· 临床研究 ·

老年共病患者认知衰弱调查及其影响因素研究

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【摘 要】 **目的** 调查全科医学科共病老年人认知衰弱状况,并评估其影响因素。**方法** 回顾性分析 2023 年 1 月至 2024 年 12 月东莞市人民医院全科医学科收治的 206 例共病老年患者的临床资料,参考国际营养与衰老研究所提出的认知衰弱判断标准,将 206 例患者分为认知衰弱组(69 例)与非认知衰弱组(137 例),比较两组患者慢性病类型、共病严重程度[年龄校正的 Charlson 共病指数(aCCI)]、入院次日血清同型半胱氨酸(Hcy)等情况。采用 SPSS 25.0 统计软件进行数据分析,根据数据类型分别采用 t 检验或 χ^2 检验进行组间比较。采用多因素 logistic 回归分析评估共病老年患者认知衰弱的影响因素。**结果** 206 例全科医学科共病老年患者慢性病以心脏疾病最为多见(56.80%),其次为高血压(38.35%)、脑血管病(21.36%),哮喘最少见(0.97%)。认知衰弱发生率为 33.50%(69/206)。认知衰弱组患者脑血管病占比、aCCI 评分、慢性病管理自我效能不良占比、营养状态不良占比及入院次日血清 Hcy 水平均显著高于非认知衰弱组,差异有统计学意义($P<0.05$)。多因素logistic回归分析显示,脑血管病($OR=2.683$,95%CI 1.409~5.111;$P<0.05$)、aCCI 评分($OR=4.272$,95%CI 2.516~7.253;$P<0.05$)、慢性病管理自我效能不良($OR=2.872$,95%CI 1.606~5.136;$P<0.05$)、营养状态不良($OR=2.705$,95%CI 1.442~5.072;$P<0.05$)、入院次日血清 Hcy($OR=3.225$,95%CI 1.835~5.667;$P<0.05$)均为全科医学科共病老年患者认知衰弱的危险因素。**结论** 全科医学科共病老年患者认知衰弱受慢性病类型、共病严重程度、营养状态不良、入院次日血清 Hcy 及慢性病管理自我效能的影响,临床工作中应重点关注存在上述高危因素的共病老年患者。

【关键词】 老年人;共病;认知衰弱;全科医学科;慢性病
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Investigation on cognitive frailty in elderly patients with comorbidity and its influencing factors

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【Abstract】 **Objective** To investigate the cognitive frailty in elderly population with comorbidity in the Department of General Medicine and to evaluate its influencing factors. **Methods** A retrospective analysis was conducted of the clinical data of 206 elderly patients with comorbidity admitted to the Department of General Medicine of Dongguan People's Hospital from January 2023 to December 2024. According to the diagnostic criteria for cognitive frailty proposed by the International Academy of Nutrition and Aging, the 206 elderly patients were divided into a cognitive frailty group ($n=69$) and a non-cognitive frailty group ($n=137$). The types of chronic diseases, comorbidity severity [age-adjusted Charlson comorbidity index (aCCI)], and serum homocysteine (Hcy) on the day after admission were compared between the two groups. SPSS 25.0 was used for data analysis, and t test or *Chi*-square test was used for comparison between groups according to the data type. Multivariate logistic regression analysis was used to evaluate the influencing factors of cognitive frailty in elderly patients with comorbidity. **Results** Among the 206 elderly patients with comorbidity in the Department of General Medicine, heart diseases were the most common chronic disease (56.80%), followed by hypertension (38.35%) and cerebrovascular disease (21.36%), and asthma was the least common (0.97%). The incidence of cognitive frailty was 33.50% (69/206). The proportion of cerebrovascular disease, aCCI scores, proportion of poor self-efficacy of chronic disease management, proportion of poor nutritional status, and serum Hcy levels on the day after admission in the cognitive frailty group were significantly higher than those in the non-cognitive frailty group, with statistically significant differences ($P<0.05$). Multivariate logistic regression analysis showed that cerebrovascular disease ($OR=2.683$, 95%CI 1.409-5.111; $P<0.05$), aCCI score ($OR=4.272$, 95%CI 2.516-7.253; $P<0.05$), poor self-efficacy of chronic disease management ($OR=2.872$, 95%CI 1.606-5.136; $P<0.05$), poor nutritional status ($OR=2.705$,

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95%*CI* 1.442-5.072; *P*<0.05), and serum Hcy on the day after admission (*OR*=3.225, 95%*CI* 1.835-5.667; *P*<0.05) were all risk factors of cognitive frailty in elderly patients with comorbidity in the Department of General Medicine. **Conclusion** Cognitive frailty in elderly patients with comorbidity in the Department of General Medicine is affected by chronic disease types, comorbidity severity, poor nutritional status, serum Hcy levels on the day after admission, and self-efficacy of chronic disease management. In clinical practice, special attention should be paid to elderly patients with comorbidity who have the aforementioned high-risk factors.

【Key words】 aged; comorbidity; cognitive frailty; department of general medicine; chronic diseases

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共病一般是指个体同时患有≥2种慢性病,共病在老年人群中常见,有调查指出,我国老年人共病发生率约为50%[1]。衰弱及认知障碍均为影响老年人健康结局的关键因素,近年研究发现,衰弱与认知障碍关系紧密,并提出“认知衰弱”这一概念[2]。全科医学科作为未分化疾病及共病患者的诊治中心,共病老年患者常见。研究发现,相较于普通老年人,共病老年患者认知衰弱发生率更高,其原因可能与慢性病的累积效应有关[3,4]。然而,认知衰弱作为相对新颖的概念,在我国的研究仍处于初级阶段,目前共病老年患者认知衰弱相关报道少见。基于此,本研究就全科医学科共病老年患者认知衰弱状况及其影响因素展开分析,为共病老年患者的健康管理提供可靠数据。

1 对象与方法

1.1 研究对象

本研究为基于电子病历数据的回顾性研究,数据来源于东莞市人民医院全科医学科2023年1月至2024年12月接收的老年共病患者,研究开始于2025年3月。根据认知衰弱发生情况,将患者分为认知衰弱组(69例)与非认知衰弱组(137例)。本研究通过医院伦理委员会批准(伦理批号:LW2025-008),豁免患者知情同意。所有患者数据均进行去标识化处理,确保隐私安全。本研究符合《赫尔辛基宣言》。

纳入标准:(1)患有≥2种慢性病,慢性病种类参考中国健康与养老追踪调查(China Health and Retirement Longitudinal Study, CHARLS)[5],包含14种常见慢性病;(2)年龄≥60岁;(3)视听功能正常,能配合问卷调查;(4)预计生存期≥6个月;(5)病历资料完整。排除标准:(1)存在基因缺陷糖尿病等特殊类型糖尿病;(2)合并先天性心脏病等先天畸形;(3)存在严重感染;(4)存在重要器官功能衰竭或疾病终末期状态;(5)明确诊断为痴呆、阿尔茨海默病;(6)全科医学科入住前3个月内出现急性脑卒中、颅内出血、颅脑外伤等严重颅脑疾病或颅脑损伤。

1.2 方法

1.2.1 认知衰弱判断方法 参考国际营养与衰老研究所于2013年提出的认知衰弱判断标准[6],即Frail量表≥3分(存在衰弱),且简易精神状态量表以文盲<17分、小学学历<20分、初中及以上学历<24分评估为认知功能障碍,同时临床痴呆评定量表为0.5分(可疑痴呆),即可判断为认知衰弱。

1.2.2 资料收集 获得患者及其监护人知情同意后,由住院电子病历系统获取共病老年患者临床资料,包括受教育程度、婚姻状况、慢性病类型、共病严重程度、慢性病管理自我效能、营养状态、睡眠质量、入院次日血清指标等。共病严重程度采用年龄校正的Charlson共病指数(age-adjusted Charlson comorbidity index, aCCI)[7]评估,该指数以19项基础疾病及年龄加权得分计算最终得分,总分为38分,得分越高,共病越严重,患者基础状态越差。慢性病管理自我效能采用慢性病管理自我效能感量表(self-efficacy to manage chronic disease scale, SEMCD)[8]评估,量表包含6个条目,采用1~10分计分,以初始总分/条目数为最终得分,最终得分≥7分提示自我效能良好。营养状态使用老年营养风险指数(geriatric nutritional risk index, GNRI)[9]评估,计算公式为GNRI=1.489×血清白蛋白(g/L)+41.7×实际体质量(kg)/理想体质量(kg),GNRI≤98提示存在营养不良。睡眠质量采用匹兹堡睡眠质量指数问卷(Pittsburgh sleep quality index, PSQI)[10],量表总分0~21分,PSQI≥7分提示睡眠质量不良。入院次日血清指标包含同型半胱氨酸(homocysteine, Hcy)、总胆固醇、甘油三酯、血肌酐等,使用自动生化分析仪(日本奥林巴斯株式会社,AU2700)检测。

1.3 统计学处理

采用SPSS 25.0统计软件进行数据分析。计量资料以均数±标准差($\bar{x}\pm s$)表示,组间比较采用t检验。计数资料以例数(百分率)表示,组间比较采用χ^2检验。共病老年患者认知衰弱的影响因素采用多因素logistic回归分析。$P<0.05$为差异有统计学意义。

2 结 果

2.1 全科医学科共病老年患者慢性病分布

206 例全科医学科共病老年患者以心脏疾病最为多见(56.80%),其次为高血压(38.35%)、脑血管病(21.36%),哮喘最少见(0.97%)。见表 1。

表 1 共病老年患者慢性病分布情况

Table 1 Distribution of chronic diseases in elderly patients with comorbidity (n=206)

Chronic disease	n	Composition ratio(%)
Heart disease	117	56.80
Hypertension	79	38.35
Cerebrovascular disease	44	21.36
Chronic lung disease	40	19.42
Liver disease	34	16.50
Dyslipidemia	29	14.08
Diabetes mellitus or elevated blood glucose	23	11.17
Stomach or digestive system disease	17	8.25
Emotional and spiritual problems	11	5.34
Malignant tumor	6	2.91
Kidney disease	5	2.43
Memory-related disease	3	1.46
Arthritis or rheumatism	3	1.46
Asthma	2	0.97

2.2 两组患者临床资料

206 例患者中认知衰弱发生率为 33.50%(69/206)。认知衰弱组脑血管病占比、aCCI 评分、慢性病管理自我效能不良占比、营养状态不良占比及入院次日血清 Hcy 水平均显著高于非认知衰弱组,差异有统计学意义(P<0.05;表 2)。

2.3 全科医学科共病老年患者认知衰弱的影响因素

以认知衰弱为因变量,单因素分析中有统计学意义的指标为自变量赋值代入多因素 logistic 回归方程,发现脑血管病、aCCI 评分、慢性病管理自我效能不良、营养状态不良及入院次日血清 Hcy 均为认知衰弱的危险因素(P<0.05;表 3)。

3 讨 论

全科医学科共病老年患者具有病因复杂、多重用药、医疗开支大、生活质量差等特点,如何改善此类患者的健康结局是临床关注的焦点[11]。认知衰弱被认为是衰弱的一种亚型,患者不仅存在增龄相关的躯体衰弱,也伴随认知衰退,且二者可相互促进,加剧老年人退行性病变[12]。近年研究发现,认知衰弱可增加住院老年患者不良临床结局,增加患者死亡风险[13]。目前,老年人认知衰弱检出率在 10%~50%,受地区及人群差异、评估工具不同等影响,检出率波动较大[14]。本研究分析全科医学科共病老年患者认知衰弱情况,发现其认知衰弱发生率为 33.50%,并未比上述老年人认知衰弱检出率显著升高,考虑与目前的认知衰弱检出率缺乏统一判断标准及被调查者范围较广泛有关,部分报道可能包含重症老年患者,导致认知衰弱检出率偏高。因此,未来还需更多针对全科医学科共病老年患者认知衰弱的调查研究,探究造成患者认知衰弱的原因并积极防控,以减少不良临床结局。

调查全科医学科共病老年患者的慢性病分布特点发现,心脏疾病最为多见,脑血管病位居第三,但认知衰弱组脑血管病占比高于非认知衰弱组,且脑血管病是共病老年患者认知衰弱的危险因素。原因可能为脑血管病造成的脑血供减少促进认知功能衰退,加之脑血管病诱导炎症介质释放,引起慢性炎症反应,加剧躯体衰弱,导致认知衰弱风险升高[15]。不仅如此,aCCI 评分也是患者认知衰弱的危险因素,提示共病越严重者认知衰弱风险越高,考虑与共病严重者病因复杂有关,患者常存在炎症、氧化应激、免疫异常等多种病理生理改变,易引起大脑病理蛋白沉积及神经递质分泌异常,从而影响认知功能,并导致机体运动耐力下降,躯体活动减少,增加认知衰弱风险[16]。另外,疾病之间的因果关系可能构成复杂共病,这些复杂共病模式可能影响认知衰弱的发生,未来还需通过聚类分析、网络分析等方法,探究共病模式对共病老年患者认知衰弱的影响。

本研究结果显示,营养状态不良也是共病老年患者认知衰弱的危险因素,分析其原因为营养不良导致骨骼肌蛋白合成不足,引起肌力及肌量下降,影响躯体活动,且白蛋白不足也影响机体修复能力及免疫应答,不利于脑功能保护,从而导致认知衰弱发生风险升高[17]。另据文献报道,Hcy 可参与多种慢性病的发生发展[18],Hcy 在循环血液中蓄积可诱发内皮细胞功能障碍,促进氧自由基增加,不仅诱导氧化应激反应,也加剧血管炎症反应,促进慢性病进展。本研究中,入院次日血清 Hcy 也是患者认知衰弱的危险因素,提示 Hcy 有望成为共病老年患者认知衰弱筛查的新项目,可能在诊疗及预后健康管理中发挥积极作用。此外,有效的慢性病管理是改善共病患者健康结局的重要因素,个体对自身慢性病管理的信心及能力则是影响管理效果的关键[19]。本研究通过多因素 logistic 回归分析发现,慢性病管理自我效能不良是共病老年患者认知衰弱的危险因素,究其原因可能为自我效能不良者很少对慢性病

表2 两组患者临床资料比较

Table 2 Comparison of clinical data between two groups

Item	Cognitive frailty group (n=69)	Non-cognitive frailty group (n=137)	χ^2/t	P value
Gender[n(%)]			0.117	0.732
Male	38(55.07)	72(52.55)		
Female	31(44.93)	65(47.45)		
Age(years, $\bar{x}\pm s$)	75.11±6.24	73.49±5.97	1.810	0.072
Body mass index(kg/m^2, $\bar{x}\pm s$)	22.06±1.98	22.45±1.65	1.495	0.136
Education level[n(%)]			1.023	0.600
Primary school or below	17(24.64)	26(18.98)		
Junior high school and senior high school	38(55.07)	78(56.93)		
Junior college or above	14(20.29)	33(24.09)		
Marital status[n(%)]			0.277	0.599
Married	49(71.01)	102(74.45)		
Unmarried/divorced/widowed	20(28.99)	35(25.55)		
Living alone status[n(%)]	10(14.49)	12(8.76)	1.582	0.209
Fall history in the past 1 year[n(%)]	7(10.14)	8(5.84)	1.260	0.262
Chronic disease type[n(%)]				
Heart disease	42(60.87)	75(54.74)	0.702	0.402
Hypertension	28(40.58)	51(37.23)	0.218	0.640
Cerebrovascular disease	21(30.43)	23(16.79)	5.088	0.024
Chronic lung disease	15(21.74)	25(18.25)	0.357	0.550
Liver disease	13(18.84)	21(15.33)	0.411	0.522
Dyslipidemia	11(15.94)	18(13.14)	0.298	0.585
Diabetes mellitus or elevated blood glucose	9(13.04)	14(10.22)	0.369	0.543
Stomach or digestive system disease	6(8.70)	11(8.03)	0.027	0.870
Emotional and spiritual problems	5(7.25)	6(4.38)	0.287	0.592
Malignant tumor	2(2.90)	4(2.91)	0.185	0.667
Kidney disease	2(2.90)	3(2.19)	0.098	0.755
Memory-related disease	2(2.90)	1(0.73)	0.372	0.542
Arthritis or rheumatism	1(1.45)	2(1.46)	0.372	0.542
Asthma	1(1.45)	1(0.73)	0.065	0.798
Main combinations of chronic diseases[n(%)]				
Heart disease+hypertension	13(18.84)	21(15.33)	0.411	0.522
Heart disease+chronic lung disease	10(14.49)	21(15.33)	0.025	0.874
Heart disease+cerebrovascular disease	8(11.59)	10(7.30)	1.062	0.303
Hypertension+dyslipidemia	6(8.70)	11(8.03)	0.027	0.870
Hypertension+liver disease	4(5.80)	8(5.84)	0.092	0.762
Heart disease+hypertension+cerebrovascular disease	3(4.35)	5(3.65)	0.019	0.891
Heart disease+hypertension+diabetes mellitus or elevated blood glucose	2(2.90)	3(2.19)	0.028	0.867
Heart disease+hypertension+chronic lung disease	2(2.90)	3(2.19)	0.028	0.867
aCCI(points, $\bar{x}\pm s$)	6.81±1.27	5.42±1.06	8.301	<0.001
Exercise frequency before admission[n(%)]			3.109	0.211
0-2 times/week	30(43.48)	46(33.58)		
3-5 times/week	33(47.83)	69(50.36)		
>5 times/week	6(8.69)	22(16.06)		
Chronic disease management self-efficacy[n(%)]			8.453	0.004
Good	26(37.68)	81(59.12)		
Poor	43(62.32)	56(40.88)		
Nutritional status[n(%)]			9.067	0.003
Good	21(30.43)	72(52.55)		
Poor	48(69.57)	65(47.45)		
Sleep quality[n(%)]			3.695	0. 055
Good	25(36.23)	69(50.36)		
Poor	44(63.77)	68(49.64)		
Hcy on the next day of admission(μmol/L, $\bar{x}\pm s$)	15.69±2.89	13.05±2.44	6.882	<0.001
Total cholesterol on the next day of admission(mmol/L, $\bar{x}\pm s$)	4.61±0.85	4.42±0.83	1.538	0.126
Triglyceride on the next day of admission(mmol/L, $\bar{x}\pm s$)	1.72±0.35	1.69±0.34	0.592	0.555
Serum creatinine on the next day of admission(μmol/L, $\bar{x}\pm s$)	119.16±20.27	113.98±19.05	1.803	0.073

aCCI: age-adjusted Charlson comorbidity index; Hcy: homocysteine.

表 3 共病老年患者认知衰弱的多因素 logistic 回归分析

Table 3 Multivariate logistic regression analysis of cognitive frailty in elderly patients with comorbidity

Factor	β	*SE*	*Wald* χ^2	*P* value	*OR*	95%*CI*
Cerebrovascular disease	0.987	0.324	9.280	0.002	2.683	1.409-5.111
aCCI score	1.452	0.406	12.790	<0.001	4.272	2.516-7.253
Poor chronic disease management self-efficacy	1.055	0.316	11.146	0.001	2.872	1.606-5.136
Poor nutritional status	0.995	0.319	9.729	0.002	2.705	1.442-5.072
Hcy on the next day of admission	1.171	0.345	11.521	<0.001	3.225	1.835-5.667

aCCI: age-adjusted Charlson comorbidity index; Hcy: homocysteine.

管理采取主动措施,甚至消积应对,这可能加速共病进展,诱导躯体及认知功能的衰退,增加认知衰弱发生率[20]。因此,对于全科医学科共病老年患者,应积极给予心理干预,鼓励患者提升自我管理信心及能力,通过提高主观能动性增加患者慢性病管理水平,以延缓认知衰弱进展。然而,本研究为单中心小样本量研究,代表性有所欠缺,未来还需联合其他医疗机构的全科医学科开展多中心、大样本量研究,对本研究结果加以验证。

综上,全科医学科共病老年患者认知衰弱形势严峻,脑血管病、aCCI 评分、营养状态不良、入院次日血清 Hcy 水平及慢性病管理自我效能均是影响认知衰弱的重要因素,临床需重视全科医学科共病老年患者的认知衰弱防控工作。

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