

焦虑症与心血管疾病的最新进展

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摘要

综述冠心病的危险因素、焦虑症与冠心病的关系、焦虑症的生理机制及治疗。为临幊上焦虑症的治疗提供新思路。

关键词

心血管疾病, 焦虑症, 焦虑状态

Recent Advances in Anxiety Disorders and Cardiovascular Diseases

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Abstract

The risk factors of coronary heart disease, the relationship between anxiety and coronary heart disease, physiological mechanism and treatment of anxiety are reviewed. It provides new ideas for the treatment of clinical anxiety disorder.

Keywords

Cardiovascular Disease, Anxiety Disorders, Anxiety States

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1. 引言

冠心病(CAD)是影响全球人口的主要心血管疾病之一。冠心病是一种由于动脉粥样硬化或冠状动脉粥样硬化性闭塞而发生的心血管疾病[1]。由于经济的发展，饮食和生活方式的改变，冠心病的发生率和死亡率持续上升，给中国经济带来了沉重的负担。广泛的流行病学研究已经确定了与冠心病发展相关的危险因素，包括糖尿病、高血压、吸烟、高脂血症、肥胖、高同型半胱氨酸血症和社会心理压力[2]。焦虑及其相关疾病在心血管疾病患者中很常见，并可能显著影响心脏健康，与心血管疾病互为因果。焦虑症与心脏病的发作和进展有关，并且与不良预后有关。生理(自主神经功能障碍、炎症、内皮功能障碍、血小板聚集变化)和健康行为机制都可能有助于解释焦虑症与心血管疾病之间的关系。焦虑最近成为另一种重要的心理疾病，经常与抑郁症同时发生并影响心血管疾病的预后，并独立于抑郁症影响心血管疾病的进展[3]。

2. 焦虑症的流行病学

研究结果表明，焦虑状态或者焦虑症[4]在冠心病患者中很常见，并且可能与心血管发病率和死亡率的显著增加有关[5]。在冠心病患者中，焦虑症的患病率高达 40% 到 70% [6]。焦虑症，无论是在心血管疾病发病前还是发病后，都会导致身体机能受限，生活质量下降[7]和患者过早死亡，发生急性冠脉综合征后，20%~30% 的患者会出现焦虑水平升高[8]。小部分患者急性冠脉综合征后出现的焦虑是短暂的，超一半患者的焦虑状态会持续长达 1 年[9]。研究表明，等待冠状动脉旁路移植术的冠心病患者中，25% 的患者在手术前经历了焦虑状态水平升高，许多患者在手术后的几个月内症状有所减轻[10]。在心衰患者中，32% 患者的焦虑状态水平升高，13% 的患者达到了焦虑症的诊断标准[11]。大约 20% 的需要植入心脏辅助装置的晚期心衰患者也受到焦虑状态的影响[12]。在接受了植入式心脏复律除颤器以防止发生致死性心律失常的患者中，大约 20%~40% 的患者存在焦虑状态水平的升高[13]。

3. 焦虑症的诊断与筛查

临幊上，焦虑症包括具有过度恐惧(对现实或感知到的迫在眉睫的威胁的情绪反应)和与焦虑相关的行為障碍[14]。焦虑状态包括一系列反映自主神经兴奋增强的心肺症状，包括心悸、心率加快、胸痛、呼吸困难、头晕、麻木和腹部不适。其他症状如跨越认知(例如，恐惧、担忧、灾难性、反刍、思想抑制)和行為(避免地点或情况、寻求安全的行为、强迫)。目前焦虑症的诊断是主观的，建议焦虑症的诊断使用流行的精神疾病诊断和统计手册[15]或国际疾病分类标准的指南。美国精神病学会《精神障碍诊断与统计手册》第五版(DSM-5)发布了焦虑症的诊断标准及亚型[16]：把焦虑症分为以下几种类型：1) 基于恐惧回路的焦虑症，例如恐惧症、惊恐、广泛性焦虑症和社交焦虑；2) 与强迫症和强迫症有关的焦虑，例如强迫症(OCD)(以前被归入 DSM-IV 中的前一类)；3) 与创伤和压力相关的焦虑，例如创伤后应激障碍；4) 以分离为特征的焦虑，即分离性障碍、去个人化障碍和分离性健忘症[17]。有研究显示：女性、糖尿病和 Gensini 评分在所有时间点都是焦虑和抑郁的独立危险因素[18]。焦虑症是持续性、普遍性和功能限制性的，并且与心脏和心理健康状况不佳有关。焦虑症患者更普遍的使用医疗资源，大多数患者频繁的就诊于门诊，由于一线医生对心理疾病的认识不足，门诊的诊断和治疗并不能使患者得到满意的回答，约 14% 的抑郁症或焦虑症患者仍未被识别[19]。心脏神经症患者的广泛性焦虑症和恐慌症发生率远高于普通人群[20]，此类患者的生活质量受损程度高于器质性心脏病患者[21]。此外，心脏神经症患者反复使用医疗资源会导致

巨大的经济负担，此类患者每年的评估费用达数十亿[22]。这一结果导致很多焦虑症患者并未得到专业的治疗，使得症状恶化。

4. 焦虑与心血管的联系

心跳加速或心悸是心血管疾病和焦虑的中心症状。自主神经系统和下丘脑-垂体-肾上腺轴的功能失调会影响心血管系统，在焦虑和抑郁中都会发生[23]。由于冠心病和焦虑的临床表现经常重叠，尤其是非典型胸痛、呼吸困难、心悸和心律失常。目前，双心门诊的建立使得这一问题得到逐步解决。焦虑可能是对压力情况的正常反应，适当的焦虑状态可促使患者按时服药、定期锻炼、定期体检，但长时间的焦虑状态是有害的。Roest 等人对 20 项研究($N = 249,846$)进行的 Meta 分析，评估了焦虑(即焦虑、恐慌、恐惧和担忧)与冠心病发病的关系，在排除了种族、健康行为、冠心病危险因素的影响后，发现最初高度焦虑的健康个体患冠心病的风险增加了 26% [24]。Stewart 等人的研究显示，经过连续 4 年的评估，受持续性的中度或重度心理困扰的稳定性冠心病患者在接下来的 12 年心血管疾病的死亡风险增加 2 倍至 4 倍[5]。这一研究表明在稳定时期测量的焦虑症与冠心病的预后有关[25]。因急性冠脉综合征而导致的创伤后应激障碍患者出现疾病复发或在 1 至 3 年内死亡的风险是一般急性冠脉综合征患者的两倍[26]。

5. 调节焦虑症和心脏健康的机制

健康行为可以解释焦虑症和心脏健康之间的部分联系。坚持一些健康的行为，例如保持健康的饮食、健康的体育锻炼和药物依从性，能改善心脏病患者的预后[27]。此外，对于稳定的心力衰竭患者或心肌梗死后患者，参加心脏康复计划是改善健康相关生活质量(HRQoL)和降低未来住院风险的重要一步[28]。相比之下，不健康的行为会导致风险因素的发展或恶化，包括糖尿病、高血压、高脂血症、肥胖和吸烟，这些都会增加心脏病患者的死亡率[29]。但是焦虑的人往往会增加饮食中的胆固醇摄入量、增加总能量摄入量、久坐不动的生活方式和减少体力活动[30]。例如恐慌症和广泛性焦虑障碍患者发生血脂异常、肥胖、糖尿病和暴饮暴食的几率增加[31]。创伤后应激障碍患者饮食质量差(大部分能量来自饱和脂肪酸)、体力活动减少、肥胖增加和吸烟率增加[32]。在心脏病患者中，焦虑症与心肌梗死后较少的遵守降低冠心病风险建议有关，包括戒烟、利用社会支持和减轻压力[33]。焦虑症患者也不太可能同时参加和完成心脏康复计划[34]。焦虑症患者的这些行为因素会增加心血管发病率和死亡率。

6. 焦虑症的生理机制

焦虑症患者发生冠心病的危险因素包括高血压、低饱和脂肪酸水平、吸烟、久坐、药物依从性低、炎症反应和心率变异性降低[35]。1) 炎症，炎症通路在心脏病的发展和进展中都发挥着关键作用[1]。涉及白细胞介素 1 (IL-1)、白细胞介素 6 (IL-6)、肿瘤坏死因子 α (TNF- α) 和 C 反应蛋白(CRP)的炎症通路均与动脉粥样硬化的发展有关。心脏病，包括稳定型心绞痛、心力衰竭和不稳定型心绞痛[36]。在不稳定心绞痛患者中，CRP 等炎症标志物与长期死亡率增加有关[37]。同样，炎症通路与心力衰竭患者的心功能降低、住院率增加和生存率低有关[38]。焦虑状态和焦虑症都与炎症标志物增加有关，在一项针对健康人群的研究发现，焦虑水平升高的个体具有更高水平的 CRP、TNF- α 、IL-6、同型半胱氨酸和纤维蛋白原[39]。焦虑症，包括广泛性焦虑障碍、创伤后应激状态和恐慌症，都与炎症增加有关，尤其是 CRP [40]。此外，创伤后应激障碍与循环 TNF- α 、IL-1、IL-6、IL-1 β 和干扰素- γ 水平升高有关[41]。2) 内皮功能障碍导致动脉粥样硬化的发展[42]，并已被证明会增加心力衰竭患者的住院率、心脏移植和死亡的发生率[43]。焦虑症患者的血管系统血流介导的扩张受损，表明存在内皮功能障碍[44]。广泛性焦虑症、恐慌症和强迫症患者的循环内皮原始细胞水平降低，会影响健康的内皮功能和促进冠状动脉粥样硬化进展[45]。3) 血小

板功能障碍，炎症引起的血小板活性增加，在动脉粥样硬化血栓形成和心肌缺血中起关键作用[46]。焦虑症患者血清素系统异常[47]，血清素已被证明可以增加血小板聚集。创伤后应激障碍患者，其体内血液循环中儿茶酚胺的增加和过度激活的交感肾上腺系统可导致血小板活化增加[48]。4) 自主神经功能紊乱：患者的心率变异性降低、血压升高、QT间期变异性增加、QT间期延长和P波延长。自主神经功能包含交感神经功能和副交感神经功能，焦虑症患者往往循环儿茶酚胺水平较高，与交感神经功能失调有关，导致心率增快和血压增加，同时冠状动脉血流量减少，全身血管阻力增加[49]，这些变化会增加冠心病的额外风险[50]。另外焦虑症患者的心率变异性(HRV)降低。HRV降低，反映迷走神经功能受损，已被证实是心脏猝死的独立危险因素[51]。

7. 焦虑的治疗

目前针对冠心病焦虑症的研究较少，关于焦虑的有效干预措施尚待解决。以下是已有的研究报告：

- 1) 一些临床指南推荐使用选择性5-羟色胺抑制剂(SSRIs)治疗各种焦虑症[52]。是心血管疾病合并焦虑症患者首选的一线药物治疗[53]。SSRIs具有抗血小板、改善内皮功能、降低炎症标志物(CRP, IL-6)水平，具有抗动脉粥样硬化的能力[54]。但SSRIs如艾司西酞普兰可延长QTc间期，建议每日最高剂量为40毫克/天。
- 2) 心功能训练康复，指对心血管疾病患者综合采用主动积极的身体、心理、行为和社会活动的训练和再训练，是冠心病的一线治疗，它是一种包含健康教育、体育锻炼和饮食的多组分治疗，也包括心理治疗(例如催眠疗法、压力管理)和心理药理学干预。在合适的时机实施心功能训练康复，可以刺激心理健康和增加疾病接受度，减少焦虑状态或抑郁症状[55]。各种研究表明，减少心理社会压力可以延长心肌梗死患者冠状动脉旁路移植术后的预期寿命[56]。
- 3) 适当的体育锻炼对心理健康有益，许多研究记录了慢性有氧运动或阻力训练能改善抑郁症和焦虑状态[57]。但是焦虑会阻碍患者参加体育锻炼，过早退出心脏康复计划[58]。Hannah等人的研究发现急性运动可能对健康成人产生抗焦虑作用[59]。
- 4) 心理疾病的宣传与教育：大多数患者仅仅关注器质性疾病，很少意识到精神疾病也是身体症状的原因，他们很少主动谈论心理疾病。这就需要医务人员主动问及患者的心理状态，提供有关心理咨询的信息，并帮助患者与专业心理医务人员取得联系。当患者认为医生是具有同情心时，会显著提高患者的信息交流、治疗满意度、感知专业知识和人际信任方面的满意度和依从性[60]。

8. 小结

心血管疾病呈上升趋势，心理社会压力是心血管疾病的危险因素之一。焦虑症是心理疾病中的一大类，目前关于焦虑症的诊断依据是DSM-5。心血管疾病和心理疾病互相影响，焦虑症在很多心脏疾病的中都有发现，影响疾病的发展与预后。焦虑影响心血管疾病的生理机制与炎症、内皮功能障碍、血小板功能障碍、自主神经功能紊乱等有关。心血管疾病患者常常因为焦虑症有不健康行为，增加心血管疾病风险。由于焦虑症与心血管疾病有共同的神经通路，因此两者之间有很多共同的症状，如心悸和胸闷，导致两者很容易混淆。很多一线医生对焦虑症的认识不足，很多病人没有得到充分的治疗，由于缺乏对心理疾病的认识而到处就诊，造成不必要的医疗资源的浪费和经济损失，因此双心门诊的建立是必要的。SSRIs是目前已知的用于治疗焦虑症的药物，心脏康复、适当的体育锻炼、对心理疾病的充分宣传能帮助焦虑症的治疗。

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