

· 综述 ·

# 眼动脱敏与再加工在伴创伤症状的抑郁症治疗中应用的研究进展

张晶晶 侯文鹏 李先宾

100088 首都医科大学附属北京安定医院国家精神心理疾病临床医学研究中心 精神疾病  
诊断与治疗北京市重点实验室 北京脑重大疾病研究院精神分裂症研究所(张晶晶、侯文鹏、  
李先宾); 065200 廊坊, 河北燕达医院心理科(张晶晶)

通信作者: 李先宾, Email: xianbinli@ccmu.edu.cn

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【摘要】 抑郁症是一种常见心境障碍, 复发率高, 且相当比例的患者存在残留症状。研究发现抑郁症患者的创伤症状与其残留症状、复发均存在明显的相关关系, 因此在抑郁症患者中干预创伤, 可能是改善疾病症状及预后的有效手段。眼动脱敏与再加工是干预创伤的一种常用心理疗法, 现就其在伴有创伤症状的抑郁症中的应用进展进行综述。

【关键词】 抑郁症; 眼动脱敏与再加工; 创伤治疗; 综述

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## Research advances of eye movement desensitization and reprocessing in the treatment of depression with traumatic symptoms Zhang Jingjing, Hou Wenpeng, Li Xianbin

The National Clinical Research Center for Mental Disorders, Beijing Key Laboratory of Mental Disorders, Beijing Institute for Brain Disorders Center of Schizophrenia, Beijing Anding Hospital, Capital Medical University, Beijing 100088, China (Zhang JJ, Hou WP, Li XB); Department of Psychology, Hebei Yanda Hospital, Langfang, Hebei Province 065200, China (Zhang JJ)

Corresponding author: Li Xianbin, Email: xianbinli@ccmu.edu.cn

【Abstract】 Depression is a common mood disorder with a high recurrence rate and a considerable proportion of patients with residual symptoms. It was found that the traumatic symptoms of patients with depression were significantly correlated with their residual symptoms and recurrence. Therefore, the intervention of trauma in patients with depression may be an effective means to improve the symptoms and prognosis of the disease. Eye movement desensitization and reprocessing (EMDR) is a commonly used psychological therapy to intervene in trauma. This article reviews the application of EMDR in depression with traumatic symptoms.

【Key words】 Depressive disorders; Eye movement desensitization reprocessing; Trauma therapy; Review

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抑郁症是一种严重限制个体心理社会功能的精神疾病, 以显著而持久的情绪低落、兴趣减退等为主要临床特征, 伴有相应的认知和行为改变。抑郁症的12个月患病率为6%, 而且患病在整个生命周期中较为普遍<sup>[1]</sup>。虽然药物和心理治疗方法对抑郁症的症状改善是有效的, 但仍然有许多患者存在残留症状, 且长期复发率高<sup>[2]</sup>。创伤是抑郁症的发病风险因素<sup>[3]</sup>。一项荟萃分析显示, 童年虐待作为创伤的一种, 能够预示更严重的抑郁症症状和高风险的复发<sup>[4]</sup>, 而且暴露于创伤的抑郁症患者在抗抑

郁药物治疗后缓解率更低<sup>[5]</sup>。因此, 为了提高抑郁症治疗的有效性, 需要关注患者遭受的创伤性生活事件在抑郁症发展中的重要性。眼动脱敏与再加工(eye movement desensitization and reprocessing, EMDR)是美国心理学家弗朗辛·夏皮罗(Francine Shapiro)于20世纪80年代提出的一种整合的心理治疗方法, 是将心理治疗应用于PTSD的首选方法之一<sup>[6]</sup>。EMDR能够在治疗中帮助个体降低与创伤记忆有关的反应, 重建与创伤有关的正性认知, 进而缓解创伤及相关症状, 减轻和消除个体痛苦<sup>[7]</sup>。现对

EMDR治疗的心理机制、操作程序以及其在治疗伴有创伤症状的抑郁症患者中的应用现状进行综述。

### 一、EMDR治疗的心理机制及操作程序

EMDR是一种整合的心理疗法,借鉴了生理学、心理动力学、行为学和认知行为学等多学科内容,构建了适应性信息处理(adaptive information processing, AIP)模型<sup>[8]</sup>,与其他类型的心理治疗侧重于改变创伤记忆引起的情绪反应不同,EMDR治疗直接关注记忆<sup>[9]</sup>。EMDR通过对创伤经历引起的不适进行脱敏,并在个人的自传性记忆中对其进行再加工<sup>[10]</sup>,促进对创伤相关的负性认知的重建<sup>[11]</sup>,从而缓解相关症状。

1. EMDR治疗的心理机制: 弗朗辛·夏皮罗提出EMDR治疗的理论框架是AIP模型,该模型认为个体存在本能的信息加工系统,可以接收新的体验并以自适应状态把它们储存在现有的记忆网络中,而创伤或应激事件使系统加工中断,产生令人不安的记忆,并把个体关于这一事件的感知储存起来,如果这种储存方式无法获得适应性解决,会出现一系列情感、行为和认知的失调状态,如闪回、回避及警觉性提高等。EMDR的核心操作是在患者回忆创伤经历的同时,进行双侧眼球运动或其他类型的双侧刺激,可以重启对创伤性事件的认知加工,并最终将记忆自适应地整合到记忆网络中,因此创伤记忆得到适应性解决,相关的精神病理学症状随之消退。

基于以上理论基础,对眼球运动的影响方式提出几种假设:(1)眼球运动可诱导与快速眼动睡眠相似的大脑状态,促进创伤记忆的重组;(2)眼球运动可能通过触发定向反应来刺激自动放松反应;(3)加重工作记忆模型的负担,从而降低创伤性图像的生动性,减少负面情绪<sup>[12]</sup>。相关研究发现,眼球运动可以帮助处理情绪记忆<sup>[13]</sup>,其他类型的双侧刺激也对减少创伤记忆的生动性有效<sup>[14]</sup>。随后弗朗辛·夏皮罗提出,EMDR的起效机制可能不是眼球运动独有的影响,而与双重注意力的作用有关<sup>[15]</sup>。许多形式的精神病理学源自早期不良生活经历,比如PTSD和其他创伤性疾病,以及某些形式的抑郁症,而成功的EMDR治疗可以改变个体对早期创伤经历的反应<sup>[16]</sup>。

2. EMDR治疗的操作程序: EMDR的总体目标是使患者能够处理创伤性经历并改善生活质量,遵循由弗朗辛·夏皮罗设计的8个阶段标准方案:(1)采集一般病史和制订计划;(2)帮助患者稳定(情绪)和进行必要的准备;(3)采集创伤病史;(4)脱敏;(5)巩固植入;(6)身体扫描;(7)结束;(8)反馈与再

评估<sup>[16]</sup>。在成功的EMDR操作中,治疗师必须做到:(1)使过去的创伤事件意识化,帮助来访者形成目前关于事件的认知框架;(2)发现目前的扳机点,提取再加工的目标记忆,激化非适应性的症状,使患者脱敏;(3)植入对创伤事件合理有效的正性认知,增加患者的积极效应<sup>[17]</sup>。

### 二、EMDR在治疗伴有创伤症状的抑郁症患者中的应用

EMDR针对的是负性生活事件和创伤经历的记忆,使心理治疗聚焦于适应不良的认知模式,随之改善相关精神障碍。因此,理论上EMDR适用于任何伴有创伤经历的精神疾病<sup>[18]</sup>。目前,EMDR治疗PTSD的疗效已得到广泛认可<sup>[19]</sup>,而且EMDR还可以减轻PTSD伴发的抑郁症状。Acarturk等<sup>[20]</sup>将患有PTSD的患者随机分配到EMDR组( $n=37$ )和空白对照组( $n=33$ ),在干预结束后采用哈佛创伤问卷和贝克抑郁量表(Beck Depression Inventory II, BDI-II)评估,结果表明EMDR能减少创伤后应激症状及患者痛苦,同时改善患者的抑郁和焦虑症状,这与Yurtsever等<sup>[21]</sup>的研究结论一致。此外,van der Kolk等<sup>[22]</sup>比较氟西汀、EMDR和安慰剂对PTSD患者的治疗效果,结果表明在治疗结束及随访中,EMDR能持续性缓解PTSD和抑郁症状,对于成年患者效果更明显。

多项荟萃分析证明了EMDR治疗不仅能够改善PTSD的诊断及症状,还能够缓解其他与创伤相关的症状,比如抑郁焦虑和主观痛苦<sup>[23]</sup>、睡眠质量<sup>[24]</sup>、听幻觉以及妄想等精神病性症状<sup>[25]</sup>,并且在减少创伤后症状和焦虑方面优于认知行为疗法(cognitive behavioral treatment, CBT)<sup>[26]</sup>。

1. 单独应用EMDR治疗: 既往应用EMDR治疗PTSD的研究,证明EMDR改善了患者伴有的抑郁症状<sup>[20-24, 27]</sup>。目前,已有相关研究报道EMDR在伴创伤症状的抑郁症患者治疗中的作用。Gauhar<sup>[28]</sup>采用随机对照试验设计来检验EMDR对有压力性生活事件的抑郁症患者的影响。经过6~8个疗程的EMDR干预后,患者的创伤和抑郁症状显著缓解,而且生活质量也得到了改善。研究发现,EMDR可以通过泛化效应减少消极信念的数量和强度,进而减轻抑郁症状。Wood等<sup>[29]</sup>进行另外一项可行性研究,将EMDR应用于8例诊断为复发或长期抑郁症且不伴有PTSD的患者,其中7例患者的事件影响量表修订版(Impact of Event Scale-Revised, IES-r)和BDI-II得分明显降低,EMDR对改善创伤和抑郁症状有

效,这可能与消极事件(小“i”创伤)的记忆被完全处理有关。另外,EMDR对躯体症状也有积极作用,Paauw等<sup>[30]</sup>对中重度抑郁的青少年应用EMDR治疗后发现,患者抑郁焦虑和头痛、头晕等躯体不适症状减轻,而且共病PTSD且症状越严重的患者抑郁症状减轻越明显,这与EMDR针对性解决抑郁症相关创伤记忆的假设一致。

国内Tang等<sup>[31]</sup>将83例患有与台风莫拉科特相关的PTSD及重度抑郁症的青少年随机分到干预组(EMDR治疗)和对照组(创伤心理教育)。结果显示,干预组的抑郁、焦虑评定量表和IES-r得分均显著低于对照组,表明EMDR不仅能降低灾害相关焦虑、一般焦虑症状,还能降低抑郁症状的严重程度。

一项仅包括随机对照研究的荟萃分析表明,EMDR在减轻抑郁症状方面比“无干预”和CBT更有效,尤其是伴有创伤经历的成人重度抑郁症患者<sup>[32]</sup>,EMDR的治疗靶点是痛苦或创伤记忆,这是抑郁症发作和维持的重要因素。上述结论与Carletto等<sup>[33]</sup>发表的荟萃分析结果一致,即EMDR可能通过处理功能失调的存储记忆进行创伤治疗,从而减轻抑郁症状。

2. 药物治疗基础上附加EMDR治疗:虽然在抑郁症的治疗中,心理干预方法是有帮助的<sup>[34]</sup>,但相比单独应用心理治疗,药物治疗联合EMDR的研究较多。Hase等<sup>[35]</sup>将两组有创伤性记忆的抑郁症患者进行配对研究:研究组患者在接受常规药物治疗的同时额外进行EMDR治疗,对照组仅接受药物治疗。结果根据症状自评量表(Symptom Checklist 90, SCL-90)抑郁分量表的测量,EMDR组16例患者中有11例在治疗结束时抑郁症状完全缓解,且在1年多的随访期间,EMDR组的抑郁症状复发率更低,效果更持久。另外,Ostacoli等<sup>[36]</sup>调查了EMDR或CBT联合抗抑郁药物的疗效,该研究共纳入66例复发性抑郁症患者,观察研究组(EMDR+药物治疗)和对照组(CBT+药物治疗)症状的缓解率,结果显示两种治疗方法在减少焦虑及创伤症状方面都有效,而EMDR能缓解再处理记忆相关的功能受损,更迅速地降低患者的抑郁水平,降低复发风险。EMDR还可以改善患者的生活质量,Jahanfar等<sup>[37]</sup>将70例患有重度抑郁症的患者随机分配到干预组和对照组,对照组仅给予抗抑郁药物治疗,干预组在药物治疗的基础上额外给予8次EMDR治疗,结果发现,EMDR使创伤性事件脱敏并以适应性方式

进行认知重建,从而减少抑郁症状,提高患者身心健康和社会关系领域的生活质量,改善预后水平。

以上研究均明确将PTSD作为排除标准,对伴有创伤症状的抑郁症患者进行对照研究,而在Minelli等<sup>[38]</sup>开展的研究中,将有创伤经历的难治性抑郁症作为纳入标准,其中包括较大比例共病PTSD的患者,结果发现接受EMDR治疗患者的抑郁症状好转更显著,在焦虑症状、睡眠障碍改善方面都优于CBT对照组,而且随访时EMDR组的抑郁症状复发率更低。

国内对于EMDR治疗抑郁症的研究相对较少。与单纯药物治疗相比,联用EMDR能更快缓解症状,而且无明显不良反应,耐受性较好。宋磊和王振英<sup>[39]</sup>对抑郁症患者进行的对照研究中,研究组在舍曲林治疗基础上联合EMDR治疗,对照组仅予以舍曲林治疗,在治疗的1周及2周末,研究组抑郁症状治疗有效率高于对照组,而且起效更快。于雪竹等<sup>[40]</sup>将240例伴有应激性生活事件的抑郁症患者随机分为对照组(单独氟西汀治疗)和干预组(EMDR联合氟西汀治疗),比较两组治疗前后的临床疗效及不良反应发生率,发现EMDR可以更快减轻患者的抑郁症状,有效提高患者的生活质量,而且无明显不良反应。

3. EMDR联合其他心理治疗:越来越多的临床试验研究了以创伤为重点的心理治疗对抑郁症患者的有效性<sup>[41]</sup>,也有一些将EMDR与其他方法联合应用的对照研究。Hofmann等<sup>[42]</sup>调查了在原发性抑郁症患者中额外应用EMDR治疗的效果,证明与CBT单独治疗组相比,联合应用EMDR治疗组的BDI-II评分更低,抑郁症状缓解更明显,这可能与EMDR处理了压力性生活事件造成的“记忆网络存储功能障碍”有关。而Dominguez等<sup>[43]</sup>将49例抑郁症患者随机分配到干预组(EMDR+CBT治疗)与对照组(自信训练+CBT治疗),尽管治疗结束后两组患者抑郁症状的改善没有明显差异,但在第6周及第12周的随访中,EMDR治疗组患者的抑郁症状明显减少,因此将与精神病理学病因相关的记忆作为靶点是EMDR治疗的关键。

### 三、总结和展望

在抑郁症的治疗和管理中,评估创伤经历和不良生活事件是很重要的,并考虑对有创伤史的患者进行补充治疗。EMDR是一种有效的心理治疗工具,可以有效且持久地减少创伤相关症状,改善抑郁症

状,且耐受性良好,依从性高<sup>[44]</sup>。然而,需要注意的是,目前的随机对照研究多是小样本,并不确定上述研究结果是否可重复。因此,需要研究者扩大样本量,进行随机对照研究来验证上述研究结果,为提高抑郁症治疗效果提供新的治疗手段。此外,若能开发相关线上EMDR操作程序,则能更方便和规范地开展诊疗,同时减轻患者治疗的时间和经济负担。

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### 参 考 文 献

- [ 1 ] Kessler RC, Bromet EJ. The epidemiology of depression across cultures[ J ]. *Annu Rev Public Health*, 2013, 34: 119-138. DOI: 10.1146/annurev-publhealth-031912-114409.
- [ 2 ] Gartlehner G, Wagner G, Matyas N, et al. Pharmacological and non-pharmacological treatments for major depressive disorder: review of systematic reviews[ J ]. *BMJ Open*, 2017, 7(6): e014912. DOI: 10.1136/bmjopen-2016-014912.
- [ 3 ] Hovens JG, Giltay EJ, Spinhoven P, et al. Impact of childhood life events and childhood trauma on the onset and recurrence of depressive and anxiety disorders[ J ]. *J Clin Psychiatry*, 2015, 76(7): 931-938. DOI: 10.4088/JCP.14m09135.
- [ 4 ] Nanni V, Uher R, Danese A. Childhood maltreatment predicts unfavorable course of illness and treatment outcome in depression: a meta-analysis[ J ]. *Am J Psychiatry*, 2012, 169(2): 141-151. DOI: 10.1176/appi.ajp.2011.11020335.
- [ 5 ] Williams LM, Debatista C, Duchemin AM, et al. Childhood trauma predicts antidepressant response in adults with major depression: data from the randomized international study to predict optimized treatment for depression[ J ]. *Transl Psychiatry*, 2016, 6(5): e799. DOI: 10.1038/tp.2016.61.
- [ 6 ] Shapiro F. Eye movement desensitization: a new treatment for post-traumatic stress disorder[ J ]. *J Behav Ther Exp Psychiatry*, 1989, 20(3): 211-217. DOI: 10.1016/0005-7916(89)90025-6.
- [ 7 ] 杨清风,崔红.眼动脱敏与再加工心理疗法研究述评[ J ].*医学综述*, 2015, 21(8): 1362-1364. DOI: 10.3969/j.issn.1006-2084.2015.08.006.  
Yang QF, Cui H. Review of the research on psychotherapy of eye movement desensitization and reprocessing psychotherapy[ J ]. *Medical Review*, 2015, 21(8): 1362-1364.
- [ 8 ] Carpenter JT. EMDR as an integrative psychotherapy approach: experts explore the paradigm prism[ J ]. *Psychother Res*, 2004, 14(1): 135-136. DOI: 10.1093/ptr/kph009.
- [ 9 ] Gainer D, Alam S, Alam H, et al. A FLASH OF HOPE: eye movement desensitization and reprocessing (EMDR) therapy[ J ]. *Innov Clin Neurosci*, 2020, 17(7/9): 12-20.
- [ 10 ] Hardy A. Pathways from trauma to psychotic experiences: a theoretically informed model of posttraumatic stress in psychosis[ J ]. *Front Psychol*, 2017, 8: 697. DOI: 10.3389/fpsyg.2017.00697.
- [ 11 ] 吕秋云,钱铭怡. EMDR 在中国的发展历程[ J ].*西华大学学报(哲学社会科学版)*, 2010, 29(5): 1-2, 20.
- [ 12 ] Lyu QY, Qian MY. The developing process of EMDR in China[ J ]. *Journal of Xihua University (Philosophy & Social Sciences)*, 2010, 29(5): 1-2, 20.
- [ 12 ] Landin-Romero R, Moreno-Alcazar A, Pagani M, et al. How does eye movement desensitization and reprocessing therapy work? A systematic review on suggested mechanisms of action[ J ]. *Front Psychol*, 2018, 9: 1395. DOI: 10.3389/fpsyg.2018.01395.
- [ 13 ] Lee CW, Cuijpers P. A Meta-analysis of the contribution of eye movements in processing emotional memories[ J ]. *J Behav Ther Exp Psychiatry*, 2013, 44(2): 231-239. DOI: 10.1016/j.jbtep.2012.11.001.
- [ 14 ] de Jongh A, Ernst R, Marques L, et al. The impact of eye movements and tones on disturbing memories involving PTSD and other mental disorders[ J ]. *J Behav Ther Exp Psychiatry*, 2013, 44(4): 477-483. DOI: 10.1016/j.jbtep.2013.07.002.
- [ 15 ] Shapiro F, Laliotis D. EMDR therapy for trauma-related disorders[ J ]. *Evidence Based Treatments for Trauma-Related Psychological Disorders*, 2015: 205-228. DOI: 10.1007/978-3-319-07109-1\_11.
- [ 16 ] Shapiro F, Maxfield L. Eye Movement Desensitization and Reprocessing (EMDR): information processing in the treatment of trauma[ J ]. *J Clin Psychol*, 2002, 58(8): 933-946. DOI: 10.1002/jclp.10068.
- [ 17 ] 孙海霞,杨蕴萍.眼动脱敏与再加工治疗现状[ J ].*中国临床心理学杂志*, 2004, 12(3): 324-326.  
Sun HX, Yang YP. The Psychotherapy of eye movement desensitization and reprocessing[ J ]. *China Journal of Clinical Psychology*, 2004, 12(3): 324-326.
- [ 18 ] Kluft RP, Shapiro, Francine. (1995). *Eye movement desensitization and reprocessing: basic principles, protocols, and procedures*. New York: Guilford Press. 398 Pages. Price: \$40.00 [ J ]. *Am J Clin Hypn*, 1995, 38(2): 137-140. DOI: 10.1080/00029157.1995.10403197.
- [ 19 ] Wilson G, Farrell D, Barron I, et al. The use of eye-movement desensitization reprocessing (EMDR) therapy in treating post-traumatic stress disorder - a systematic narrative review[ J ]. *Front Psychol*, 2018, 9: 923. DOI: 10.3389/fpsyg.2018.00923.
- [ 20 ] Acaturk C, Konuk E, Cetinkaya M, et al. The efficacy of eye movement desensitization and reprocessing for post-traumatic stress disorder and depression among Syrian refugees: results of a randomized controlled trial[ J ]. *Psychol Med*, 2016, 46(12): 2583-2593. DOI: 10.1017/S0033291716001070.
- [ 21 ] Yurtsever A, Konuk E, Akyüz T, et al. An eye movement desensitization and reprocessing(EMDR) group intervention for Syrian refugees with post-traumatic stress symptoms: results of a randomized controlled trial[ J ]. *Front Psychol*, 2018, 9: 493. DOI: 10.3389/fpsyg.2018.00493.
- [ 22 ] van der Kolk BA, Spinazzola J, Blaustein ME, et al. A randomized clinical trial of eye movement desensitization and reprocessing (EMDR), fluoxetine, and pill placebo in the treatment of posttraumatic stress disorder: treatment effects and long-term maintenance[ J ]. *J Clin Psychiatry*, 2007, 68(1): 37-46. DOI: 10.4088/jcp.v68n0105.
- [ 23 ] Chen YR, Hung KW, Tsai JC, et al. Efficacy of eye-movement desensitization and reprocessing for patients with posttraumatic-stress disorder: a Meta-analysis of randomized controlled trials[ J ]. *PLoS One*, 2014, 9(8): e103676. DOI: 10.1371/journal.pone.0103676.

- [ 24 ] Raboni MR, Alonso FF, Tufik S, et al. Improvement of mood and sleep alterations in posttraumatic stress disorder patients by eye movement desensitization and reprocessing[ J ]. *Front Behav Neurosci*, 2014, 8: 209. DOI: 10.3389/fnbeh.2014.00209.
- [ 25 ] van den Berg DP, van der Gaag M. Treating trauma in psychosis with EMDR: a pilot study[ J ]. *J Behav Ther Exp Psychiatry*, 2012, 43(1): 664-671. DOI: 10.1016/j.jbtep.2011.09.011.
- [ 26 ] Khan AM, Dar S, Ahmed R, et al. Cognitive behavioral therapy versus eye movement desensitization and reprocessing in patients with post-traumatic stress disorder: systematic review and Meta-analysis of randomized clinical trials[ J ]. *Cureus*, 2018, 10(9): e3250. DOI: 10.7759/cureus.3250.
- [ 27 ] Carletto S, Borghi M, Bertino G, et al. Treating post-traumatic stress disorder in patients with multiple sclerosis: a randomized controlled trial comparing the efficacy of eye movement desensitization and reprocessing and relaxation therapy[ J ]. *Front Psychol*, 2016, 7: 526. DOI: 10.3389/fpsyg.2016.00526.
- [ 28 ] Gauhar YWM. The efficacy of EMDR in the treatment of depression[ J ]. *J EMDR Pract Res*, 2016, 10: 59-69. DOI: 10.1891/1933-3196.10.2.59.a
- [ 29 ] Wood E, Ricketts T, Parry G. EMDR as a treatment for long-term depression: a feasibility study[ J ]. *Psychol Psychother*, 2018, 91(1): 63-78. DOI: 10.1111/papt.12145.
- [ 30 ] Paauw C, de Roos C, Tummers J, et al. Effectiveness of trauma-focused treatment for adolescents with major depressive disorder[ J ]. *Eur J Psychotraumatol*, 2019, 10(1): 1682931. DOI: 10.1080/20008198.2019.1682931.
- [ 31 ] Tang TC, Yang P, Yen CF, et al. Eye movement desensitization and reprocessing for treating psychological disturbances in Taiwanese adolescents who experienced Typhoon Morakot[ J ]. *Kaohsiung J Med Sci*, 2015, 31(7): 363-369. DOI: 10.1016/j.kjms.2015.04.013.
- [ 32 ] Yan S, Shan Y, Zhong S, et al. The effectiveness of eye movement desensitization and reprocessing toward adults with major depressive disorder: a Meta-analysis of randomized controlled trials[ J ]. *Front Psychiatry*, 2021, 12: 700458. DOI: 10.3389/fpsyg.2021.700458.
- [ 33 ] Carletto S, Malandrone F, Berchiolla P, et al. Eye movement desensitization and reprocessing for depression: a systematic review and Meta-analysis[ J ]. *Eur J Psychotraumatol*, 2021, 12(1): 1894736. DOI: 10.1080/20008198.2021.1894736.
- [ 34 ] Nemeroff CB, Heim CM, Thase ME, et al. Differential responses to psychotherapy versus pharmacotherapy in patients with chronic forms of major depression and childhood trauma[ J ]. *Proc Natl Acad Sci U S A*, 2003, 100(24): 14293-14296. DOI: 10.1073/pnas.2336126100.
- [ 35 ] Hase M, Balmaceda UM, Hase A, et al. Eye movement desensitization and reprocessing (EMDR) therapy in the treatment of depression: a matched pairs study in an inpatient setting[ J ]. *Brain Behav*, 2015, 5(6): e00342. DOI: 10.1002/brb3.342.
- [ 36 ] Ostacoli L, Carletto S, Cavallo M, et al. Comparison of eye movement desensitization reprocessing and cognitive behavioral therapy as adjunctive treatments for recurrent depression: the European Depression EMDR Network (EDEN) randomized controlled trial[ J ]. *Front Psychol*, 2018, 9: 74. DOI: 10.3389/fpsyg.2018.00074.
- [ 37 ] Jahanfar A, Fereidouni Z, Behnamoghdam M, et al. Efficacy of eye movement desensitization and reprocessing on the quality of life in patients with major depressive disorder: a randomized clinical trial[ J ]. *Psychol Res Behav Manag*, 2020, 13: 11-17. DOI: 10.2147/PRBM.S232589.
- [ 38 ] Minelli A, Zampieri E, Sacco C, et al. Clinical efficacy of trauma-focused psychotherapies in treatment-resistant depression (TRD) in-patients: a randomized, controlled pilot-study[ J ]. *Psychiatry Res*, 2019, 273: 567-574. DOI: 10.1016/j.psychres.2019.01.070.
- [ 39 ] 宋磊, 王振英, 舍曲林联合 EMDR 治疗抑郁症对照研究[ J ]. *临床心身疾病杂志*, 2007, 13(4): 307-308. DOI: 10.3969/j.issn.1672-187X.2007.04.008.
- Song L, Wang ZY. A control study of sertraline combined with the EMDR in the treatment of depression[ J ]. *Journal of Clinical Psychosomatic Diseases*, 2007, 13(4): 307-308.
- [ 40 ] 于雪竹, 刘伟, 李媛媛, 等. EMDR 技术联合氟西汀治疗应激性生活事件抑郁症疗效观察[ J ]. *中国地方病防治杂志*, 2017, 32(8): 923, 925.
- [ 41 ] Bisson JI, Berliner L, Cloitre M, et al. The international society for traumatic stress studies new guidelines for the prevention and treatment of posttraumatic stress disorder: methodology and development process[ J ]. *J Trauma Stress*, 2019, 32(4): 475-483. DOI: 10.1002/jts.22421.
- [ 42 ] Hofmann A, Hilgers A, Lehnung M, et al. Eye movement desensitization and reprocessing as an adjunctive treatment of unipolar depression: a controlled study[ J ]. *J EMDR Pract Res*, 2014, 8: 103-112. DOI: 10.1891/1933-3196.8.3.103.
- [ 43 ] Dominguez S, Drummond P, Gouldthorp B, et al. A randomized controlled trial examining the impact of individual trauma-focused therapy for individuals receiving group treatment for depression[ J ]. *Psychol Psychother*, 2021, 94(1): 81-100. DOI: 10.1111/papt.12268.
- [ 44 ] Perlini C, Donisi V, Rossetti MG, et al. The potential role of EMDR on trauma in affective disorders: a narrative review[ J ]. *J Affect Disord*, 2020, 269: 1-11. DOI: 10.1016/j.jad.2020.03.001.

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