

## · 综述 ·

# 老年高血压合并衰弱患者降压治疗的研究进展

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**【摘要】** 高血压是影响老年人健康的重要因素, 降压治疗可降低老年高血压患者脑卒中、心血管事件和死亡等风险。老年人群中衰弱常与高血压并存, 但目前关于老年高血压与衰弱的研究相对较少, 尤其是老年高血压合并衰弱的降压治疗研究结论不一。老年高血压合并衰弱患者降压治疗的起始值与目标值、衰弱老年人能否从降压治疗中获益以及降压治疗方案的选择等仍争议较大。因此, 本文对老年高血压患者合并衰弱的降压治疗进行综述。

**【关键词】** 老年人; 衰弱; 高血压; 降压治疗

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## Progress in research of antihypertensive treatment in elderly hypertensive patients with frailty

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**【Abstract】** Hypertension is an important factor affecting the health of the elderly. Antihypertensive treatment can reduce the risk of stroke, cardiovascular events, and death in elderly hypertensive patients. Frailty often coexists with hypertension in elderly population, but few studies have focused on hypertension and frailty in the elderly. More importantly, conclusions vary in the studies about the antihypertensive treatment in elderly hypertensive patients with frailty. Still controversy are the starting values and target values of, the benefits from, and the strategies of the antihypertensive treatment in those patients. Therefore, this article reviews the antihypertensive treatment in elderly hypertensive patients with frailty.

**【Key words】** aged; frailty; hypertension; antihypertensive treatment

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高血压是老年人常见的慢性疾病, 患病率高, 以单纯收缩期高血压多见, 易发生心脑血管事件等并发症, 严重影响老年人的生命质量。数据显示, 我国≥60岁老年人高血压的患病率为53.24%, 知晓率、治疗率和控制率较低, 分别为57.08%、51.35%和18.20%<sup>[1]</sup>。因此, 老年高血压的治疗有重要意义。

衰弱是一种由多因素引起的体能下降和生理功能减退, 使个体依赖性、易感性和死亡风险增加的老

年综合征<sup>[2]</sup>。增龄、女性、经济状况、受教育程度、共病、失能等是衰弱的危险因素。衰弱的患病率因评估方法不同而存在差异。亚太地区社区老年人衰弱患病率为3.5%~27.0%<sup>[3]</sup>, 一项Meta分析显示我国社区老年人衰弱患病率为10.0%<sup>[4]</sup>。目前常用的衰弱评估方法包括Fried衰弱表型<sup>[5]</sup>、衰弱指数<sup>[6]</sup>、FRAIL问卷<sup>[7]</sup>及单项身体指标, 如步速、握力<sup>[8]</sup>等, 针对我国老年人群研发的衰弱快速评估工

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具——衰弱筛查问卷(frailty screening questionnaire, FSQ)<sup>[9]</sup>、北京老龄化多维纵向研究体力活动问卷(Beijing longitudinal study of aging-physical activity questionnaire, BLSA-PAQ)<sup>[10]</sup>和基于老年综合评估的68项衰弱指数法等均能筛查衰弱、预测不良预后。衰弱与高血压常共存于老年人中,影响老年人的健康和生活质量。流行病学数据显示,我国社区老年高血压中衰弱的患病率为19.6%<sup>[11]</sup>,但目前对高血压与衰弱关系的研究相对较少,尤其是衰弱老年高血压患者的降压治疗尚无统一标准。本文对老年高血压合并衰弱患者的降压治疗作一综述。

## 1 衰弱老年人降压治疗是否可以获益

由于衰弱影响老年高血压的患病率及风险/获益比<sup>[12]</sup>,建议老年高血压患者在降压治疗前应进行衰弱评估<sup>[13]</sup>。研究发现,降压治疗可减少老年高血压患者的心脑血管事件和全因死亡率等,衰弱和非衰弱的老年人都可从中获益<sup>[14-16]</sup>。尽管衰弱的老年人在降压治疗中可能会出现低血压、晕厥、跌倒、认知障碍、电解质紊乱等不良事件,但在跌倒、体位性低血压方面差异并无统计学意义<sup>[15]</sup>。老年高血压患者存在过度治疗的风险<sup>[17]</sup>。有研究发现,高的收缩压和舒张压水平是降低衰弱老年患者总体死亡风险的保护因素,而脉压与死亡风险无关<sup>[18]</sup>。Odden等<sup>[19]</sup>也得出相似的结论,并提出步速可作为一种用于识别容易发生高血压相关不良事件的老年人的方法。因此,衰弱老年高血压患者可能从适度降压治疗中获益,有必要标准化衰弱老年人降压治疗的起始值与目标。

## 2 衰弱老年人降压治疗的起始值与目标

不同高血压指南对老年高血压降压治疗提出的起始值和目标不同<sup>[13,20,21]</sup>。美国高血压指南建议社区老年人(≥65岁)收缩压(systolic blood pressure, SBP)≥130 mmHg(1 mmHg=0.133 kPa)时启动降压治疗,目标SBP<130 mmHg;对合并糖尿病、慢性肾功能不全、心力衰竭及冠心病等共病的高血压患者,血压应<130/80 mmHg<sup>[20]</sup>,但未提及衰弱老年人的血压管理。而我国和欧洲指南提出年龄≥65岁的老年人血压≥140/90 mmHg时开始降压治疗,建议<140/90 mmHg<sup>[13,21]</sup>;对≥80岁高血压患者,欧洲指南以血压≥160/90 mmHg为降压治疗起始值,降压目标同非高龄老人;我国指南则建议高龄高血压患者当血压≥150/90 mmHg时开始分阶段降压治疗,首先应将血压降至<150/90 mmHg,如耐

受良好,可进一步将血压降至<140/90 mmHg<sup>[13]</sup>。

对衰弱老年高血压患者,加拿大指南建议SBP≥160 mmHg时开始降压治疗,目标为坐位SBP 140~160 mmHg;如合并糖尿病,无需降低降压目标;如患者严重衰弱处于生命终末期,SBP可控制在160~190 mmHg<sup>[22]</sup>。欧洲指南提出,衰弱老年患者如能耐受,可考虑降压治疗,SBP目标应根据个体的耐受情况调整<sup>[21]</sup>。国内研究及指南建议,衰弱高龄高血压患者当血压≥160/90 mmHg时开始降压治疗,SBP控制在130~150 mmHg为宜<sup>[13,23]</sup>。其他研究建议,步速<0.8 m/s的老年患者SBP<150 mmHg,≥80岁轻度衰弱患者的SBP目标为130~139 mmHg<sup>[24]</sup>。因此,建议衰弱的老年高血压患者当血压≥160/90 mmHg时启动降压治疗,目标<150/90 mmHg,且SBP不应<130 mmHg。但研究发现<sup>[25]</sup>,衰弱的老年高血压患者将血压控制在150/90 mmHg以下的比率偏低,可能与降压目标不明确、过度降压、生活方式和共病等因素有关。

## 3 老年衰弱患者降压治疗的措施

### 3.1 非药物治疗

生活方式干预是高血压治疗的重要部分,健康饮食、规律运动、戒烟限酒、控制体质量、改善睡眠和保持良好情绪状态等均有助于血压管理<sup>[13]</sup>。研究发现,衰弱的老年高血压患者身体、心理、社交功能和生活习惯均较差<sup>[11]</sup>。吸烟、肥胖、高体质指数、低水平的高密度脂蛋白胆固醇等是衰弱和高血压的共同危险因素<sup>[25]</sup>,且衰弱程度可影响老年高血压患者治疗的依从性<sup>[26]</sup>,因此,衰弱干预有助于老年人的血压管理和生活质量改善。建议:(1)由医疗保健专业人员、老年人及其家人共同决策,为衰弱老年人制定管理计划;(2)重视抵抗训练和适当的蛋白质摄入,对缺乏维生素D的老年人应及时补充;(3)及时识别多重用药、体质量减轻、体力活动等可控的衰弱危险因素,并阻止其进一步发展;(4)提供基于社区的相关培训、教育和支持<sup>[3]</sup>。

### 3.2 药物治疗

动脉粥样硬化可能是导致衰弱和高血压的共同机制<sup>[27,28]</sup>,因此,降压治疗可降低衰弱的患病率。钙通道阻滞剂(calcium channel blockers, CCBs)、血管紧张素转换酶抑制剂(angiotensin converting enzyme inhibitor, ACEI)、血管紧张素受体阻滞剂(angiotensin receptor blocker, ARB)、利尿剂和单片固定复方制剂均可作为老年高血压患者降压治疗的初始和长期维持用药<sup>[13]</sup>。单纯收缩期高血压首选

利尿剂和CCBs<sup>[29]</sup>。研究表明,CCBs对治疗衰弱老年高血压具有保护作用<sup>[30]</sup>。欧洲专家建议ACEI在老年高血压治疗中应与噻嗪类利尿剂和CCBs同等重要<sup>[31]</sup>。ACEI可预防老年高血压患者身体衰弱,研究表明,ACEI可能降低患有膝关节炎个体身体衰弱的风险<sup>[32]</sup>,使用ACEI降压的老年人比使用其他降压药物者具有更大的下肢肌肉质量<sup>[33]</sup>。指南建议,衰弱老年高血压患者起始治疗应小剂量单药治疗,并密切监测患者的用药反应<sup>[13,21]</sup>。当患者SBP降至140 mmHg以下时,如情况允许,建议尽量减少降压药物种类,一般不应超过两种<sup>[22]</sup>。

### 3.3 个体化综合治疗

对年龄≥65岁、共病及预期寿命有限的老年人,建议以基于临床决策、患者意愿及团队为基础的方式去评估降压治疗的风险与获益,这对决定降压强度及药物的选择具有重要意义<sup>[20]</sup>。老年人群存在异质性,常合并衰弱、共病、多重用药等老年综合征,需根据个体耐受情况综合治疗。衰弱的老年高血压患者降压治疗前应注意:(1)充分了解其功能和认知状态,初步评估预后;(2)熟悉该年龄段中普遍的多重用药;(3)筛查并快速对衰弱状态分层;(4)识别并纠正导致血压过低的因素,如伴随治疗、营养不良和脱水<sup>[31]</sup>。总之,要充分考虑降压治疗的指征、目标,权衡利弊,结合患者的意愿,制定个体化的综合治疗方案。

## 4 小结

由于衰弱老年人常合并糖尿病、血脂异常、肾功能不全、脑卒中和心血管疾病等多种疾病,增加了老年人多重用药的风险,故需考虑共病、多重用药、认知功能障碍及体位性低血压等因素对衰弱老年高血压患者降压治疗的影响。

随年龄增长,老年高血压患者衰弱的患病率呈增长趋势<sup>[12,34]</sup>,且衰弱可影响老年高血压患者的预后,早期识别衰弱,适度降压治疗可减少衰弱老年高血压患者不良事件的发生<sup>[14,15]</sup>。建议老年高血压患者在制定降压治疗方案前应进行衰弱评估,尤其是近1年内无明显原因体质下降>5%或有跌倒风险者<sup>[13]</sup>。早期筛查衰弱、识别认知障碍、恰当治疗共病、合理用药及提供社会支持,对预防衰弱、改善老年高血压患者生命质量有重要意义。但目前研究中纳入的老年人更偏于健壮<sup>[14,15]</sup>,因此,患者年龄越大,基于“证据”的推荐值与患者最适值之间的差异就越大;此外,现有研究主要针对高龄衰弱人群,对60~80岁衰弱的老年高血压患者有待进一步研究。

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