

ICS **.***

SCM



世界中医药学会联合会

World Federation of Chinese Medicine Societies

SCM ***-20**

国际浊毒证诊断指南

Diagnostic guidelines for blood stasis

世界中联国际组织标准

International Standard of WFCMS

20**-**-**发布实施

Issued & implemented on ** **, 20**

目 次

前 言	3
引 言	4
1 范围	7
2 规范性引用文件	7
3 术语和定义	7
4 诊断标准	7
4.1 主要标准	7
4.2 次要标准	8
5 判定标准	8
附录 A（资料性）指南研究过程	9
参考文献	12
Preface	14
Introduction	15
1 Scope	20
2 Normative reference documents	20
3 Terms and definitions	20
4 Diagnostic criteria	21
4.1 Main criteria	21
4.2 Secondary criteria	21
5 Judgment criteria	21
Appendix A(informative)Research Process of this Guide	22
References	26

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：河北省中医院

参与起草单位：河北中医学院、瑞典中医药研究院、大医行易健康管理、汉唐国际中医药学院、Nutti Women Therapy Centre。

主审：李佃贵、刘启泉

主要起草人：姜建明、杨倩、赵宝玉、杜艳茹、刘小发

参与起草人：

中 国：白海燕、刘建平、毛宇湘、林慧华（台湾）、徐伟超

瑞 典：国万春

美 国：John Chengming Hsu

马来西亚：何凤卿

日 本：王晓东

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》。

本文件由世界中医药学会联合会发布，版权归世界中医药学会联合会所有。

引言

“浊”与“毒”的概念始于《黄帝内经》，其中记载“浊”有 60 处之多，描述。“毒”，有 46 处之多。后世医书如《金匱要略》《诸病源候论》《温病条辨》对此也多有提及，但都未将“浊”，“毒”合并表述。国医大师李佃贵根据天人合一的思想，结合当下复杂的社会与自然环境，将“浊”·“毒”合而称之，创造性的提出了“浊毒理论”。

浊毒有广义与狭义之别，广义泛指一切对身体有害的不洁物质，而狭义是指由于湿浊、谷浊久蕴化热而成的可对脏腑气血造成严重损害的黏腻秽浊之物⁽¹⁾。浊毒自外来或内生，循人体络脉由表入里，胶结作用于人体，致人体细胞、组织和器官浊变，即毒害细胞、组织和器官，使之代谢和机能失常，乃至机能衰竭⁽²⁻³⁾。浊毒致病具有“三易四性”，三易即易耗气伤血、入学入络；易阻碍气机、胶滞难解；易积成形、败坏脏腑。四性则指迁延性、难治性、顽固性、内损性⁽⁴⁾。浊毒证是指以浊毒为病因使机体处于浊毒状态从而产生特有临床表现的一组或几组证候群⁽⁵⁾。浊毒的一般临床表现主要有以下几方面：

1. 颜面五官 浊毒蕴结，郁蒸体内，上蒸于头面，而见面色粗黄，晦浊。若浊毒为热蒸而外溢于皮肤则见皮肤油腻，浊毒上犯清窍而见咽部红肿，浊毒上犯清窍而见眼胞红肿湿烂、目眵增多，鼻头红肿溃烂、鼻涕多，耳屎多，咳吐黏稠之涎沫。

2. 舌苔 患者以黄腻苔多见，但因感浊毒的轻重不同而有所差别。浊毒轻者舌红，苔腻、薄腻、厚腻，或黄或白或黄白相间；浊毒重者舌质紫红、红绛，苔黄腻，或中根部黄腻。因感邪脏腑不同苔位亦异，如浊毒中阻者，苔中部黄腻；浊毒阻于肝胆者，苔两侧黄腻。苔色、苔质根据病情的新久而变，初感浊毒、津液未伤时见黄滑腻苔；浊毒日久伤津时则为黄燥苔。

3. 脉象 浊毒证患者滑数脉常见，尤以右关脉滑数突出。临床以滑数、弦滑、弦细滑、细滑多见。病程短，浊毒盛者，可见弦滑、或弦滑数脉。病程长、阴虚有浊毒者，可见细滑脉、沉细滑脉。但患者出现沉细脉时多为浊毒阻滞络瘀，而不应仅仅认为是虚或虚寒脉，如《金匱要略方论》中说：“太阳病，关节疼痛而烦，脉沉而细者，此名湿痹”，又说：“诸积大法，脉来细而附骨者，乃积也”。以上说明细脉主湿浊主积而不主虚的明证。

4. 排泄物、分泌物 浊毒内蕴，可见大便黏腻不爽，臭秽难闻，小便或浅黄或深黄或浓茶样，汗液垢浊有味。

浊毒理论最早应用于消化系统疾病诊疗，效果较佳。而消化系统是人体吸收营养、排除废物的重要系统，它与全身健康密切相关。如果消化系统功能失调，如消化能力下降、肠道菌群失衡等，就容易导致毒素和废物在体内积聚，形成浊毒，这些浊毒物质可随血液的循环到达人体的各个组织器官。再者除了消化系统，人体还有其他排泄途径，如肾脏、肝脏、皮肤和呼吸系统等。这些器官可以排除体内的毒素和废物，包括通过尿液、汗液、呼出的气体等方式。因此，即使浊毒主要与消化系统相关，但它也可以通过这些排泄途径影响整个身体。随着研究深入，发现许多疾病如肾系疾病、肺系疾病、风湿类疾病、心脑血管系统、内分泌系列、妇科系列、新型冠状病毒肺炎等都与浊毒联系密切⁽⁷⁻²⁵⁾。

李教授研究团队认为“浊毒”既是病理产物，又为致病因素，且与脾胃病密切相关。湿浊之邪致病有内外之分，外感湿浊由外受湿邪引起，内生湿浊由脾胃功能失常所致。内外湿邪交

织,外湿困脾,致脾失健运,胃失和降;内湿停滞,又常使外感湿浊侵袭。胃属阳土,胃病易于化热化火,或初为湿盛,湿盛则浊聚,郁久化热,故毒由湿热转化而来亦可由湿浊演变而生,即热为毒之渐,毒为热之极,毒寓干热,热由毒生,变由毒起⁽⁶⁾。王彦刚⁽⁷⁻¹⁰⁾教授提出浊毒内蕴为胃癌前病变核心病机,通过一系列研究发现化浊解毒方能明显改善 CEG 浊毒内蕴证患者的临床症状、胃镜及病理情况,其作用机制可能与上调 E-cad 蛋白,下调 Snail1、Twist 蛋白,阻止上皮细胞向间质细胞转化有关;也可能通过调控 HGF、c-Met 的表达水平而起作用。娄莹莹⁽¹¹⁾等讨论慢性胃炎(CG)浊毒内蕴证与 Th1/Th2 平衡的关系,发现慢性胃炎浊毒内蕴证与 Th1/Th2 动态平衡密切相关,“浊毒”可能是介导 Th1 型细胞因子发生免疫反应的关键病理因素。王绍坡⁽¹²⁾认为浊毒是良性肿瘤与恶性肿瘤病理形成过程中的关键区别所在,浊毒内蕴是恶性肿瘤的病机关键,治疗应以化浊解毒为大法。韩欣璞⁽¹³⁾认为肿瘤的核心病机为阳虚毒结,而外寒易伤脾胃阳气,导致气血津液输布失常化生浊邪,浊邪进一步聚而成毒,即形成胃癌阳虚、浊化、浊变与浊毒的核心病机演变过程。以探索相关方药靶向调控胃癌微环境为切入点,提高微观辨治精准性。

谢桂权⁽¹⁴⁾认为中医药治疗慢性肾脏病有独特的疗效,结合临床提出脾肾虚损、浊毒内蕴为慢性肾功能衰竭辨证之机,针对慢性肾功能衰竭本虚标实的病机,抓住浊毒在慢性肾功能衰竭的核心地位,综合运用多种方法祛浊排毒,效果显著。占永立⁽¹⁵⁻¹⁶⁾等发现浊毒致病,有浑秽,重浊、火热、广泛、危重,顽固的特征,符合慢性肾脏病临床表现和病程特点。浊毒与慢性肾脏病的发生、发展和转归等密切相关,治疗上宜用发表透浊、芳香化浊、渗湿利浊、通腑泄浊、辛开苦降等法,因势利导,驱邪以安正。

刘小发⁽¹⁷⁾等提出了导致瘟疫的“异气”当为“浊毒”的观点,总结了新冠肺炎的中医六大病机特点:起病急,易感染传变;毒性强,易直中脏腑;遏气机,易化热伤津;浊害清,易蒙蔽清窍;性秽腻,易生瘀生痰;同气求,易引动宿疾。认为化浊解毒,扶正祛邪当贯穿防治始终,并提出化浊解毒、镇惊开窍为新冠肺炎的关键治法。苏健⁽¹⁸⁾等认为脾胃浊毒贯穿干燥综合征相关性间质性肺疾病始终,临床诊疗应根据浊毒化生程度,早期应阻截浊毒生成之源,重视顾护津液;中晚期应化浊解毒开通络脉,兼顾补虚以复正气。

周仲瑛⁽¹⁹⁾教授认为难治性痛风病位在络,脾肾功能失调、湿热浊毒内生,病程日久继发痰、瘀等新的病理因素,多种病理因素之间因果夹杂,常表现为湿热浊毒与痰瘀、瘀热兼夹为患。治疗以清泄湿浊、解毒通络为主法,并根据病情进展、病理因素的演变采用化痰祛瘀、凉血化瘀等法进行合治,衷中参西,疗效确切。

郭晓辰⁽²⁰⁾等阐明浊毒既是高血压病发生的始动因素,也是高血压病病变过程中多种因素相互作用的结果,并且指出适时运用芳香化浊、清热解毒之法清除体内浊毒,临床常可收到良好疗效。吴深涛⁽²¹⁻²³⁾提出糖尿病从“脾不散精”到“由浊致毒”继而“浊毒内蕴”之病机观。脾不散精是糖尿病形成的重要病理基础,浊邪是其主要病理产物。基于此核心病机提出化“化浊解毒”疗法,从糖尿病糖、脂毒性角度探讨化浊解毒方的干预作用。

梁亚飞⁽²⁴⁾基于浊毒理论指导治疗非酒精性脂肪性肝病,发现临床疗效确切,可显著改善患者肝功能、血脂及血液流变学指标,显著改善肝脏形态与实质进而提高肝脏扫描后 CT 值,为治疗和研究非酒精性脂肪性肝病提供新思路,并进一步深化浊毒理论。

韩欣璞⁽²⁵⁾认为肿瘤的核心病机为阳虚毒结,而外寒易伤脾胃阳气,导致气血津液输布失常化生浊邪,浊邪进一步聚而成毒,即形成胃癌阳虚、浊化、浊变与浊毒的核心病机演变

过程。以探索相关方药靶向调控胃癌微环境为切入点，提高微观辨治精准性。

WFCMS

国际浊毒证诊断指南

1 范围

本文件规定了浊毒证的诊断标准以及判定标准等内容。

本文件适用于浊毒证的临床与科研工作。

2 规范性引用文件（请根据标准引用情况选择）

“下列文件中的内容通过文中的规范性引用而构成本文件必不可少的条款。其中，注日期的引用文件，仅该日期对应的版本适用于本文件；不注日期的引用文件，其最新版本（包括所有的修改单）适用于本文件。

2022 年《河北中医》杂志发布《慢性萎缩性胃炎浊毒蕴胃证相关症状初步研究》

3 术语和定义

下列术语和定义适用于本文件。

3.1

浊毒

自然生理物质发生“浊化”、“毒化”而形成的，是对人体健康许多有害因素的总称。

3.2

浊毒证

以浊毒为病因使机体处于浊毒状态从而产生特有临床表现的一组或几组证候群。临床以大便黏腻不爽，面色晦浊，头昏沉，背痛，口干，乏力，舌暗红，苔黄腻或厚腻，脉弦滑或弦细滑为主要表现。

4 诊断标准

4.1 主要标准

4.1.1 舌质暗红或紫暗，苔黄腻或燥

4.1.2 大便黏腻不爽

4.1.3 小便不利或小便黄（赤）

4.1.4 口味不和（口臭、口黏腻、口干、口苦）

4.1.5 面部晦暗

4.2 次要标准

4.2.1 身体困重

4.2.2 头昏蒙不清

4.2.3 分泌物多、黏腻、臭秽

4.2.4 腹部板硬感

4.2.5 脉弦滑，或滑或滑数

5 判定标准

符合上述标准的舌象，脉象，排泄物相关指标，即可诊断为浊毒证。

WJECMS

附录 A
(资料性)
指南研究过程

A.1 研究方法

A.1.1 文献研究

文献整理共检索三个数据库：中国知网（CNKI）、万方数据知识服务平台（Wanfang）、维普数据库，以“浊毒”“浊毒证”“浊毒理论”“湿浊”“湿毒”“毒瘀”为检索词，根据各数据库的特点采用主题词、关键词与自由词相结合的方式进行搜索。通过文献研究，梳理归纳浊毒证相关的症状、体征、舌象、脉象等。共检索得 4233 篇文献，依据纳入和排除标准，阅读题目、摘要以及全文进行人工剔除，并运用 NoteExpress3.6.0 软件查重并剔除重复文献，确定最终纳入文献 35 篇，提取其四诊信息并进行名词术语规范化处理，共得到 78 个症状，其中出现频率 $\geq 10\%$ 的有 45 个，分别为：大便黏腻不爽、口干、乏力、大便秘结、胃脘痛、心烦、嗳气、口中异味、胃脘胀、纳差、小便浑浊、腹胀、身体困重、纳呆、胸闷、口苦、汗液秽浊有味、寐欠安、心悸、头晕、口黏、尿少或尿闭、烧心反酸、水肿、少气懒言、五心烦热、小便短赤、口舌生疮、背痛、肢体疼痛、嘈杂、背冷、咽痛、胃脘痞闷、头昏沉、耳垢粘多、眼眵黏腻黄浊、咳声重浊、咳痰不爽、面部晦暗、舌暗红或紫暗、舌燥或少津、苔黄腻、脉弦滑、脉滑。

A.1.2 定性研究

围绕浊毒证辨证特点、辨证方法等，对国医大师李佃贵等浊毒证研究领域知名专家进行访谈。同时，通过广泛收集中医证型符合浊毒证的患者进行临床调查，本研究共收集浊毒证患者病例 320 例。

其中纳入标准：

- a) 经专家辨证为浊毒证患者；
- b) 愿意参与调查者；
- c) 签署知情同意书。

排除标准：

- a) 经专家辨证不符合浊毒证患者；
- b) 对调查问卷排斥，不能完成量表填写者；
- c) 精神疾患类或意识障碍不能配合者。

以病案信息完整，辨证、处方用药有代表性为搜集标准，采用离散趋势法、相关系数法、克朗巴赫系数法、因子分析法 4 种统计学方法进行诊断条目客观筛选，通过多维度分析，若有一项不符合筛选标准，则考虑删除，共删除 23 个条目，最终入选 22 个条目，分别为舌暗红或紫暗、苔黄腻、大便黏腻不爽、口中异味、口黏、小便浑浊、面部晦暗、小便短赤、口干、口苦、身体困重、汗液秽浊有味、耳垢粘多、眼眵黏腻黄浊、头昏沉、脉弦滑、脉滑、

头晕、乏力、少气懒言、五心烦热、胃脘痞闷。

A. 1. 3 德尔菲法

基于定性研究结果，结合文献研究中各条目出现频数进行初筛，并制作专家咨询问卷，通过三轮德尔菲专家咨询对条目进行主观筛选。评价指标为：专家积极系数，即调查问卷的回收率；专家权威程度，用专家权威系数 Cr 表示， Cr 主要为专家对条目的熟悉程度（ Cs ）和专家对条目做的判断依据（ Ca ）， $Cr = (Cs + Ca) / 2$ ；专家意见集中程度，用均数，满分率和变异系数表示；专家意见协调程度，用变异系数、协调系数表示。

A. 2 临床研究

A. 2. 1 一致性检验（量表质量测评）

经临床调研筛选条目后，将最终保留的条目进行编制，形成“浊毒证诊断量表--质量测评表”进行量表质量(可行性、信度、效度)测评。用横断面调查的方法，选择 2022 年 9 月上旬河北省中医院 14 个科室（心血管科、消化科、呼吸科、脑病、肾内科、内分泌科、风湿免疫科、妇科、血液科、肿瘤科、皮肤科、骨科、外科、周围血管科/肛肠科）的住院和门诊患者，根据既往临床流行病学横断面调查多因素分析的样本含量估算 $Corsuch$ 法，样本量=课题（相关因素或变量数目） \times （5-10 倍）。对调查员进行 SOP 培训，内容包括：本次调查的目的和意义、调查实施过程的方法等，使其明确职责，确保数据的可靠性及准确性。问卷以患者自评为主，调查员只负责解释字面意义并记录患者完成量表所需的时间。

A. 2. 1. 1 可行性

主要是评测量表被接受的程度及量表被完成的质量，包括接受率、完成率、完成时间 3 方面。

A. 2. 1. 2 信度

是从可靠性方面评价量表的质量，多通过计算相关系数来反映。本研究采用分半信度（Split-half reliability）和克隆巴赫（Cronbach） α 系数来作为信度评价的指标。

A. 2. 1. 3 效度

是从有效性、准确性方面评价量表的质量，即量表是否能够有效、准确地测量出所测事物的“真值”。效度越高，表示测量结果越能显示出所要测量对象的真正特征。本研究采用表面效度和内容效度、区分效度、结构效度 3 方面作为效度评测指标。

A. 2. 2 诊断性检验

通过构建量表框架、确立条目池、条目筛选、条目赋权及确立诊断阈值这几个关键环节后，初步建立了浊毒证诊断量表。但该量表的实际诊断能力如何，需要进一步对量表的诊断能力加以评价。本研究采用了诊断性试验的方法对浊毒证诊断量表的性能进行了初步验证。

对多中心临床调查的患者进行回顾性检验，招募新的经诊断为浊毒证的患者进行前瞻性检验，分别计算其灵敏度、特异度、准确度、似然比并进行分析总结来判定该诊断标是否具有临床价值及可行性。

采用所建立的浊毒证诊断量表，选择 2023 年 9 月上旬河北省中医院 14 个科室（心血管科、消化科、呼吸科、脑病、肾内科、内分泌科、风湿免疫科、妇科、血液科、肿瘤科、皮肤科、骨科、外科、周围血管科/肛肠科）的住院和门诊患者，共 320 例，进行辨证诊断，得到相应的辨证结果。将量表的辨证结果与临床医师辨证结果进行比较，从而绘制出相应的诊断性试验四格表。并通过计算得出灵敏度、特异度、准确度、阳性似然比、阴性似然比等指标的结果。

WJECMS

参 考 文 献

- [1]徐伟超,李佃贵,刘建平,等.浊毒理论创新中医病因病机学[J].中国中西医结合杂志,2019,39(08):913-915.
- [2]王正品,李佃贵,杜艳茹,等.浊毒致病论与现代中医病因学[J].中医杂志,2010,51(01):11-13
- [3]王少锋,李佳欣,郝彦伟,刘青松,李斌.浊毒理论之考析与述评[J/OL].辽宁中医杂志:1-7[2023-04-18].
- [4]徐伟超,赵润元,李佃贵,等.浊毒证充实中医证候学[J].中华中医药杂志,2019,34(10):4580-4582.
- [5]王亚,QIANG SONG,代紫阳,王晨斌,晏宽鹏,杜梦凡,姚纹,张雅楠,宋鑫,李继安,吴深涛.基于文献挖掘的浊毒病症及用药规律研究[J].天津中医药,2018,35(12):891-894.
- [6]李佃贵.从浊毒理论的建立与应用谈中医学创新与发展[J].中医杂志,2020,61(22):1938-1940.
- [7]田向上,王彦刚.王彦刚教授从“核心病机观”八法论治胃癌前病变[J].世界中西医结合杂志,2023,18(03):501-505.
- [8]周平平,王彦刚,吕静静等.化浊解毒方对慢性糜烂性胃炎浊毒内蕴证患者上皮细胞间质化的影响[J].中药药理与临床,2019,35(06):154-158.
- [9]吕静静,王彦刚,吕雪艳.化浊解毒方对慢性糜烂性胃炎浊毒内蕴证患者 HIF-1 α ,VEGF,PTEN 的影响[J].中国中药杂志,2018,43(11):2384-2390.
- [10]王彦刚,吕静静,周盼盼.化浊解毒方对慢性糜烂性胃炎浊毒内蕴证患者 HGF/c-Met 信号通路影响的研究[J].中药药理与临床,2017,33(02):186-189.
- [11]娄莹莹,李佃贵,郭喜军等.慢性胃炎浊毒内蕴证与 Th1/Th2 平衡关系的研究[J].中华中医药杂志,2020,35(08):4132-4134.
- [12]王绍坡,孙润雪,刘小发等.恶性肿瘤浊毒论[J].时珍国医国药,2021,32(12):2985-2987.
- [13]韩欣璞,许博文,李杰.基于“寒气生浊”探讨胃癌微环境的微观辨治[J].中医杂志,2022,63(12):1135-1138.
- [14]孟立锋,谢桂权.谢桂权从浊毒论治慢性肾功能衰竭经验[J].中华中医药杂志,2016,31(04):1301-1303.
- [15]王宇阳,马放,占永立.基于“浊毒”理论论治慢性肾脏病[J].中医杂志,2019,60(16):1374-1377.
- [16]刘鑫,占永立,马放等.占永立从浊毒论治慢性肾衰竭经验[J].中医药导报,2022,28(09):143-146.
- [17]刘小发,李佃贵,陈分乔等.从浊毒论治新型冠状病毒肺炎[J].中华中医药杂志,2022,37(08):4503-4506.
- [18]苏健,刘学,张伟等.基于脾胃浊毒理论辨治干燥综合征相关性间质性肺疾病[J].北京中医药大学学报,2023,46(03):392-396.
- [19]赵蕊,周学平,周仲瑛.周仲瑛从湿热浊毒入络论治难治性痛风[J].中医杂

志,2022,63(13):1215-1218+1222.

[20]郭晓辰,张军平.高血压病从浊毒论治[J].中医杂志,2010,51(07):581-583.

[21]吴深涛,王斌,章清华等.论糖尿病从“脾不散精”到“浊毒内蕴”之病机观[J].中医杂志,2018,59(22):1920-1924.

[22]吴深涛,闫冬雪.从浊毒论糖尿病血脂异常之防治[J].中华中医药杂志,2009,24(08):1047-1049.

[23]廉洁,吴深涛.吴深涛对浊毒的新认识[J].中国中医药信息杂志,2014,21(05):104-105.

[24]梁亚飞,储心乔,申玉行等.基于浊毒理论论治非酒精性脂肪性肝病[J].中国中医基础医学杂志,2019,25(01):78-80.

[25]韩欣璞,许博文,李杰.基于“寒气生浊”探讨胃癌微环境的微观辨治[J].中医杂志,2022,63(12):1135-1138.

[26]毛宇湘,刘启明,杜朋丽等.慢性萎缩性胃炎浊毒蕴胃证相关症状初步研究[J].河北中医,2022,44(07):1061-1064.

WJECMS

Preface

Please note that certain contents of this document may involve patents. The publishing institution of this document does not assume the responsibility of identifying patents.

Main drafting units: Hebei Provincial Hospital of Traditional Chinese Medicine.

Units involved in Drafting: Hebei University of Traditional Chinese Medicine, Swedish Institute of Traditional Chinese Medicine, Da Yi Xing Yi Health Management, Hantang International College of Traditional Chinese Medicine, Nutti Women Therapy Centre.

Main examiner: Li Diangui, Liu Qiquan.

Main drafters: Jiang Jianming, Yang Qian, Zhao Baoyu, Du Yanru, Liu Xiaofa.

Drafters:

China: Bai Haiyan, Liu Jianping, Mao Yuxiang, Lin Huihua (Taiwan), Xu Weichao.

Sweden: Guo Wanchun.

USA: John Chengming Hsu.

Malaysia: He Fengqing.

Japan: Wang Xiaodong.

The drafting process of this document follows the SCM1.1-2021 *Guidelines for Standardization Work Part 1: Standard Preparation, Revision and Release*, which was issued by the World Federation of Chinese Medicine Societies.

This document is published by the World Federation of Chinese Medicine Societies, and the copyright belongs to the World Federation of Chinese Medicine Societies.

Introduction

The concepts of “Zhuo” (Turbidity) and “Du” (Toxin) were proposed first in *Huang Di Nei Jing*, in which the term of “Turbidity” was mentioned in as many as 60 places and that of “Toxin” 46 places. In other medical books compiled in later times such as *Jin Gui Yao Lue*, *Zhu Bing Yuan Hou Lun* and *Wen Bing Tiao Bian*, both of them were also mentioned a lot times. However, the combined expression of “Zhuo Du” (Turbidity and Toxin) has never been used in all of the descriptions. Li Diangui, Chinese Medicine Master, by combining today’s complex social and natural environment, creatively proposed the “Theory of Zhuo Du” (Turbidity and Toxin combination theory) based on Chinese philosophy of “Unity of Heaven and Man”.

There is a distinction between the definitions of Zhuo Du (Turbidity and Toxin) in the broad and narrow sense. In the broad sense, it refers to all harmful and unclean substances to the body, while in its narrow sense it refer to sticky and filthy substances that can cause serious damage to organs and blood due to the accumulation of Dampness and Turbidity caused by poor transformation induced Heat⁽¹⁾. Turbidity and Toxin originate from external or internal sources and enter the body from skin through the collaterals. They act as a mixed binding agent within human body, causing turbid transformation of cells, tissues, and organs, resulting in metabolic and functional disorders, and even functional failure⁽²⁻³⁾. The pathogenic effects of Turbidity and Toxin have the characteristics of “Three Tendencies and Four Characteristics”. Three Tendencies mean the followings: tendency to consume Qi, damage blood and enter into acupoints and meridians; tendency to obstruct the Qi flow and difficult to resolve adhesive stagnation; tendency to accumulate and form nodes and damage organs. The Four Characteristics refer to its extensibility, intractability, stubbornness and the internal damage effect⁽⁴⁾. Turbidity and Toxin syndrome refers to a group or several syndrome groups that cause the body to be in a state with much Turbidity and toxin, resulting in unique clinical manifestations⁽⁵⁾. The general clinical manifestations of Turbidity and Toxin mainly include the following aspects:

1. The facial features are disturbed with Turbidity and Toxin, which stagnates and functions within the body. When it goes up on the head and face, the complexion is coarse yellow and dull. If the Turbidity and Toxin is steamed by Heat and overflows on the surface part of body, it will cause greasy skin. If the Turbidity and Toxin invades the orifices of head and face, it will cause redness and swelling of the throat as well as redness, swelling, dampness of the upper eyelids, an increase of epiphora (eye secretions), redness, swelling, and ulceration of the nose with a lot of nasal mucus as well as a lot of earwax. Sticky saliva foam is also seen with cough.

2. Coating on the tongue

Patients’ tongue coatings are mainly yellow and greasy, but they varies depending on

the severity of the Turbidity and Toxin infection. Those with mild Turbidity and Toxin infection would have a red tongue, with greasy, thin or thick coating, which may be yellow, white, or alternating yellow and white in color; Those with severe Turbidity and Toxin infection may have a purple red or crimson tongue, yellow and greasy coating, or a yellow and greasy in middle and root part of tongue. Due to different pathogenic Zang and Fu organs, the position of the coating also varies. For example, in cases that Turbidity and Toxin obstructing in the Middle Jiao, the middle of the tongue coating would be yellow and greasy; in cases that Turbidity and Toxin obstructing the Liver and Gallbladder the coating would be yellow and greasy on both sides of tongue. The color and texture of the coating also vary depending on the term of the illness. Yellow, smooth and greasy coating may appear in case of short time of Turbidity and Toxin infection, when body Fluids are not damaged. When the Turbidity and Toxin injures the body over time, yellow and dry coating can be seen.

3. Pulse manifestation

Slippery rapid pulse is common, especially prominent in the right Guan pulse in patients with Turbidity and Toxin syndrome. Clinically, slippery rapid pulse, string slippery pulse, string fine slippery pulse or fine slippery pulse are more common. For patients with a short course of disease and high level of Turbidity and Toxin syndrome, string slippery or string slippery rapid pulse can be felt. For patients with a long course of disease, Yin deficiency with Turbidity and Toxin infection, the presence of fine slippery pulse or sinking fine slippery pulse can be observed. However, the sinking fine slippery pulse is due to Turbidity and Toxin blocking collateral induced blood stasis and should not be simply considered as deficiency syndrome or deficiency and Cold syndrome. For example, in *Jin Gui Yao Lue Fang Lun*, it is said that “with Taiyang disease man suffer joint pain and annoyance, with sinking and fine pulse. It is called Dampness Bi (rheumatism)”, and it is also said that “the great method of various accumulations diagnosis is feeling the fine pulse attached to the bone. This is a clear evidence that fine pulse are the manifestation of Dampness, Turbidity and Evil Factor stagnation but not deficiency.

4. Excrement and secretions

Turbidity and Toxin inner stagnation syndrome can be found with symptoms like sticky stools or difficult movement stools with foul odor, light yellow or dark yellow or even tea-like brown urine and dirty smelly sweat.

When the Theory of Turbidity and Toxin was first applied to the diagnosis and treatment of digestive system diseases, good results were achieved. The digestive system is an important system for the human body to absorb nutrients and eliminate waste, which is closely related to the overall health. If the digestive system is dysfunctional, such as decreased digestive ability and imbalanced gut microbiota, it is easy to lead to the accumulation of toxins and waste in the body, forming Turbidity and Toxin that can reach various tissues and organs of the human body through blood circulation. Furthermore, in addition to the digestive system, there are other excretory pathways in the body, such as the

kidneys, liver, skin and respiratory system. These organs can eliminate Toxin and other waste from the body through urine, sweat, exhaled Qi and other means. Therefore, even though Turbidity and Toxin is mainly related to the digestive system, it can still affect the entire body through other excretory pathways. With further research, it is found that many diseases, such as kidney diseases, lung diseases, rheumatic diseases, diseases of cardiovascular and cerebrovascular systems, of endocrine system, gynecological system and COVID-19 are all closely related to Turbidity Toxin⁽⁷⁻²⁵⁾.

Professor Li's research team believes that "Turbidity and Toxin" are both pathological products and pathogenic factors, and they are closely related to Spleen and Stomach diseases. The pathogenic factors of Dampness and Turbidity can be divided into internal and external factors. External infected Dampness and Turbidity are caused by external Dampness and Turbidity factors, while internal infected Dampness and Turbidity are caused by dysfunction of the spleen and stomach. The interweaving of internal and external infected Dampness and the former usually further injure the Spleen, leading to Spleen dysfunction and the disharmony between Spleen and Stomach. Internal Dampness stagnation often leads to further invasion of the external Dampness. The Stomach belongs to the Yang Earth and Stomach diseases are prone to produce Heat and Fire. It may begin with the Dampness problem, which leads to Turbidity accumulation and then Heat stagnation. Therefore, Toxin can be produced from Dampness and Heat and also can be evolved from Dampness and Turbidity. That is, Heat is the gradual developing condition of Toxin and Toxin is the extreme condition of Heat. Toxin comes from Heat or Heat is generated by Toxin, and the disease start with Toxin⁽⁶⁾. Professor Wang Yangang⁽⁷⁻¹⁰⁾ proposed that the accumulation of Turbidity and Toxins are the core pathogenesis of gastric precancerous lesions. With a series of studies, it has been found that the formula for clearing Turbidity and toxin can significantly relieve the clinical symptoms, gastroscopy manifestation and pathological conditions of CEG patients with Turbidity and Toxin accumulation syndrome. The action mechanism may be related to the up-regulating E-cad protein, down-regulating Snail1 and Twist proteins and preventing epithelial cells from transforming into stromal cells; It may also work by regulating the expression levels of HGF and c-Met. Lou Yingying et al.⁽¹¹⁾ investigated the relationship between the Turbidity and Toxin accumulation syndrome in chronic gastritis (CG) and the Th1/Th2 balance, and it was found that the Turbidity and Toxin accumulation syndrome in chronic gastritis is closely related to the dynamic balance of Th1/Th2 and "Turbidity" may be a key pathological factor mediating the immune response of Th1 type cytokines. Wang Shaopo⁽¹²⁾ believes that Turbidity and Toxin is the key difference in pathological formation process between benign tumors and malignant tumors. The accumulation and stagnation of Turbidity and Toxin is the key pathogenesis of malignant tumors, and the treatment policy should focus on detoxifying Turbidity and Toxin. Han Xinpu⁽¹³⁾ believes that the core pathogenesis of tumors is Yang deficiency and Toxin accumulation. External cold can easily damage the Yang Qi of the Spleen and Stomach, leading to abnormal distribution of Qi, blood,

and body fluids, and then the generation of Turbid evil factor, which further develops into Toxin. In this way the core pathogenesis evolution process of gastric cancer including Yang deficiency, Turbidity production, Turbidity stagnation and eventually Turbidity and Toxin stagnation takes place. Therefore, exploration of targeted regulation of gastric cancer micro-environment with relevant prescriptions and drugs can be the starting point in improving the accuracy of micro diagnosis and treatment.

Xie Guiquan⁽¹⁴⁾ believes that traditional Chinese medicine has a unique therapeutic effect on chronic kidney disease. Based on clinical practice, it is proposed that Spleen and Kidney deficiency as well as Turbidity and Toxin accumulation are critical for differentiation of chronic kidney function failure. In response to the pathogenesis of chronic kidney function failure, by focusing on the core position of Turbidity and Toxin in chronic kidney function failure, multiple methods can be used comprehensively to remove Turbidity and Toxin, and significant effects can be achieved. Zhan Yongli⁽¹⁵⁻¹⁶⁾ and others found that Turbidity and Toxins induced diseases have the characteristics of being filthy, severe turbid, with Heat as well as being extensive, critical and intractable, which are consistent with the clinical manifestations and course of chronic kidney disease. Turbidity and Toxin are closely related to the occurrence, development, and outcome of chronic kidney disease. Therefore, in treatment, it is advisable to use methods such as sweating to spread turbidity out, applying fragrant drugs to remove turbidity, excreting Dampness to drive turbidity out, clearing of Fu organs to expel turbidity and using bitter taste drugs to defuse and download turbidity. With policy of guiding the trend according to the situation, evil factors of turbidity can be expelled and human's Zheng Qi can be recovered.

Liu Xiaofa⁽¹⁷⁾ and others proposed that the "Yi Qi" (abnormal Qi) that caused the plague should be categorized as "Turbidity and Toxin", and the six pathogenesis characteristics of COVID-19 in traditional Chinese medicine have been summarized as follows: acute onset and being easily infected and transmitted; being highly toxic and easily injuring the Zang and Fu organs; suppressing Qi movement and facilitating Heat producing and body fluid damage; Turbidity harming clarity condition of body and being easily obscuring the clear orifices; being filthy and greasy and being prone to blood stasis and Phlegm generation; echoing with the same kind of Qi and easily leading to relapse of illnesses. It is believed that the key treatment of COVID-19 is to remove Turbidity and Toxin, to strengthen the Zheng Qi and eliminate the evil factors throughout the whole process of the prevention and treatment. It is also proposed that the key treatment of COVID-19 is to remove Turbidity and Toxin, to arrest convulsion and to dredge the orifices. Su Jian et al.⁽¹⁸⁾ believe that Turbidity and Toxin in Spleen and Stomach runs through the interstitial lung disease associated with Sjogren's syndrome. In clinical diagnosis and treatment the degree of Turbidity and Toxin metaplasia should be noted and in the early stage of the treatment the source of Turbidity and Toxin generation should be intercepted, and great attention should be paid to protecting the body Fluid; In the middle and late stages, Turbidity and Toxin should be eliminated and collaterals

should be dredged, which is supplemented with tonifying deficiency to restore Zheng Qi.

Professor Zhou Zhongying ⁽¹⁹⁾ believes that the location of refractory gout is in the meridians, with dysfunction of the Spleen and Kidney, endogenous Damp, Heat, Turbidity and Toxin, a long-term course of disease that leads to new pathological factors such as Phlegm and blood stasis. All of the multiple pathological factors are intertwined, being manifested as a combination of Damp Heat, Turbidity and Toxin as well as Phlegm, blood stasis and Heat induced by blood stasis. The main treatment method is to clear Dampness, Turbidity and Toxin, and unblock the collaterals. In addition, according to the progression of the disease and the evolution of pathological factors, a combination of methods such as resolving Phlegm to remove blood stasis as well as clearing Heat in blood to remove blood stasis, etc., is adopted for treatment. The method in Chinese medicine should be applied with referring to western medicine so as to achieve definite therapeutic effect.

Guo Xiaochen et al. ⁽²⁰⁾ elucidated that Turbidity and Toxin are not only the initiating factor of hypertension, but also the result of the interaction of multiple factors in the development process of hypertension. They also pointed out that timely use of methods of Heat clearing and Turbidity dissolving with fragrant Chinese drugs to clear Turbidity and Toxin inside the body can often achieve good clinical efficacy. Wu Shentao ⁽²¹⁻²³⁾ proposed the pathogenesis of diabetes, which is from “the Spleen dysfunction in supplying Essence” to the “Turbidity inducing Toxin” and then the “Turbidity and Toxin stagnation”. Spleen dysfunction in supplying Essence is an important pathological basis for the formation of diabetes, and Turbidity is its main pathological product. Based on this core pathogenesis, the therapy of “resolving Turbidity and Toxin” was proposed, and the intervention formula effect of “resolving Turbidity and Toxin” was discussed from perspective of glucose and lipid toxicity of diabetes.

Liang Yafei ⁽²⁴⁾ guided the treatment of non-alcoholic fatty liver disease based on the theory of Turbidity and Toxin, and it is found that the clinical efficacy is quite definite. It can significantly improve the liver function, blood lipids and hemorheological indicators in patients, significantly improve liver morphology and parenchyma, and thereby increase CT values after liver scanning. This provides new ideas for the treatment and research of non-alcoholic fatty liver disease and perfect the theory of Turbidity and Toxin.

Han Xinpu ⁽²⁵⁾ believes that the core pathogenesis of tumor is Yang deficiency and Toxin accumulation and external Cold can easily damage the Yang Qi of the Spleen and Stomach, leading to abnormal distribution of Qi, blood, body Fluids and the generation of Turbidity. The Turbidity further aggregate into toxins, forming the core pathogenesis evolution process of gastric cancer with Yang deficiency, Turbidity producing, Turbidity malignant transformation, and eventually Turbid and Toxin. Therefore, taking the exploration of targeted regulation of gastric cancer micro-environment with relevant prescription drugs as the starting point, the accuracy of micro diagnosis and treatment improvement is to be aimed at in clinics.

Diagnostic guidelines for blood stasis

1 Scope

This document specifies the diagnostic criteria and judgment criteria for Turbidity and Toxin syndrome.

This document is applicable to the clinical and scientific research work of Turbid and Toxin syndrome.

2 Normative reference documents (please choose according to the standard citation situation)

The content of the following documents constitutes an essential clause of this document through normative references in the text. Among them, the referenced documents with a date are only applicable to the version corresponding to that date; the referenced documents without a date are applicable to this document in their latest version (including all modification forms).

Preliminary Study on Symptoms of Chronic Atrophic Gastritis with Turbidity and Toxin Accumulation in Stomach Syndrome, which was Published in *Hebei Journal of Traditional Chinese Medicine* in 2022.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Turbidity and Toxin

It refers to the pathological substances formed by “becoming turbid” and then “becoming toxic”, based on the natural physiological substances. It is a collective term for many harmful factors to human health.

3.2

Turbidity syndrome

It refers to a group or groups of syndromes caused by Turbidity and Toxin, during which process the body is injured by Turbidity and Toxin and the unique clinical manifestations are produced. The main clinical manifestations include sticky stool and difficult movement of stool, dark and dull complexion, dizziness, back pain, dry mouth, fatigue, dark red tongue, yellow greasy or thick greasy tongue coating as well as stringy slippery or stringy thin

slippery pulse.

4 Diagnostic criteria

4.1 Main criteria

- 4.1.1 Dark red or dark purple tongue, yellow greasy or dry tongue coating
- 4.1.2 Sticky stool and difficult movement of stool
- 4.1.3 Obstructed urinary or yellow (red) urinary
- 4.1.4 Taste disharmony (bad breath, sticky and greasy sense in mouth, dry mouth, bitter mouth)
- 4.1.5 Facial darkness and dullness

4.2 Secondary criteria

- 4.2.1 Body drowsiness and heaviness
- 4.2.2 Head dizziness
- 4.2.3 Excessive, sticky, and foul smelling secretions
- 4.2.4 Abdominal stiffness
- 4.2.5 stringy slippery or slippery or slippery and rapid pulse

5 Judgment criteria

Tongue, pulse, and excretory indicators that meet the above criteria can be diagnosed as Turbidity and Toxin syndrome.

Appendix A

(informative)

Research Process of this Guide

A. 1 Research methods

A. 1.1 Literature research

In the literature review three databases have been searched: China National Knowledge Infrastructure (CNKI), Wanfang Data Knowledge Service Platform, and CQVIP database. The search terms are “Turbidity and Toxin”, “Turbidity and Toxin syndrome”, “Turbidity and Toxin theory”, “Damp and Turbidity”, “Damp and Toxin” and “Toxin and blood stasis”. Based on the characteristics of each database, a combination of theme words, keywords, and free words was used for retrieval. Through literature research, the Turbidity and Toxin syndrome related symptoms, physical signs, tongue images, pulse images, etc. were summarized. A total of 4233 articles were collected through screening. Based on inclusion and exclusion criteria, the titles, abstracts, and full text were manually excluded. NoteExpress3.6.0 software was used to check for duplicates and eliminate duplicate articles, and 35 articles were ultimately included. The four diagnostic information was extracted and the terminology was standardized. A total of 78 symptoms were obtained, including 45 with a frequency of $\geq 10\%$, including sticky stool and difficult movement stool, dry mouth, fatigue, constipation, stomach pain, restlessness, belching, bad breath in the mouth, bloating stomach, poor appetite, cloudy urine, bloating belly, heavy body fatigue, indigestion and loss of appetite, chest tightness, bitter taste, foul and smelly sweat, restless sleep, palpitations, dizziness, sticky mouth, less or closed urine, heartburn and acid reflux, edema, lack of strength and lazy in speech, Five Center restlessness and Heat, short and red urine, sore mouth and tongue, back pain, limb pain, tumult in stomach, cold back, sore throat, stomach distension and stagnation, dizziness, and excessive earwax, sticky and yellow turbid gum in eyes, cough with heavy and turbid note, sticky sputum in throat, dark dull oily face, dark red or dark purple tongue, dry tongue without saliva, yellow and greasy tongue coating, slippery pulse or stringy slippery pulse.

A. 1.2 Qualitative research

By focusing on the characteristics and methods of syndrome differentiation for Turbidity and Toxin syndrome, and interviews were conducted with well-known experts in the field of Turbidity and Toxin syndrome research, e.g. Chinese Medicine Master Li Diangui. At the same time, by extensively collecting patients with traditional Chinese medicine syndrome types that meet the criteria of Turbidity and Toxin syndrome for clinical

investigation, a total of 320 cases of Turbidity and Toxin syndrome patients were collected in this study.

Inclusion criteria:

- a) Patients diagnosed with Turbidity and Toxin syndrome by experts;
- b) Patients willing to participate in the survey;
- c) Signing an *Informed Consent Form*.

Exclusion criteria:

- a) Patients diagnosed by experts as not meeting the criteria for Turbidity and Toxin syndrome;
- b) Patients who reject the survey questionnaire and are unable to complete the scale filling;
- c) Patients with mental disorders or consciousness disorders and difficult to cooperate.

Based on the collection criteria of complete medical record information, representative syndrome differentiation and prescription, four statistical methods, namely, discrete trend method, correlation coefficient method, Cronbach coefficient method and factor analysis method, were used to screen diagnostic items objectively. Through multidimensional analysis, any one item that does not meet the screening criteria was deleted. A total of 23 items are deleted, and 22 items were ultimately selected, namely, dark red or dark purple tongue, yellow greasy tongue coating, sticky stool and difficult movement stool, bad breath in the mouth, sticky mouth, cloudy urine, dark dull oily face, short and red urine, dry mouth, bitter mouth, heavy and fatigue body, foul and smelly sweat, excessive earwax, yellow sticky and turbid gum in eyes, dizziness, slippery pulse, stringy and slippery pulse, dizziness, fatigue, lack of strength and lazy in speech, restlessness and Heat in the Five Centers and stuffiness and stagnation in the stomach.

A.1.3 Delphi method

Based on qualitative research results, combined with the frequency of occurrence of each item in literature research, the initial screening is conducted, and an expert consultation questionnaire was made. Subjective screening of items was conducted through three rounds of Delphi expert consultation. The evaluation indexes are as follows: expert positivity coefficient, which is represented by the response rate of the survey questionnaire; the level of expert authority, represented by the expert authority coefficient Cr , mainly refers to the experts' familiarity with the item (Cs) and the experts' judgment basis for the item (Ca), $Cr = (Cs + Ca) / 2$; the degree of concentration of expert opinions, expressed by mean, full score rate and coefficient of variation; the degree of coordination of expert opinions, which is represented by coefficient of variation and coordination coefficient.

A.2 Clinical Study

A.2.1 Consistency Test (Scale Quality Evaluation)

After screening items through clinical research, the final retained items were compiled to form the *Turbidity and Toxin Syndrome Diagnosis Scale-Quality Evaluation Form* for scale quality (feasibility, reliability, validity) evaluation. The cross-sectional survey method was used, and the inpatients and outpatient patients from 14 departments (Cardiovascular, Digestive, Respiratory, Encephalopathy, Nephrology, Endocrinology, Rheumatology and Immunology, Gynecology, Hematology, Oncology, Dermatology, Orthopedics, Surgery, and Peripheral Vascular/Proctology) of Hebei Provincial Hospital of Traditional Chinese Medicine were selected in early September 2022. The Corsch method was used to estimate the sample size based on the multivariate analysis of previous clinical epidemiological cross-sectional surveys, Sample size=investigation (number of related factors or variables)×(5-10 times). Provide SOP training to investigators, including the purpose and significance of this investigation, methods of investigation implementation, etc., to clarify their responsibilities and ensure the reliability and accuracy of data. The questionnaire was mainly based on patient self-evaluation, and the investigator was only responsible for explaining the literal meaning and recording the time required for patients to complete the scale.

A.2.1.1 Feasibility

It means the degree of acceptance of the scale and the quality of its completion, including acceptance rate, completion rate, and completion time, were mainly evaluated.

A.2.1.2 Reliability

It means the evaluation of the quality of a scale from the perspective of reliability, often reflected by calculating correlation coefficients. In this study, Split half reliability and Cronbach α coefficient were used as indicators for reliability evaluation.

A.2.1.3 Validity

It means the evaluation of the quality of a scale in terms of validity and accuracy, that is, whether the scale can effectively and accurately measure the “true value” of the measured objective. The higher the validity, the more the measurement results can display the true characteristics of the object being measured. In this study the surface validity, content validity, discriminant validity, and structural validity were used as validity evaluation indicators

A.2.2 Diagnostic testing

After the constructing of a scale framework as well as the establishing of an item pool, item screening, item weighting, and establishing diagnostic thresholds, a preliminary diagnostic scale for turbid toxin syndrome was established. However, the actual diagnostic ability of the scale needs to be further evaluated. In this study, the diagnostic testing was used to preliminarily verify the performance of the turbid toxin syndrome diagnostic scale.

Retrospective testing was conducted on patients surveyed from multiple centers, and prospective testing was conducted on newly diagnosed patients with turbid toxin syndrome. Sensitivity, specificity, accuracy and likelihood ratio were calculated and analyzed to determine whether the diagnostic criterion has clinical value and feasibility.

The established diagnostic scale for Turbidity and Toxin syndrome, a total of 320 inpatients and outpatient patients from 14 departments (Cardiovascular, Digestive, Respiratory, Encephalopathy, Nephrology, Endocrinology, Rheumatology and Immunology, Gynecology, Hematology, Oncology, Dermatology, Orthopedics, Surgery, and Peripheral Vascular/Proctology) of Hebei Provincial Hospital of Traditional Chinese Medicine were selected in early September 2023 for differential diagnosis, and corresponding differential diagnosis results were obtained. The diagnosis results of the scale with those of clinical physicians were compared, and the corresponding diagnostic test four grid table was drawn. In addition, the results of sensitivity, specificity, accuracy, positive likelihood ratio, negative likelihood ratio and other indicators were calculated.

References

- [1] Xu W. C., Li D. G., Liu J. P., et al. Innovation of traditional Chinese medicine etiology and pathogenesis in Theory of Turbidity and Toxin, Chinese Journal of Integrated Traditional and Western Medicine, 2019, 39 (08): 913-915.
- [2] Wang Z. P., Li D. G., Du Y. R., et al. Pathogenic theory of Turbidity and Toxin and modern etiology of traditional Chinese medicine, Journal of Traditional Chinese Medicine, 2010, 51 (01): 11-13.
- [3]. Wang S. F., Li J. X., Hao Y. W., Liu Q. S., Li B. Analysis and review of Turbidity and Toxin Theory [J/OL]. Liaoning Journal of Traditional Chinese Medicine:1-7 [2023-04-18].
- [4] Xu W. C., Zhao R. Y., Li D. G., et al. Enriching traditional Chinese medicine syndrome studies with Turbidity and Toxin syndrome [J]. Chinese Journal of Traditional Chinese Medicine and Pharmacy, 2019, 34 (10): 4580-4582.
- [5] Wang Y., QIANG SONG, Dai Z. Y., Wang C. B., Yan K. P., Du M. F., Yao W., Zhang Y. N., Song X., Li J. A., Wu S. T. Research on Turbidity and Toxin disorders and medication rules based on literature mining, Tianjin Journal of Traditional Chinese Medicine, 2018, 35(12): 891-894.
- [6] Li D. G. On innovation and development of traditional Chinese medicine from perspective of establishment and application of Turbidity and Toxin theory, Journal of Traditional Chinese Medicine, 2020, 61 (22): 1938-1940.
- [7] Tian X.S., Wang Y. G. Professor Wang Yangang's discussion on treatment of gastric precancerous lesions from perspective of eight methods of "core disease mechanism" [J]. World Journal of Integrated Traditional Chinese and Western Medicine, 2023, 18 (03): 501-505.
- [8] Zhou P. P., Wang Y. G., Lü J. J., et al. Effect of dissolving Turbidity and Toxin Formula on epithelial cell interstitial metaplasia in patients with chronic erosive gastritis with Turbidity and Toxin accumulation syndrome [J]. Pharmacology and Clinic of Chinese Medicine, 2019, 35 (06): 154-158.
- [9] Lü J. J., Wang Y. G., Lü X. Y. Effects of dissolving Turbidity and Toxin Formula on HIF-1 α , VEGF and PTEN in patients of chronic erosive gastritis with Turbidity and Toxin internal accumulation syndrome, China Journal of Chinese Materia Medica, 2018, 43(11): 2384-2390.
- [10] Wang Y. G., Lü J. J., Zhou P. P. Study on effect of dissolving Turbidity and Toxin Formula on HGF /cMet signaling pathway in patients of chronic erosive gastritis with Turbidity and Toxin accumulation syndrome, Pharmacology and Clinic of Chinese Medicine, 2017, 33 (02): 186-189.
- [11] Lou Y. Y., Li D. G., Guo X. J., et al. Study on balanced relationship between chronic

gastritis with Turbidity and Toxin syndrome and Th1/Th2, Chinese Journal of Traditional Chinese Medicine and Pharmacy, 2019,35(08):4132-4134.

[12] WANG S. P., Sun R. X., Liu X. F. et al. Discussion on theory of Turbidity and Toxin of malignant tumor, Shizhen Journal of Chinese Medicine Research, 201,32(12):2985-2987.

[13] Han X. P., Xu B. W., Li J. Micro-differentiation and treatment of gastric cancer micro-environment based on “Cold producing Turbidity”, Journal of Traditional Chinese Medicine, 2022,63(12):1135-1138.

[14] Meng L. F., Xie G. Q. Xie Guiquan’s experience in treating chronic renal failure from perspective of Turbidity and Toxin, Chinese Journal of Traditional Chinese Medicine and Pharmacy, 2016,31(04):1301-1303.

[15] Wang Y. Y., Ma F., Zhan Y. L. Treatment of chronic kidney disease based on Turbidity and Toxin theory, Journal of Traditional Chinese Medicine, 2019,60(16):1374-1377.

[16] Liu X., Zhan Y. L., Ma F., et al. Zhan Yongli’s experience in treating chronic renal failure from perspective of Turbidity and Toxin, Guiding Journal of Traditional Chinese Medicine and Pharmacy, 202,28(09):143-146.

[17] Liu X. F., LI D. G., Chen F. Q., et al. Treatment of novel COVID-19 from perspective of Turbidity and Toxin, Chinese Journal of Traditional Chinese Medicine and Pharmacy, 2022,37(08):4503-4506.

[18] Su J., Liu X., Zhang W., et. al. Treatment of interstitial lung disease associated with Sjogren’s syndrome based on Spleen and Stomach Turbidity and Toxin theory, Journal of Beijing University of Traditional Chinese Medicine, 2019,46(03):392-396.

[19] Zhao R., Zhou X.P., Zhou Z. Y. Zhou Zhongying’s treatment of refractory gout from perspective of Damp-Heat, Turbidity and Toxin entering collateral, Journal of Traditional Chinese Medicine, 2022,63(13):1215-1218+1222.

[20] Guo X. C., Zhang J. P. Treatment of hypertension from perspective of Turbidity and Toxin, Journal of Traditional Chinese Medicine, 2010,51(07):581-583.

[21] WU S. T., Wang B., Zhang Q. H., et al. On diabetes pathogenesis from “Spleen dysfunction in dispersing Essence” to “Turbidity and Tonin inner stagnation”, Journal of Traditional Chinese Medicine, 2018,59(22):1920-1924.

[22] Wu S. T., Yan D. X. Prevention and treatment of diabetic dyslipidemia from perspective of Turbidity and Toxin theory, Chinese Journal of Traditional Chinese Medicine and Pharmacy, 2009,24(08):1047-1049.

[23] Lian J., Wu S. T. Wu Shentao’s new understanding of Turbidity and Toxin, Chinese Journal of Information on Traditional Chinese Medicine, 2014,21(05):104-105.

[24] Liang Y. F., Chu X. Q., Shen Y. X., et al. Treatment of nonalcoholic fatty liver disease based on Turbid and Toxin theory, Journal of Basic Chinese Medicine, 2019,25(01):78-80.

[25] Han X. P., Xu B. W., Li Jie. Micro differentiation and treatment of gastric cancer micro-environment based on “Cold producing Turbidity”, Journal of Traditional Chinese Medicine, 2022,63(12):1135-1138.

[26] Mao Y. X., Liu Q. M., Du P. L., et al. A preliminary study on chronic atrophic gastritis related symptoms with Stomach Turbidity and Toxin syndrome accumulation, Hebei Journal of Traditional Chinese Medicine, 2022, 44(07): 1061-1064.

WJECMS