lesion of the meibomian glands, mainly characterized by obstruction of the terminal ducts of the meibomian glands and/or abnormal quality or quantity of meibum secretion. Clinically, it can cause tear film abnormalities and ocular surface inflammatory reactions, leading to ocular irritation symptoms, and may damage the cornea and impair visual function in severe cases.

Note : Meibomian gland dysfunction falls into the categories of “Bai Se Zheng (Dry Eye Syndrome)” and “Jian Xian Chi Lan (Eyelid Margin Erosion)” in traditional Chinese medicine.

3.2

Bai Se Zheng (Dry Eye Syndrome)

Persistent dryness and discomfort in both eyes, frequent blinking, foreign body sensation, burning sensation, eye pain, eye itching, blurred vision, eye fatigue, sticky and excessive eye discharge, and redness of the eyelids.

Note: 《Shen Shi Yao Han (Mirror of Ophthalmology)》, Volume 3: “Bai Tong (White Pain)” states: “No swelling or redness, yet a constant sense of discomfort, with a sandy, dry and blurred vision—this is named Bai Se.” It is similar to the term “Gan Se Hun Hua (Dry and Blurred Vision)” recorded in 《Zheng Zhi Zhun Sheng (Standards for Diagnosis and Treatment)》, which describes “a subjective feeling of dry and uncomfortable eyes with blurred vision”.

3.3

Jian Xian Chi Lan (Eyelid Margin Erosion)

Redness, swelling and erosion of the eyelid margin; or the presence of adherent scales, pustules, ulcers or yellow crusts. Patients experience subjective pruritus, burning sensation, photophobia and lacrimation; in severe cases, it may lead to eyelash loss or trichiasis.

4 Diagnosis

There are no specific clinical symptoms. The main symptoms include dry eyes (especially severe in the morning and alleviated in the afternoon), eye pain, foreign body sensation in the eyes, burning sensation, eye itching, scratching sensation, blurred vision, fluctuating visual acuity (prominent in the morning), increased eye discharge, sticky eyelids and difficulty in opening the eyes in the morning, and redness of the eyelid margin. Common typical signs include eyelid margin changes, abnormal meibomian gland secretion and meibomian gland loss.

5 Syndrome Differentiation

5.1 Damp-Heat in the Spleen and Stomach Syndrome

Redness, burning sensation, swelling and pain of the eyelid margins in both eyes; yellow and sticky eye discharge at the eyelid margin, with eyelashes sticking together in the morning; subjective itching and dryness of the eyelids, or accompanied by foreign body sensation, photophobia and lacrimation. There may also be mild fever, headache, nasal congestion and runny nose, and other exterior wind-heat manifestations; slightly red tongue with thin yellow fur, floating and rapid pulse.

5.2 Liver Stagnation with Spleen Dampness Syndrome

Dryness and dull pain in both eyes, burning sensation, slight red collaterals in the bulbar conjunctiva, redness of the eyelid margin, frothy eye discharge at the canthi, etc.; accompanied by sticky mouth or halitosis, difficult defecation, scanty and reddish urine; red tongue with yellow and greasy fur, soft and rapid pulse.

5.3 Qi Deficiency of the Spleen and Stomach Syndrome

Dryness and burning sensation of the eyelids in both eyes, or even slight tingling pain that worsens after prolonged vision; dry and lusterless eyelid margins, or fine scales on the margins; accompanied by blurred vision and intolerance to prolonged vision; slight redness of the bulbar conjunctiva. May also be accompanied by dry mouth and throat, poor appetite, soreness and weakness of the waist and knees, dizziness and tinnitus, heat in the palms, soles and chest, and dry stool; red tongue with scanty or peeled fur, thready and weak or thready and rapid pulse.

5.4 Liver and Kidney Insufficiency Syndrome

Oily and sticky eyelid margins of both eyes, with yellow and thick eye discharge that adheres to the eyelashes in the morning and makes it difficult to open the eyes; subjective heaviness and swelling sensation of the eyelids, or even mild ptosis, prominent in the morning; blurred vision that is slightly relieved after blinking. May also be accompanied by oily head and face, sticky and greasy sensation in the mouth, poor appetite, epigastric and abdominal distension; sticky and unsatisfactory defecation, turbid urine; enlarged tongue body with white greasy or yellow greasy fur, slippery or soft and moderate pulse.

5.5 Qi Deficiency of the Spleen and Stomach Syndrome

Subjective heaviness of both eyelids, difficulty in opening the eyes, even a slight sense of ptosis that worsens after prolonged vision; pale red or pale eyelid margins, accompanied by dry and uncomfortable eyes, blurred vision and intolerance to prolonged vision; pale red bulbar conjunctiva without significant swelling and pain. Sallow or pale complexion, listlessness, lassitude of the limbs, shortness of breath and disinclination to speak; may also be accompanied by poor appetite, abdominal distension after meals, loose or unformed stool; pale and fat tongue with tooth marks on the edges, thin and white fur, thready and weak or slow and weak pulse.

5.6 Liver Stagnation with Spleen Deficiency Syndrome

Dryness and discomfort of both eyes, eye distension, frequent blinking of the eyelids, heaviness and drooping of the eyelids, and intolerance to prolonged

vision; accompanied by insomnia, anxiety, poor appetite and other symptoms; pale red tongue with enlarged body and tooth marks on the edges, slippery and greasy fur, string-like pulse.

5.7 Liver and Kidney Yin Deficiency Syndrome

Dryness of both eyes, foreign body sensation, faint pale redness of the bulbar conjunctiva, and poor vision, with all symptoms aggravated after prolonged vision; accompanied by dry mouth with scanty fluid, soreness and weakness of the waist and knees, dizziness and tinnitus, and dream-disturbed sleep at night; red tongue with scanty fur, thready pulse.

5.8 Liver Blood Insufficiency Syndrome

Dryness of both eyes, visual fatigue, decreased visual acuity, intermittent eye itching, and soreness of the superciliary ridges; accompanied by dizziness, lassitude, and pale lusterless complexion; pale tongue with white fur, string-like, thready and weak pulse.

6 Treatment

6.1 Therapeutic Principles

TCM therapeutic principles vary according to the etiology and pathogenesis of the disease, adopting therapies such as clearing away damp-heat, regulating the spleen and stomach, soothing the liver and invigorating the spleen, tonifying the liver and kidney, and nourishing yin and blood respectively. The disease should be treated by focusing on the liver, spleen and kidney, distinguishing deficiency and excess patterns, and administering symptomatic treatment.

6.2 Herbal Prescriptions

6.2.1 Wind-Heat External Attack Syndrome

Therapeutic method: Dispel wind and clear heat, resolve toxin and unblock collaterals.

Main prescription: Modified Yinqiao San.

Commonly used herbs: Lonicerae Japonicae Flos, Forsythiae Fructus, Menthae Haplocalycis Herba, Scutellariae Radix, etc. (Evidence level D, strong recommendation)

6.2.2 Damp-Heat in the Spleen and Stomach Syndrome

Therapeutic method: Clear away damp-heat and regulate the spleen and

stomach.

Main prescription: Modified Sanren Decoction.

Commonly used herbs: Armeniacae Semen Amarum, Amomi Fructus Rotundus, Coicis Semen, Pinelliae Rhizoma Preparatum, Magnoliae Officinalis Cortex, Talcum, Tetrapanacis Medulla, Lophatheri Herba, etc. (Evidence level D, strong recommendation)

Modifications: Add Bombyx Batryticatus, Platycodonis Radix and Scrophulariae Radix to the decoction for patients with eyelid swelling, red eyelid margin and poor meibomian gland fluid excretion.

6.2.3 Spleen and Kidney Yin Deficiency Syndrome

Therapeutic method: Nourish yin and moisten dryness, tonify the spleen and kidney.

Main prescription: Modified Qiju Dihuang Pill combined with Shengmai Yin.

Commonly used herbs: Rehmanniae Radix Preparata, Corni Fructus, Lycii Fructus, Chrysanthemi Flos, Ophiopogonis Radix, Dioscoreae Rhizoma, Ligustri Lucidi Fructus, Ecliptae Herba, etc. (Evidence level D, strong recommendation)

Modifications: Add Shashen Maidong Decoction if spleen yin deficiency is prominent.

6.2.4 Phlegm-Dampness Obstructing the Eyelid Syndrome

Therapeutic method: Invigorate the spleen and resolve phlegm, drain dampness and unblock collaterals.

Main prescription: Modified Erchen Decoction combined with Pingwei San.

Commonly used herbs: Poria, Atractylodis Macrocephalae Rhizoma, Atractylodis Rhizoma, Pinelliae Rhizoma, Citri Reticulatae Pericarpium, Coicis Semen, Alismatis Rhizoma, etc. (Evidence level D, strong recommendation)

Modifications: Add Scutellariae Radix, Gardeniae Fructus and Coicis Semen if damp-heat is prominent.

6.2.5 Qi Deficiency of the Spleen and Stomach Syndrome

Therapeutic method: Invigorate the spleen and benefit qi, elevate yang and unblock collaterals.

Main prescription: Modified Buzhong Yiqi Decoction.

Commonly used herbs: Astragali Radix, Codonopsis Radix, Atractylodis Macrocephalae Rhizoma, Poria, Dioscoreae Rhizoma, Glycyrrhizae Radix Preparata, etc. (Evidence level D, strong recommendation)

Modifications: Add Angelicae Sinensis Radix and Paeoniae Radix Alba if complicated with blood deficiency; add Poria and Coicis Semen if dampness is

severe.

6.2.6 Liver Stagnation with Spleen Deficiency Syndrome

Therapeutic method: Soothe the liver and clear heat, invigorate the spleen and nourish blood.

Main prescription: Modified Jiawei Xiaoyao San.

Commonly used herbs: Bupleuri Radix, Paeoniae Radix Alba, Menthae Haplocalycis Herba, Angelicae Sinensis Radix, Moutan Cortex, Codonopsis Radix, Poria, Atractylodis Macrocephalae Rhizoma, Chrysanthemi Flos, Buddlejae Flos, Glycyrrhizae Radix Preparata, etc. (Evidence level D, strong recommendation)

Modifications: Add Caulis Polygoni Multiflori, Ziziphi Spinosae Semen and Schisandrae Chinensis Fructus to nourish the heart and soothe the nerves for patients with obvious subjective symptoms such as insomnia, anxiety, dysphoria and poor appetite.

6.2.7 Liver and Kidney Yin Deficiency Syndrome

Therapeutic method: Nourish the liver and kidney, clear heat and improve eyesight.

Main prescription: Modified Qiju Dihuang Decoction.

Commonly used herbs: Chrysanthemi Flos, Lycii Fructus, Rehmanniae Radix Preparata, Dioscoreae Rhizoma, Corni Fructus, Alismatis Rhizoma, Moutan Cortex, Poria, etc. (Evidence level D, strong recommendation)

Modifications: Lillii Bulbus and Rehmanniae Radix may be added to the prescription to enhance the effect of nourishing yin and promoting fluid production.

6.2.8 Liver Blood Insufficiency Syndrome

Therapeutic method: Nourish blood and moisten the eyes.

Main prescription: Modified Siwu Decoction.

Commonly used herbs: Rehmanniae Radix Preparata, Angelicae Sinensis Radix, Paeoniae Radix Alba, Chuanxiong Rhizoma.

Modifications: Add Buddlejae Flos, Chrysanthemi Flos and Cicadae Periostracum to remove nebula and improve eyesight for patients with corneal nebula; add Lycii Fructus and Chrysanthemi Flos for blurred vision; add Uncariae Ramulus cum Uncis and Gastrodiae Rhizoma for eyelid twitching; add Ligustri Lucidi Fructus and Ecliptae Herba for severe dryness.

6.3 Other Therapeutic Methods

6.3.1 Acupuncture Therapy

Summarized based on clinical literature on acupuncture intervention for optic atrophy based on syndrome differentiation and treatment, relevant textbooks, and expert consensus.

Acupoint selection: Periocular acupoints including Jingming, Shangjingming, Cuanzhu, Sibai, Chengqi, Taiyang, Sizhukong and Yangbai; distant acupoints including Yanglao, Hegu and Sanyinjiao. Select 3 to 4 acupoints each time, apply the even reinforcing and reducing manipulation, once a day, retain the needles for 30 minutes each time, with 10 days as one course of treatment. (Evidence level D, strong recommendation)

6.3.2 Chinese Herbal Fumigation

Select herbs for clearing the liver, nourishing yin and improving eyesight such as Chrysanthemi Flos, Lycii Fructus, Lonicerae Japonicae Flos, Buddlejae Flos, Prunellae Spica, Tribuli Fructus, Haliotidis Concha and Rehmanniae Radix. Decoct the herbs with water and fumigate the affected eyes, 2 to 3 times a day. (Evidence level D, strong recommendation)

6.3.3 Atomization Therapy

Select herbs for clearing the liver and nourishing yin such as Bupleuri Radix, Buddlejae Flos, Bidens Pilosa, Scrophulariae Radix and Lycii Fructus. Decoct the herbs with water to extract the juice, and apply the juice directly to the ocular local area via an ultrasonic atomization device, once a day. (Evidence level D, strong recommendation)

Appendix A

(Informative)

Diagnosis of Meibomian Gland Dysfunction

A.1 TCM Diagnostic Criteria

(ZYXH/T 287-305-2012 Clinical Diagnosis and Treatment Guidelines for Common Ophthalmic Diseases in Traditional Chinese Medicine, Chinese Expert Consensus on Meibomian Gland Dysfunction: Definition and Classification (2023), Chinese Expert Consensus on Meibomian Gland Dysfunction: Diagnosis and Treatment (2023))

The diagnosis of MGD shall focus on two aspects of signs: the status of meibomian gland orifices and the secretion of meibomian glands.

- ① Abnormal meibomian gland orifices: including obstruction, stenosis, displacement, atresia, congenital absence of meibomian gland orifices, etc.
- ② Abnormal meibomian gland secretion: including abnormal meibomian gland excretion capacity and/or abnormal secretion properties.

MGD can be diagnosed if either ① or ② is present.

Asymptomatic MGD is diagnosed when a patient has either of the above signs but no clinical symptoms. Timely diagnosis and initiation of treatment for such patients help delay and prevent disease progression.

A.2 Auxiliary Examinations

A.2.1 Slit Lamp Microscopy

Observe the morphology of the eyelid margin and meibomian gland orifices: Eyelid margin congestion, accompanied by telangiectasia, hyperkeratosis, irregular morphology, neovascularization, as well as lipid caps, protuberances, lipid emboli at meibomian gland orifices, etc., are indicative of meibomian gland dysfunction (MGD).

A.2.2 Scoring of Meibomian Gland Excretion Capacity and Secretion Properties

A meibomian gland examiner is used to detect 3 sites (nasal, middle, temporal) on the upper and lower eyelids of each eye, with 5 glands observed at each site. (Refer to Expert Consensus on Clinical Diagnosis and Treatment of Dry Eye in China (2024))

Note: Scoring criteria: ① Meibomian gland secretion excretion score: 0 points if secretions are excreted from all gland orifices; 1 point if secretions are excreted from

3~4 gland orifices; 2 points if secretions are excreted from 1~2 gland orifices; 3 points if no secretions are excreted from all gland orifices. The upper and lower eyelids of each eye are scored separately, with a maximum total score of 9 points; a score of 3 points and above is considered abnormal. ② Meibomian gland secretion property score: 0 points for transparent and clear liquid secretions; 1 point for turbid liquid secretions; 2 points for turbid granular secretions; 3 points for thick toothpaste-like secretions or inability to excrete. The upper and lower eyelids of each eye are scored separately, with 0 points as normal and a score of 1 point and above as abnormal.

A.2.3 Meibomian Gland Structural Morphology Examination

Meibomian gland infrared imaging technology is used to observe and evaluate the condition of meibomian glands, and determine the scope and degree of meibomian gland tissue loss. The upper and lower eyelids of each eye are scored and recorded separately, with 0 points as normal and a score of 1 point and above as abnormal.

Note: Scoring criteria: 0 points: no meibomian gland loss; 1 point: meibomian gland loss ratio < 1/3; 2 points: meibomian gland loss ratio ranging from 1/3 to 2/3; 3 points: meibomian gland loss ratio > 2/3.

A.2.4 Tear Film and Ocular Surface Examination

The detection and grading criteria are in accordance with Expert Consensus on Clinical Diagnosis and Treatment of Dry Eye in China (2024): (1) TBUT (Tear Break-Up Time): A TBUT > 10s is normal. Currently, Fluorescein Break-Up Time (FBUT) and Non-Invasive Tear Break-Up Time (NIBUT) are commonly used. The amount and concentration of fluorescein may affect the test results; excess liquid on the test strip must be removed, or a narrow test strip (1 mm in width) should be used. In addition, 2 μ l of sodium fluorescein can be drawn with a sterile dropper and instilled into the conjunctival sac, followed by observation after 3 natural blinks. FBUT is generally tested 3 times with the average value taken; some researchers recommend taking the maximum value of the 3 tests. NIBUT can be automatically assessed by an ocular surface comprehensive analyzer, and the NIBUT value is higher than that of the traditional FBUT. Rapid tear film break-up is common in meibomian gland diseases and aqueous-deficient dry eye. (2) Corneal Fluorescein Staining: Corneal fluorescein staining is observed and scored by region under a cobalt blue filter. The three-division method is commonly used in clinical practice: the cornea is divided into 3 regions (upper, middle, lower), and scored according to the condition of corneal epithelial fluorescein staining in each region: 0 points for no staining; 1 point for 1~30 staining points; 2 points for more than 30 staining points without fusion; 3

points for the appearance of flaky fused corneal staining, filiform keratitis, ulcers, etc. The total score is 9 points.

A.2.5 Tear Film Lipid Layer Thickness Examination

An ocular surface interferometer is used to estimate the lipid layer thickness based on the color and brightness of the image. The lipid layer thickness should range from 15 to 157 nm, with an average thickness of 42 nm. The cut-off value of lipid layer thickness for diagnosing MGD is 75 nm, with a sensitivity of 65.8% and a specificity of 63.4%, and its value in the diagnosis of dry eye remains unclear.

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Appendix B
(Normative)

Pattern Diagram of TCM Treatment for Meibomian Gland Dysfunction

The pattern of TCM treatment for meibomian gland dysfunction is shown in Figure B.1:

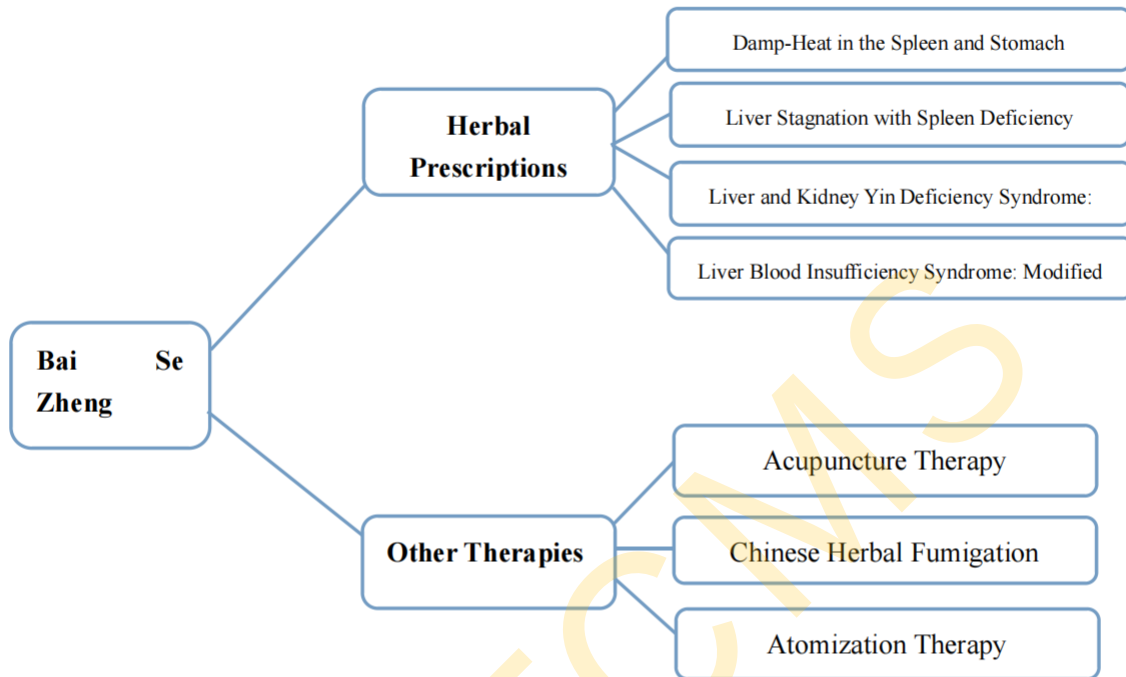


Figure B.1 Pattern of TCM Treatment for Meibomian Gland Dysfunction

Appendix C (Informative) Evidence Evaluation and Recommendation Principles

C.1 Evidence Evaluation and Grading Criteria

With reference to the GRADE (Grading of Recommendations Assessment, Development and Evaluation) grading method, randomized controlled trials are initially classified as high-quality evidence, the quality of which may be downgraded due to five factors; observational studies are classified as low-quality evidence, the quality of which may be upgraded due to three factors. The final evidence quality is divided into four levels: high, moderate, low and very low.

The literature screening and evaluation process is independently conducted by two evaluators. In case of disagreement between the two parties, the issue shall be resolved through negotiation or ruled by a third party. Details are shown in Table C.1:

Study Design	Initial Evidence Level	Downgrading/Upgrading Factor	Evidence	Level Description
Randomized Controlled Trial	High	Risk of Bias	-1 Severe	High (A) Very confident that the true value is close to the effect estimate
			-2 Very Severe	
		Inconsistency	-1 Severe	
			-2 Very Severe	
		Indirectness	-1 Severe	Moderate (B) Moderate confidence in the effect estimate: the true value may be close to the estimated efficacy, but there may also be large differences
			-2 Very Severe	
		Imprecision	-1 Severe	
			-2 Very Severe	
		Publication	-1	Low (C) Limited

		Bias	Probable		confidence in the effect estimate: the true value may differ greatly from the estimate
			-2 Very Probable		
Observational Study	Low	Large Effect Size	+1 Large		confidence in the effect estimate: the true value may differ greatly from the estimate
			+2 Very Large		
		Dose-Response Relationship/Confounder Factors	+1 Obvious Correlation	Very Low (D)	Very little confidence in the effect estimate: the true value may differ greatly from the estimate
			+1 Increased Effect		
			+1 Significantly Reduced Effect		

C.2 Recommendation Principles

Most literature studies on TCM treatment for meibomian gland dysfunction have such limitations as incomplete reporting, non-standard study design, diverse syndrome differentiation and prescription selection, and inconsistent efficacy criteria, which result in low credibility of the research findings. Therefore, the recommendation principles of this document are formulated based on a comprehensive consideration of traditional TCM theories, literature research, expert experience and other relevant factors, and all evidence shall be included in the recommendations only after reaching expert consensus.

Principles for determining the strength of recommendations: A treatment measure shall be “strongly recommended” if more than 75% of the experts vote for a strong recommendation of the measure; a treatment measure shall be “not recommended” if the proportion of experts against the recommendation is $\geq 50\%$; the measure shall be “weakly recommended” in all other cases.

Appendix D
(Informative)

Declaration of Interest

All members of the guideline development group for the “International Clinical Practice Guideline of Traditional Chinese Medicine for Meibomian Gland Dysfunction” declare that they have completed the compilation of this guideline in a fully independent manner and have no affiliations with any interest groups.

WFCMS

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