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老年睡眠障碍患者胃管反流病、功能性肠病及功能性消化不良患病的现况调查分析*

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摘要 目的:调查老年睡眠障碍患者胃管反流病(GERD)、功能性肠病(FBD)及功能性消化不良(FD)的患病现况。**方法:**选择参加我院2012年春季体检人员中有睡眠障碍的患者为调查对象,进行“消化道症状问卷”调查,并按年龄分层进行比较。**结果:**共入选377例睡眠障碍患者,老年组确诊为GERD、FBD及FD患者129例(53.53%),发生率明显高于成年患者(45例,33.06%)(P＜0.01)。老年睡眠障碍患者中GERD和功能性便秘的发生率明显高于成年组，而FD及肠易激综合征患病的发生率均明显低于后者(P均＜0.01~0.05)；老年睡眠障碍患者重叠型及GERD+FBD各亚型重叠发生率明显高于成年组，而单一型发生率明显低于后者(P均＜0.01~0.05)。**结论:**老年睡眠障碍患者GERD、FBD及FD的发生率均较成年人高,且以GERD及功能性便秘为主。

关键词:睡眠障碍;老年;胃管反流病;功能性消化不良;功能性肠病;患病率

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Current Status Survey on the Gastric Reflux Disease (GERD), Functional Bowel Disorders(FBD) and Functional Dyspepsia(FD) in the Elderly Patients with Sleep Disorders*

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ABSTRACT Objective: To investigate the current status on the gastric reflux disease(GERD), functional bowel disorders(FBD) and functional dyspepsia (FD) in the elderly patients with sleep disorders. **Methods:** The patients with sleep disorders in our hospital medical staff in the spring of 2012 were selected as the research object, and accepted the "GI symptom questionnaire" investigation, comparison and stratified by the age. **Results:** 377 cases of patients with sleep disorder in elderly group were enrolled, 129 (53.53%) patients were diagnosed as GERD, FBD and FD patients, which was significantly higher than that in the adult group (45 cases, 33.06%) (P<0.01). The percentage of elderly patients with sleep disorder and functional constipation patients with GERD was significantly higher than that of the adult group, while the percentages of FD and irritable bowel syndrome were significantly lower than that of the latter (P<0.01~0.05); the overlapping percentages of GERD+FBD in elderly patients with sleep disorder and percentages of subtypes overlap cases were significantly higher than that of the adult group, and a single type were significantly less than the latter (P<0.01~0.05). **Conclusion:** The prevalence of elderly patients with sleep disorder of GERD, FBD and FD were significantly higher than the adults, in which GERD and functional constipation were more common.

Key words: Sleep disorders; Elderly; GERD; Functional dyspepsia; Functional bowel disorder; Prevalence rate

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前言

人体消化道疾病与睡眠质量密切相关。目前,多数学者主张胃管反流病(gastroesophageal reflux disease,GERD)、功能性肠病(functional bowel disorders,FBD)及功能性消化不良(Functional Dyspepsia,FD)为睡眠障碍患病危险因素[1-4]。但迄今为止,我国老年人群涉及上述相关内容的报道不多,我们调查了2012年参加我院春季体检人员中睡眠障碍患者GERD、FBD及FD的患病情况,并按年龄进行分层、分组比较,现将结果报道如下。

1 对象和方法

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1.1 对象

选择参加我院 2012 年 3 月～2012 年 5 月春季体检对象中有睡眠不佳主述患者，纳入标准：①PSQI 总分≥ 13；②年龄≥ 18 岁。排除标准:①消化系系统肿瘤、炎症及寄生虫病;②肝、胆、胰腺疾病;③近 3 个月内接受过腹部手术患者;④甲状腺疾病;⑤有严重智力或认知障碍患者。本文共入选 377 例睡眠障碍患者,男 165 例,女 212 例,年龄 22～85(43.29± 18.41)岁。入选对象按年龄进行分组,老年组(年龄≥ 60 岁)241 例,成年组(年龄 18 岁～59 岁)136 例。两组对象的性别、职业、婚姻及受教育年限分布比较无统计学意义(P 均 >0.05),见表 1。

表 1 两组对象的一般资料比较($\bar{x}$± s,n(%))

Table 1 Comparison of the general data between two groups($\bar{x}$± s, n(%))

	受教育年限(年) The education(year)	男性 / 女性 Male/female	已婚 / 单身 Married/singel	脑力劳动 / 体力劳动 Mental labor/physical labor
老年组 Elderly group(n=241)	14.12± 3.76	96(39.83)/145(60.17)	194(80.50)/47(19.50)	117(48.55)/124(51.45)
成年组 Adult group(n=136)	14.79± 4.18	69(50.74)/67(49.26)	101(74.26)/35(25.74)	79(58.08)/57(41.91)

1.2 方法

1.2.1 睡眠质量评估问卷及睡眠障碍的诊断方法 睡眠质量评估问卷选择“匹兹堡睡眠质量指数问卷 (Pittsburgh Sleep Quality Index,PSQI)，由 19 个自评和和 5 个他评条目组成,归结为 7 项因子分:睡眠质量、入睡时间、睡眠时间、睡眠效率、睡眠障碍、催眠药物及日间功能。累计各项因子评分之和为 PSQI 总分,得分愈高代表睡眠质量愈差,PSQI 总分≥ 13 确诊为睡眠障碍。两组对象 PSQI 问卷评估时间在入选后 7 d 内进行。

1.2.2 “消化道症状问卷”调查方法 “消化道症状问卷”由 3 部分组成:①一般资料;②反流性疾病问卷(reflux distase questionnaire,RDQ);③罗马Ⅲ功能性胃肠疾病诊断问卷 -Ⅲ(ROME-Ⅲ),FD 包括肠易激综合征、功能性腹胀、功能性腹泻、功能性便秘和非特异性功能性肠病等亚型。诊断依据来自于最近 3 个月和诊断前至少 6 个月出现的症状,FBD 及 FD 诊断符合“ROME-Ⅲ”标准,GERD 诊断标准按照中国胃食管反流病研究协作组制定的 RDQ 量表中症状积分(Sc)≥ 12 分。调查员由经过培训的医护人员担任,调查时间在在入选后 15d 内进行。

1.3 统计学分析

在医学统计学老师的指导下，应用 SPSS 10.0 统计学相关软件进行数据分析，所有问卷和量表测评数据用例数的百分(%)比表示,采用 x^2 检验进行两组间显著性测定,部分基线参数用均数± 标准差($\bar{x}$± s)表示,应用 t 检验进行两组间显著性测定,P<0.05 代表差异有统计学意义。

2 结果

2.1 两组功能性胃肠疾病患病情况的比较

老年组确诊为 GERD、FBD 及 FD 的患者 129 例(53.53%),发生率明显高于成年患者(45 例,33.06%)(x^2=14.61,P< 0.01)。

2.2 两组 GERD、FBD 及 FD 各亚型患病情况的比较

两组 GERD、FBD 及 FD 各亚型的分布比较见表 2,结果表明老年睡眠障碍患者 GERD 和 FC 的发生率明显高于成年组,而 FD 及肠易激综合征患病例数均明显少于后者 (P 均< 0.01~0.05)。

表 2 两组对象 GERD、FBD 及 FD 各亚型发生率比较(n/%)

Table 2 Comparison of the incidence of GERD, FBD and FD between two groups

分 组 Group	胃食管反流病 Gastroesophageal reflux disease(GERD)	功能性消化不良 Functional dyspepsia(FD)	肠易激综合征 Irritable bowel syndrome (IBS)	功能性腹胀 Functional abdominal bloating(FB)
老年组(n=129)Elderly group	46/35.66 a	19/14.73 [a]	12/9.30 [a]	49/37.98
成年组(n=45)Adult group	6/13.33	15/33.33	11/24.44	14/31.11
分 组 Group	**功能性腹泻 functional diarrhea(FDR)**	**功能性便秘 functional constipation(FC)**	**非特异性功能性肠病 Nonspecific functional bowel disease(NFD)**	
老年组(n=129) Elderly group	17/13.18	29/22.48[b]	7/5.43	
成年组(n=45) Adult group	4/8.89	2/4.44	2/4.44	

注:与成年组比较:[a]P<0.05，[cv]P<0.01

Notes:Compared with the adult group:[a]P<0.05，[b]P<0.01

表 3 两组 GERD、FBD、FD 单一及重叠患病情况的比较(n/%)

Table 3 Comparison of the GERD, FBD, FD unitary and overlapping prevalence between two groups

	单一型 Unitary type	重叠型 Overlapping type	GERD+ FBD 各亚型重叠 GERD+FBD each subtype of overlap	FD+ FBD 各亚型重叠 FD+ FBD each subtype of overlap
老年组(n=129) elderly group	79/61.24[a]	50/38.76[a]	35/27.13[b]	15/11.63
成年组(n=45) adult group	36/80.00	9/20.00	3/6.67	6/13.33

注:与成年组比较:[a]P<0.05,[b]P<0.01

Notes: Compared with the elderly group: [a]P<0.05, [b]P<0.01

2.3 两组 GERD、FBD、FD 单一及重叠患病情况的比较

两组 GERD、FBD、FD 单一及重叠患病情况的比较结果见表 3，老年睡眠障碍患者重叠型及 GERD+FBD 各亚型重叠发生率明显多于成年组，而单一型发生率明显少于后者 (P 均< 0.01~0.05)。

3 讨论

睡眠质量与是否存在胃肠道疾病有着一定联系,良好睡眠过程可促进人体消化道系统器官发挥各自生理功能；反之,睡眠紊乱可导致大脑皮层中枢调控紊乱、胃肠功能失调、食欲下降、黏膜防御机能降低,引发各类器质性疾病。近年来,国内外学者[5-8]对上述关系进行了深入研究,观点比较一致的是,睡眠障碍对人体消化系统影响较为复杂,主要为刺激体内植物神经系统,导致相关激素水平分泌异常,从而影响到消化道各器官发挥作用。同时,这些食道、胃、肠道控制调节系统与睡眠紊乱之间相互影响也是双向、互动的,消化道疾病症状往往加重睡眠质量损害。其中,GERD、FBD 及 FD 是影响睡眠质量最常见的消化道系统疾病。一些流行病学研究[9-11]证明,我国老龄人群中睡眠障碍的患病率较高,睡眠障碍已成为这一年龄段人们日常生活中较为常见的抱怨。迄今为止,涉及老年睡眠障碍患者上述胃肠道疾病患病的现况调查不多,本研究试图寻觅其中的内在联系。

我们选择了一组去年参加春季健康体检中确诊为睡眠障碍患者为调查对象,将他们按年龄分层、分组,统计分析上述几种消化道疾病患病情况。结果显示,与成人睡眠障碍患者比较,老年组 GERD、FBD 及 FD 患病率显著增加，并以 GERD 和功能性便秘表现为主。国内涉及这类内容报道不多,国外几篇[12-17]涉及到老年睡眠紊乱患者消化道疾病相关报道与本研究的结果相近。Lindam 等[12]取材瑞典一组 8,014 例≥ 65 岁老龄人群,发现其睡眠障碍患者 GERD 的患病率增加明显;另一位作者[10]则确定便秘症状是老龄失眠人群主要临床表现。老龄睡眠障碍人群 GERD 和功能性便秘的患病率较高与增龄后消化系统变化有关,其中与 GERD 变化相关的有胃食物排空延迟、食管蠕动减少、吞咽后唾液分泌下降及睡眠期酸清除耗时漫长;而老年患者肠道动力下降、内脏感觉异常、直肠及盆底肌群排便动作紊乱则是功能性便秘发病机制之一。在睡眠障碍状态下,这些消化系统老龄化表现趋强提高了 GERD 和功能性便秘患病率。

一些文献[18-20]报道,GERD、FBD 与 FD 各亚型之间的症状常有重叠现象,目前解释这些表现原因如下:① GERD 和 FBD 发病机制复杂,前两者可能与 FD 各亚型之间有着很接近的神经胃肠病学基础，导致了症状不同分类不一样的消化道疾病;② 人体大脑皮层脑 - 肠轴调节不精确引发了食道、胃、肠道之间动力学及感觉异常症状常有重叠;③ 人体消化系统各器官神经及体液调节关联密切;④ 这些疾病常常有着共同的发病诱因及致病危险因素。这些消化道疾病相互重叠后常常引发睡眠障碍症状表现加重,本研究结果表明,老年睡眠障碍患者中胃肠病重叠型及 GERD+FBD 重叠型例数明显增加。

随着现代睡眠医学和神经胃肠病学等领域科学研究进展,人们逐渐从分子生物学和基因学对睡眠质量与胃肠道疾病之间联系有了新的认知。本研究发现,老龄睡眠障碍群体存在着明确的 GERD、FBD 及 FD 患病倾向，并以 GERD、功能性便秘、重叠型及 GERD+FD 各亚型重叠为常见的表现形式,注重研究这些疾病年龄分层特点及规律,制定有针对性的干预计划非常有必要。

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