·老年医学新模式专栏·

住院患者老年综合评估规范及初步效果分析

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【摘 要】**目的** 探讨在老年住院患者中进行老年综合评估（CGA）对于老年人全面综合管理的作用。**方法** 制定标准的CGA流程，采用标准流程对北京协和医院老年病房2013年9月至2014年9月连续入院的≥65岁患者进行CGA，分析其筛查老年综合征的效果。**结果** 标准化的评估流程便于临床使用，接受评估的179例患者中，年龄（72.5±8.1）岁。通过CGA发现，视力异常患者占62.0%，睡眠障碍41.3%，听力异常40.8%，慢性疼痛34.6%，跌倒25.7%，多重用药23.5%，便秘21.8%，抑郁焦虑18.4%，尿失禁16.2%，谵妄10.6%。以不同主诉入院的15例患者最终诊断为老年综合征,占8.4%。**结论** 老年综合征在老年患者中普遍存在，运用标准化的CGA方法可以进行有效筛查，有利于老年患者的全人管理。

【关键词】住院老年患者；老年综合评估；老年综合征

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Standardization and preliminary effect of comprehensive geriatrics assessment for elderly inpatients

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【**Abstract**】**Objective** To investigate the role of comprehensive geriatric assessment (CGA) in comprehensive management for the elderly inpatients. **Methods** A standard CGA process was built and then employed to assess the elderly inpatients (over 65 years old) within 48 h after consecutively admitted in the Geriatric Ward of our hospital from September 2013 to September 2014. The effect of CGA was evaluated. **Results** Our standard CGA process was very convenient in clinical practice. There were 179 patients over 65 years were enrolled in this study, with an age of (72.5±8.1) years. CGA showed the following geriatrics syndrome: 62.0% with poor vision, 41.3% with sleep disorder, 40.8% with hearing loss, 34.6% with pain, 25.7% having falls, 23.5% having polypharmacy, 21.8% with constipation, 18.4% with mood disorder, 16.2% with incontinence, and 10.6% with cognitive impairment. There were 15 elderly patients (8.4%) who were admitted because of different complaints but finally discharged with the first diagnosis of geriatric syndrome. **Conclusion** Geriatric syndrome is very common in the elderly inpatients. Standard CGA can effectively screen those with geriatric syndrome, and helpful to the holistic management for them.

【**Key words**】 geriatric inpatients; comprehensive geriatric assessment; geriatric syndrome

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中国已进入老龄化社会，老年人的医疗问题尤为突出。老年人不仅是年龄老化、共病增多，更伴有多种老年综合征如衰弱、营养不良、多重用药、跌倒、认知能力下降、焦虑/抑郁、谵妄、睡眠障碍、视力/听力障碍/口腔问题、压疮、尿失禁、便秘、医疗不连续、受虐等。这些老年综合征是影响老年人功能及健康状态的重要因素，而在传统的医疗模式中往往被忽视而没能及时发现并干预，因此，有必要及时发现并干预这些老年问题。北京协和医院老年示范病房参考国外现代老年医学的形式，在不断地学习和经验总结中，逐渐完善了一套老年综合评估（comprehensive geriatrics assessment，CGA）的规范化流程。本研究

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拟通过分析老年患者接受CGA的结果，来说明CGA的效果，并详细介绍我们这套评估方法，供老年医学工作者参考。

1 对象与方法

1.1 对象

2013年9月至2014年9月北京协和医院老年示范病房1年内连续入院的老年患者。入组标准：（1）年龄≥65岁；（2）住院时间＞48h；（3）患者本人或看护人员可以配合调查。排除标准：（1）患者本人或看护人员不能明确回答问题或无法配合调查；（2）失能卧床的患者。

1.2 方法

总结从2011年开始在病房进行的CGA，制定标准化的流程，采用简单筛查与详细评估相结合的方式，由老年科住院医师进行相关评估；所有筛查在入院后48h内完成，谵妄患者在出院时评估。＞3个月再入院需重新评估。

1.3 统计学处理

采用SPSS20.0进行统计学分析，计数资料采用百分率表示，采用卡方检验。$P<0.05$为差异有统计学意义。

2 结 果

2.1 标准化的评估流程

整套评估分为患者自评部分及医师评估部分。所有评估者在独自进行评估前均需接受1周的CGA培训。

2.1.1 患者自评部分 由工作人员指导患者及家属填写自答问卷，内容包括日常功能状态、情绪状况、视力听力、睡眠情况、尿便情况、疼痛评分及社会支持、本次就诊意愿，并填写用药清单。如筛查发现异常，再由医务人员进行确认及进一步评估。

2.1.2 医师评估部分 如患者初步自评量表有问题，再由医师进行认知能力、谵妄评估、营养风险评估及跌倒评估。

根据评估内容流程，我们制定了协和CGA规范，详见表1。

2.2 评估结果

2013年9月至2014年9月评估老年患者179例，年龄（72.5±8.1）岁，其中男性74例，年龄（74.3±7.8）岁，女性105例，年龄（71.1±8.0）岁。

2.2.1 基础疾病情况 患者中排名前5的基础疾病情况见表2。其中共存慢病≥2个的患者占96.1%（172/179），共存慢病≥3个的为89.4%（160/179）。

2.2.2 老年综合征情况 62.0%的患者（111/179）有视力异常，40.8%（73/179）有听力下降。其中36.3%的视力异常患者（65/179）和55.9%的听力异常患者（100/179）自觉生活未受影响；分别有4.5%（8/179）和6.1%（11/179）的患者有严重听力及视力障碍并影响生活，但患者之前均未因此就诊。

41.3%（74/179）的患者有睡眠障碍，其中91.9%（68/74）长期或间断服用各种镇静催眠类药物，而另8.1%的患者（6/74）每日睡眠时间不足4h，却因惧怕药物成瘾而没有服用任何药物。

34.6%（62/179）有慢性疼痛，VAS疼痛评分在0～3分52例，4～6分8例（类风湿性关节炎3例、颈肩关节疼痛2例、双膝骨关节炎3例），疼痛评分≥7分2例（腰椎压缩性骨折）。

23.5%（42/179）的患者存在多重用药，其中11例存在不适当用药：4例用药剂量不恰当、3例用药时间不规范、2例同时应用两种非二氢吡啶类降压药物（1例长期应用噻嗪类利尿剂，1例由中药治疗的副作用导致腹泻）。

25.7%（46/179）的患者最近1年曾发生跌倒，其中13例因跌倒导致骨折。

便秘和尿失禁的发生比例分别为21.8%（39/179）和16.2%（29/179）。5例男性尿失禁患者全部患有前列腺增生，24例女性尿失禁患者中，87.5%的患者（21/24）有多产史（生产过≥2孩），压力性尿失禁8例、充盈性尿失禁6例、混合型尿失禁10例。

焦虑抑郁和谵妄的发生比例分别为18.4%（33/179）和10.6%（19/179）。发生谵妄的患者中11例有基础认知功能障碍，8例为合并感染或严重入量不足。

经过CGA，共有15例患者的出院第一诊断即为老年综合征，占8.4%（15/179）。其中主诉分别为胸痛待查（1例）、乏力纳差（2例）、腹痛（2例）、排便习惯改变（1例）、咳嗽（1例）的7例患者，经CGA及专科会诊后第一出院诊断均为焦虑抑郁。以意识障碍为主诉入院的患者，2例为谵妄，3例为老年期痴呆。以乏力待查为主诉入院的患者，2例为营养不良，1例为衰弱。

3 讨 论

CGA作为老年医学的关键技术，在欧美国家已经得到了广泛的应用。专门针对老年患者的急性护

表1 协和医院老年综合评估的初筛及进一步评估内容

Table 1 Comprehensive geriatrics assessment for screening and further assessment in PUMCH

Assessment content	Screening	Further assessment
Diseases	Complete medical history, physical examination, pay attention to the elderly-specific issues	Targeted tests and imaging examinations, previous clinical data
Medication management	Complete medication records, including over-the counter (OTC) drugs and health care products, herbal	Medication indications Adverse drug reactions Drug interactions Pharmacist assessment
Nutrition	Body mass loss? Reduction in food intake? Measurement of body mass, body mass index (BMI)	Mini Nutritional Assessment-Short Form (MNA-SF), Nutritional Risk Screening (NRS) 2002, dietitians assessment
Teeth, swallowing	Teeth and gums Masticatory function assessment Aspiration or not?	Dentist consultation Further examination of swallowing function
Hearing	Can he/she hear and understand under a normal speaking voice without hearing aid or looking at each other's face? Observe during communication	Audiometry Otologist consultation, cerumen removal
Vision	Vision problems during driving, watching TV, reading, or daily life? Observe during communication	Eye chart detection Ophthalmologist consultation
Incontinence	Did you ever have the loss of control over urination and wet pants? Whether more than five times a year? Causing distress that you need to treat it? Nocturnal enuresis times?	Ask the relevant incentives and other symptoms Gynecologist, urologist consultation
Constipation	Presence of constipation or bowel abnormality?	Ask defecation and traits Whether time-consuming or laborious? Digital rectal examination (DRE)
Chronic Pain	Pain or not	Pain location, extent, and duration Associated symptoms
Sleeping	Satisfied with sleep quality or not? Any influences on life? Snoring or not?	Ask sleep disorder situations(hard to sleep, wake up early, easy to wake up, feeling tired the next day, sleep time) Find out the relevant habits, emotional problems Polysomnography (PSG)
Cognition, emotion	Losing things or not, memory decline? Mini-cog No interesting or pleasure within two weeks? Depressed, low mood, hopeless within two weeks? Depression or anxiety during conversation?	Mini-Mental State Examination (MMSE), Neurology assessment Geriatric Depression Scale (GDS), Patient Health Questionnaire(PHQ-9) Self-rated Anxiety Scale(SAS)[1], Self-rated Depresion Scale(SDS)[2] Psychologist consultation
Delirium	Risk factors: advanced age (≥85 years), sleep deprivation, restriction, impaired sensation (abnormal vision or hearing), dehydration, infection, usage of high-risk drugs. Presence of delirium symptoms (disorientation and fluctuating state of consciousness)	Confusion Assessment Method (CAM), Psychologist consultation , Further examination to find incentives Prevention and non-drug interventions
Physical function		
Activities of daily living(ADL)	Barthel ADL[3] Instrumental ADL (IADL) (Lawton Index)[4] Pay attention to different grading standards; IADL assessment first during outpatient screening, then ADL assessment if IADL abnormal	Learn more about the causes of the loss of function Rehabilitation, physical therapy/occupational therapy (PT/OT) consultation
Fall assessment	History of falls within one year? Ask and observe presence of abnormal gait?	Muscle strength, balance and gait assessment Balance test, Five Times Sit-to-Stand Test(FTSST), Timed Up and Go test(TUG), functional reach Methods to prevent falls Related orthopedic, neurological examination Rehabilitation, PT/OT consultation
Social and environmental assessment	Living with anyone? Economic burden? Who does housework? Getting care from the children? Housing and surrounding environment. With elevator or not? The safety of living at home	Any influences on health? Any possibility for improvement? Social workers involvement
Medical preferences	Problems wanted to be solved this time Surrogates if he/she cannot make decisions? Preferences for life supporting treatments (given sufficient time)	Living wills may refer to "Choice and Dignity" website: www.xzyzy.com

PUMCH: Peking Union Medical College Hospital

表2 基础疾病情况
Table 2 Underlying chronic diseases of the subjects

Ranking No.	Disease	Patient[*n*(%)]
1	Hypertension	103 (57.5)
2	Peripheral arterial disease	94 (52.5)
3	Hyperlipidemia	80 (44.7)
4	Diabetes	67 (37.4)
5	Musculoskeletal disorders*	55 (30.7)

*including osteoporosis and osteoarthritis

理单元[1]和住院老人生活改进项目（Hospital Elder Life Program，HELP）[2,3]均采用CGA对老年住院患者进行评估和进一步有针对性地干预，改善了预后，降低了医疗花费，提高了患者满意度。我们所采用的标准化评估流程可以很好地发现在平时容易被忽视的老年综合征，并对这些问题予以有针对性地干预。

通过评估感官障碍，对未影响生活质量的感官障碍患者进行宣教，加强了其对视力、听力异常的重视，建议每年定期随诊；对已经影响生活的，预约耳鼻喉科及眼科会诊，协助其佩戴助听器或治疗屈光不正、白内障等。

针对睡眠障碍，有些老年患者存在过度治疗，而另一些存在症状忽视。本文中睡眠障碍患者均接受了心理医学科医师的会诊，并进行了必要的行为干预及药物调整。

便秘和尿失禁往往因患者的羞于启齿和医师的忽视在常规问诊中难以被发现。通过评估发现后，我们对所有的便秘患者均给予饮食及生活方式指导，并加用适当的通便治疗使其症状得到缓解。其中3例严重便秘采用生物反馈治疗有效。老年男性尿失禁患者中前列腺增生常见，经5-α还原酶抑制剂及α1受体阻滞剂药物治疗可改善症状。对于症状明显的女性尿失禁患者，3例给予盆底肌训练后症状有所缓解，1例为神经源性膀胱，予长期间断导尿治疗。

跌倒对老年人的危害很大，≥65岁有跌倒史的患者均应该接受认知功能、用药、功能状态、视力检测等多维度的评估，以预防再次跌倒及不良事件的发生。我们通过评估发现跌倒问题以及可能导致跌倒的原因，如视力下降、营养不良导致的衰弱等，均给予相应的视力矫正、营养支持等干预措施，并进行宣教，加强陪护，防止跌倒。

经过评估，发现多重用药很常见。用药数量的增多在老年患者会大大增加药物相关的不良反应[4,5]。针对发现的多重用药患者，经过与药师协商，及时进行了减药及调整，避免了处方瀑布的发生，减少了医源性损害。用药清单的回顾也可以帮助患者很好地保存用药记录，便于保持在不同医疗机构就诊时医疗的连续性。

谵妄在入院老年患者的发生率为11%～24%[6,7]，与预后不良相关，会显著延长住院日、增加死亡率[8,9]。通过评估发现的谵妄多见于有基础认知功能障碍的患者，入院后环境改变易诱发谵妄，通过家属陪伴、精细护理等非药物干预，使其症状得到部分改善；对于感染、入量不足导致的谵妄，在非药物措施的基础上，予以抗感染治疗及容量补充，也获得较好效果。

有些老年综合征本身，如焦虑抑郁、营养不良等可成为患者首要的致病原因，可表现为不同的主诉，经过评估及排查明确后，给予相应干预，能得到较好的疗效。

采用初步筛查与详细评估相结合的CGA，可有效发现易被忽视的老年问题，通过有针对性的预防和干预可获得较好效果，是值得推广的老年医学服务模式。

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·消　息·

《中华老年多器官疾病杂志》论文优先发表快速通道

为加快重大医学研究成果的交流推广，促进医学事业的发展，我刊对符合下列条件的论文开设快速通道，优先发表：（1）国家、军队、省部级基金资助项目；（2）其他具有国内领先水平的创新性科研成果论文；（3）相关领域各类最新指南解读。凡要求以“快速通道”发表的论文，作者应提供关于论文科学性和创新性的说明。我刊对符合标准的稿件，可快速审核及刊用。

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