·综述·

心理治疗在创伤后应激障碍中的应用及机制研究进展

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【摘要】 创伤后应激障碍(PTSD)是一种严重的精神障碍,心理治疗是创伤后应激障碍常见的治疗方法。已有研究证实心理治疗对于PTSD各种症状改善尤为重要,但目前对于每种心理治疗方法有何差异,治疗机制、适应的症状有何不同研究较少。现回顾PTSD心理治疗的国内外研究,分别对各种心理治疗适应症状及机制等方面进行综述。

【关键词】 应激障碍,创伤后; 心理治疗; 综述

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Application and mechanism of psychotherapy in post-traumatic stress disorder *Wu Yue, Yang Junhua,*

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【Abstract】 Post-traumatic stress disorder (PTSD) is one of the most serious mental disorders, and psychotherapy is a common treatment for PTSD. It has been proved that psychotherapy is very important for the improvement of PTSD symptoms, but there are few reports about the differences in the applicability and efficacy on various psychotherapy methods. This article reviews the domestic and international researches on the psychotherapy of PTSD, and elaborates the mechanism and indication of different psychotherapy methods.

【Key words】 Stress disorders, post-traumatic; Psychotherapy; Review

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创伤后应激障碍(post-traumatic stress disorder, PTSD)是指个体经历、目睹或遭遇到一个或多个涉及自身或他人的实际死亡,或遭受死亡的威胁,或严重的受伤,或躯体完整性受到威胁后,个体延迟出现并持续存在的一类精神障碍。主要临床表现为创伤性事件再体验、警觉性增高和回避症状[1],容易出现物质滥用、自伤自杀等问题[2],甚至出现精神病性症状,从根本上改变一个人的思维、情感和行为反应,造成难以恢复的认知功能损害。研究显示,PTSD患者额颞叶痴呆(frontotemporal dementia, FTD)的患病率是一般人群的450~660倍[3]。因此PTSD应尽早预防和治疗。近年,心理治疗作为PTSD治疗手段引发了国内外学者的关注。研究者将心理和药物治疗进行疗效比较发现,心理治疗常常有更好的疗效和依从性[4-5]。心理治疗不仅可以减少PTSD核心症状,改善抑郁焦虑情绪,降低对不良事件的敏感性,还能使患者恢复社会功能。现从心理治疗机制、适应症状以及疗效方面进行综述。

一、心理治疗在PTSD中的应用

PTSD临床症状不同,采用治疗方案不同,对于PTSD不同症状采用哪种治疗方案是当前需要研究的重点。

1.创伤性再体验症状:对于反复闯入性回忆痛苦的创伤性事件或反复痛苦的梦见创伤性事件的

症状,可采用眼动脱敏与再处理治疗(eye movement desensitization and reprocessing, EMDR)、认知行为疗法(cognitive behavior therapy, CBT)治疗。

以创伤聚焦为主的认知行为疗法(trauma-focused cognitive behavior therapy, TF-CBT)是一种基于技能的模型,其帮助患者修正与创伤有关的认知功能障碍,克服与创伤相关性回避,最终形成创伤记忆的重组[6],纠正自身存在的认知性错误并形成正确的认知。创伤性再体验症状与快速眼动(REM)活动减少相关[7],EMDR通过诱导类似于REM睡眠期间激活的神经机制来干扰记忆和经历的处理[8],缓解创伤性再体验症状。

创伤记忆及与创伤相关的负性评价是PTSD的核心所在[9],PTSD治疗效果的好坏取决于该治疗是否能有效处理患者的创伤性记忆。研究发现,EMDR在改善PTSD创伤性再体验症状时较CBT更有效[10],治疗期更短[6],但EMDR要求PTSD患者持续暴露于创伤记忆之中,如若患者未做好充分准备或对创伤完全持回避态度,则会表现出耐受性差[11]。

2.回避或麻木症状:长期暴露(prolonged exposure, PE)治疗主要关注创伤记忆的处理及其对患者生活的影响,从而直接改善创伤相关症状,其主要包括暴露创伤记忆和处理创伤记忆两个过程[12]。PE通过增强默认模式网络与背侧前额叶皮质(dorsolateral prefrontal cortex, dlPFC)功能连通性,减轻PTSD患者的回避和过度兴奋症状[13]。在强奸受害者中,PE治疗后自我报告的分离症状显著降低[14]。混合创伤患者在PE治疗后,47%在临床上表现出麻木回避症状明显减轻[15];此外随访3个月发现,53%分离症状显著下降。可见PE对于回避、过度兴奋和麻木等症状均有效。

3.警觉性增高:警觉性增高可表现为高度恐惧、易激惹等症状。EMDR是一种有效改善警觉性增高症状的方法,可通过增加杏仁核体积改善高度惊觉及高度恐惧症状[16-17]。陈玲等[18]将因丧亲患PTSD的患者随机分为EMDR组与CBT组,分别于治疗前后评价两组患者PTSD症状发现,EMDR组易激惹症状群得分低于CBT组,表明激惹性症状EMDR疗效优于CBT。

正念减压[19](effects of modified mindfulness-based stress reduction, MBSR)是一种冥想方法,旨在促进放松和获得更高的幸福感,其将正念冥想和瑜伽结合在一起,研究显示MBSR可减少5-羟色胺转运体(SLC6A4)和FK506结合蛋白5(FKBP5)甲基化,从而改善PTSD患者单胺及下丘脑-垂体-肾上腺轴(the hypothalamic-pituitary-adrenal axis, HPA轴)功能,减轻其功能紊乱引起的激惹性及攻击性等症状[19]。

PE治疗可使左侧前额叶皮质(prefrontal cortex, PFC)的激活增加,从而减轻恐惧和愤怒等症状[20],降低警觉性增高表达;且PE通过增强杏仁核-腹内侧前扣带皮质(ventromedial prefrontal cortex, vmPFC)、海马和杏仁核之间功能连接消退创伤记忆[21],减少警觉性增高持续的时间。

综上,对于警觉性增高的症状可通过EMDR、PE、CBT、MBSR等心理治疗方法进行有效治疗,然而四种方法的治疗机制并不相同,在治疗效果方面EMDR较CBT治疗效果好,但并未发现EMDR和PE、MBSR治疗之间的差异性。

4.其他症状:PTSD除外三大核心症状外,还包括如焦虑、抑郁、失眠等情绪及创伤性压力等症状。

精神分析治疗是由弗洛伊德开创的一种特殊心理治疗,目前对于精神分析的研究较少,既往研究显示,聚焦创伤的精神动力学治疗(trauma-focused psychodynamic psychotherapy, TFPP)不同于传统心理治疗,它侧重于创伤症状及相关动力学,能够改善患PTSD的退伍军人恐惧及PTSD症状,但对注意力障碍疗效不佳[22]。

Khan等[23]研究发现,对于PTSD焦虑症状的改善,EMDR疗效优于CBT。而PE对PTSD共病抑郁、焦虑等症状的治疗效果不明确,但不会增加PTSD共病的风险。

改善睡眠可以降低PTSD的严重程度[24],同时提高一个人应对创伤症状的能力。Pigeon等[24]对遭受暴力的幸存者进行失眠认知行为疗法(cognitive behavioral therapy for insomnia, CBTi)随机对照试验显示,CBTi之后患者IL-6水平降低,睡眠时间增加,应对创伤症状能力提高。

总体来说,心理治疗是PTSD的有效治疗措施。但在心理治疗中治疗师个人特质有积极的一面,也有消极的一面会影响治疗效果[25]。此外,心理治疗中患者行为至关重要,患者对治疗期望过高或与治疗师无法进行联盟均会影响治疗。因此,心理治疗前要评估好患者危险因素,与患者共同制定个体化心理治疗方案,提高治疗疗效。

二、心理治疗在PTSD中的机制研究

(一)PTSD心理治疗的生物学机制

1.神经免疫系统改变:经历应激事件后,HPA轴与交感神经系统应激反应通路激活,导致糖皮质

激素异常释放[26]，脑内5-羟色胺(5-HT)功能下降，最终出现失眠、激惹性及攻击性增加等症状。交感神经系统应激反应激活会导致促炎细胞因子水平升高[27]，影响人的情绪和心理状态；PTSD患者血浆中肿瘤坏死因子(tumor necrosis factor，TNF)-α、IL-1β和IL-6水平升高，IL-1β升高与恐惧症状呈正相关，IL-6升高会引起睡眠障碍[28-29]。研究发现心理治疗可以降低经历应激事件后HPA轴和交感神经系统活性，改善PTSD症状。例如正念冥想可能会降低交感-肾上腺髓质轴和HPA轴活动[30]，减轻其功能紊乱引起的失眠、激惹性及攻击性增加等症状。

因此，应激后HPA轴、交感神经系统异常等会导致PTSD各种症状，心理治疗可改善各系统功能紊乱，从而缓解临床症状。

2.脑结构改变：PTSD患者糖皮质激素、去甲肾上腺素异常分泌会导致海马、杏仁核和前额叶皮质等大脑结构和功能改变[31]。海马参与学习记忆及情绪调节[32]，所有的5-HT受体在海马均有表达。应激过程，HPA轴持续激活可能降低海马神经元兴奋性及5-HT水平，从而介导与记忆、情绪相关的PTSD症状，如创伤记忆的形成、失眠、焦虑和抑郁症状等。海马含有多种去甲肾上腺素受体，受到压力时去甲肾上腺素受体被激活，可能会强化长期记忆。PFC参与情绪调控，其表达大量5-HT受体[31]，5-HT1A和5-HT2A受体是PFC-杏仁核皮质回路的关键调节因子。压力刺激下5-HT能系统异常，腹侧PFC受到抑制，导致患者出现恐惧记忆重现、愤怒和愧疚等症状[33]。杏仁核是一个参与情绪处理、获取、表达和对恐惧及创伤记忆调节的大脑区域[34]，较小的杏仁核体积与PTSD发展相关。研究表明，EMDR通过增加杏仁核体积，改善高度惊觉及高度恐惧反应等症状[16]。Peres等[20]发现，PE治疗后左侧PFC激活增加，改善患者恐惧、愤怒等症状。

总之，心理治疗可改变PTSD脑结构，从而改善应激后脑结构改变引起的临床症状，如认知障碍、高度警觉等。

3.脑功能连接：静息状态功能连接(resting-state functional connectivity，rsFC)研究发现，PTSD患者杏仁核-海马和vmPFC功能连接减弱，导致患者对压力的注意力增强，对不良事件产生偏倚记忆[35-36]，出现回避症状[37]，功能连接越弱，回避症状越重[13]；PTSD破坏内源性大麻素系统导致PFC-杏仁核功能失调，出现PTSD相关的过度兴奋症状[38]。研究发现，PE通过增强默认网络(default mode network，DMN)与dlPFC功能连接，减轻回避和过度兴奋症状[13]。

综上，心理治疗能够改变PTSD患者各脑区功能连接的异常，从而改善症状。

(二)PTSD心理治疗的心理学机制

PTSD由多种应激源引起，对于应激源的分类方式有很多，但并不是所有人经历应激源刺激后都会发生PTSD。研究显示，PTSD核心症状的根源与身体受威胁或遭受暴力侵害有关。认知理论认为，创伤性事件的记忆频繁入侵及关于该事件的情感信息处理受损，信息以未经处理的形式存储，对PTSD的发展至关重要[39]。巴甫洛夫理论假设，创伤时经历的刺激可能与恐惧和逃避有关[40]。此外研究显示，遭受创伤后性格内向、高神经质水平的人更容易患PTSD[41]，且创伤前高神经质与PTSD症状严重程度密切相关[42]。另外创伤性事件累积、社会支持系统不佳及消极应对方式在PTSD发生中起着决定作用，尤其是不同创伤性事件的累积会增加PTSD的风险[43]。然而，邱昌建等[44]研究的结果与此不同，其结果显示5年内连续2次遭受地震创伤、更多的负性认知或更大的心理创伤并没有导致PTSD的发生率升高，究其原因发现，这与汶川地震后社会对心理干预的重视程度增加，加强了心理重建等社会支持，增加了战胜灾害的决心有关[45-46]。可见心理治疗在PTSD中处于重要地位，可改善受创伤人群的创伤后应对能力，从而减轻PTSD发生。

三、总结与展望

综上所述，PTSD可以对患者造成远期严重的影响，早期、全面的治疗对于PTSD患者尤为重要。心理治疗是PTSD治疗的主要方法，也可以在某种程度上弥补药物治疗的局限性。不同心理治疗对PTSD不同症状的疗效存在差异性，EMDR、CBT治疗对创伤性再体验症状、警觉性增高及焦虑、抑郁等症状均有效，且EMDR较CBT更有效，治疗期更短。PE对回避、麻木、过度兴奋，警觉性增高症状疗效较好，而对共病抑郁、焦虑等症状的治疗效果不明确，但不会增加PTSD共病的风险。MBSR是一种冥想方法，可以有效缓解激惹性及攻击性增加症状。

另外，一些新兴心理治疗因担心患者无法忍受痛苦导致症状恶化，在临床上应用相对较少。目前关于PTSD心理治疗的研究大多集中在改善核心症状方面，对于复杂创伤后应激障碍(complex PTSD，CPTSD)心理治疗研究甚少。可见，对于各种心理治疗的研究仍存在不足，未来的研究旨在弥补目前心理治疗的不足及进一步探索更新颖的心理治疗方法。

利益冲突 文章所有作者共同认可文章无相关利益冲突

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