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55 岁以下急性冠状动脉综合征的影响因素分析 *

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摘要 目的:探究 55 岁以下急性冠状动脉综合征(Acute coronary syndrome, ACS)患者的影响因素。**方法:**选择 2010 年 3 月至 2013 年 3 月于我院就诊的 180 例 55 岁以下 ACS 患者为研究对象,按照其性别将其区分为男性组(101 例)和女性组(79 例)。收集和比较两组患者一般临床资料,血清血红蛋白(Hemoglobin, HGB)、甘油三酯(Triglyceride, TG)、胆固醇(Cholesterol, TC)、低密度脂蛋白胆固醇(Low density lipoprotein cholesterol, LDL-C)、高密度脂蛋白胆固醇(High density lipoprotein cholesterol, HDL-C)、血尿酸水平。对两组患者进行 5 年随访,对比两组患者心血管不良事件(Major adverse cardiovascular events, MACE)的发生率、死亡率及再发病率。**结果:**(1)女性组平均发病年龄高于男性组,女性组伴发高血压、糖尿病、脑卒中比率高于男性组,男性组吸烟史比率高于女性组($P<0.05$),两组 BMI、心血管病家族史对比差异无统计学意义($P>0.05$);(2)女性组 TC、TG、LDL-C、HDL-C 水平均高于男性组($P<0.05$),女性组血尿酸水平低于男性组($P<0.05$);(3)对比 5 年预后,男性组 MACE 发生率为 9.90%(10/101),女性组 MACE 发生率为 11.39%(9/79),男性组死亡率为 1.98%(2/101),女性组为 1.27%(1/79),再发病率男性组为 5.94%(6/101),女性组为 6.33%(5/79),两组上述指标对比差异均无统计学意义($P>0.05$)。**结论:**女性 ACS 患者发病年龄高于男性患者,糖尿病、高血压等病对女性患者影响更为明显,而吸烟则对男性影响更大,女性 ACS 患者血脂、血尿酸等指标异常程度甚于男性患者,但女性与男性患者远期预后相当。

关键词:急性冠状动脉综合征;预后;性别差异

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Analysis of Influencing Factors in Patients with Acute Coronary Syndrome under 55 Years Old*

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ABSTRACT Objective: To investigate the influencing factors of patients with acute coronary syndrome (ACS) of different genders under 55 years old. **Methods:** 180 ACS patients under 55 years old who were admitted to our hospital from March 2010 to March 2013 were selected as the research objects. They were divided into the male group (101 cases) and the female group (79 cases) according to their gender. The general clinical data of the two groups were collected and compared, serum HGB, TG, TC, LDL-C, HDL-C, and blood uric acid levels. The two groups of patients were followed up for 5 years. The incidence, mortality and recurrence rate of major adverse cardiovascular events (MACE) were compared between the two groups. **Results:** (1) The average age of onset in the female group was higher than that in the male group, the rate of hypertension, diabetes and stroke in the female group was higher than that in the male group, and the rate of smoking history in the male group was higher than that in the female group ($P<0.05$). There was no significant difference between the two groups in BMI and family history of cardiovascular diseases ($P>0.05$). (2) The levels of TC, TG, LDL-C and HDL-C in female group were higher than those in male group ($P<0.05$), and the blood uric acid level in female group was lower than that in male group ($P<0.05$). (3) Compared with the 5-year prognosis, the incidence of MACE in the male group was 9.90% (10/101), that in the female group was 11.39% (9/79), that in the male group was 1.98% (2/101), and that in the female group was 1.27% (1/79). The recurrence rate was 5.94% (6/101) in the males group and 6.33% (5/79) in the females group. There was no significant difference between the two groups ($P>0.05$). **Conclusion:** The age of onset of female ACS patients is higher than that of male patients. Diabetes, hypertension and other diseases have more obvious effects on female patients, while smoking has a greater impact on men. Female ACS patients have abnormalities in blood lipids, blood uric acid and other indicators than male patients. Female and male patients have a long-term prognosis.

Key words: Acute coronary syndrome (ACS); Prognosis; Sex differences

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前言

急性冠脉综合征(Acute coronary syndrome, ACS)是一类临床上常见的心血管疾病,临床表现为冠状动脉粥样硬化斑块破裂,进而诱发冠状动脉狭窄或闭塞,最终引起心肌急性缺血^[1-3]。ACS 具有发病急、病情危等特点,患者多表现为典型的胸骨后钝痛,伴有大汗淋漓、呼吸困难、濒死感,严重者可因血液动力学不稳定而出现休克症状,如得不到及时干预,患者可出现严重的心肌损害或心肌梗死,预后较差^[4-6]。研究显示 ACS 发病率近些年有不断攀升趋势,尤其是 55 岁以下中老年人,分析其原因与不良饮食习惯及生活作息方式有关。此外,ACS 在中国女性死因排序中已经超过脑卒中和肿瘤,成为首要死因^[7-9]。近些年,关于性别是否为 ACS 患者预后的影响因素尚存在较大的争议。本研究结果显示女性 ACS 患者发病年龄高于男性患者,糖尿病、高血压等病对女性患者影响更为明显,而吸烟则对男性影响更大,女性 ACS 患者血脂、尿酸等指标异常程度甚于男性患者,但女性与男性患者远期预后比较无显著差异,具体报道如下。

1 资料与方法

1.1 一般资料

选择我院 2010 年 3 月至 2013 年 3 月收治的 180 例 55 岁以下 ACS 患者,按照其性别将其区分为男性组(101 例)和女性组(79 例)。

纳入标准:(1)年龄位于 18 周岁至 55 周岁之间;(2)符合中国医师协会急诊医师分会制定的 ACS 诊断标准;(3) 病历资料均齐全;(4)经医院伦理学会批准;(5)患者及家属知情同意,且对本次调研过程、方法、原理清楚明白。

排除标准:(1)合并恶性肿瘤者;(2)合并精神障碍者;(3)合并凝血功能障碍者;(4)合并其他器质性疾病如肾衰竭等;(5)合并冠状动脉栓塞者;(6)合并全身免疫系统疾病者。

1.2 方法

采集两组患者一般资料,一般资料包括其发病时间、质量指数(Body mass index, BMI)、糖尿病史、高血压病史、吸烟史、家族心血管病史等;同时采集两组患者清晨空腹静脉血 5 ml,使用全自动生化分析仪检测其胆固醇(Cholesterol, TC)、甘油三酯 (Triglyceride, TG)、低密度脂蛋白胆固醇 (Low density lipoprotein cholesterol, LDL-C)、高密度脂蛋白胆固醇(High density lipoprotein cholesterol, HDL-C)、尿酸水平并进行比对;而后对两组患者实施为期 5 年的随访,统计随访期间两组患者不良事件(Major adverse cardiovascular events, MACE)发病率、死亡率及再发病率。

1.3 观察指标及评测标准

高血压评估标准为既往患者存在明确的高血压史或者入院后非同日检测受试者收缩压均 ≥ 140 mmHg 或(和)舒张压 ≥ 90 mmHg;糖尿病诊断标准为存在明确的糖尿病病史或者检测非同日检测空腹血糖 ≥ 7.0 mmol/L 或餐后 2 h 血糖 ≥ 11.1 mmol/L; 脑卒中诊断标准为存在明确的脑卒中病史或影像学检查确诊为脑卒中者。

1.4 统计学方法

使用 SPSS23.0 软件对比分析本研究数据,计数资料以频数或%的形式表示,用卡方检验进行对比分析,计量资料以 $\bar{x} \pm s$ 的形式表示,组间比较采用 t 检验,以 $P < 0.05$ 为差异有统计学意义。

2 结果

2.1 两组患者一般临床资料的对比

女性 ACS 患者组平均发病年龄高于男性组,女性组伴发高血压、糖尿病、脑卒中比率高于男性组,男性组吸烟史比率高于女性组($P < 0.05$),两组 BMI、心血管病家族史对比差异不具有统计学意义($P > 0.05$),具体数据如表 1 所示。

表 1 两组一般临床资料对比

Table 1 Comparison of the general clinical data between two groups

Clinical data	The female group(n=79)	The male group (n=101)	t/ χ^2	P
Onset age	50.01 $\pm$ 1.91	46.89 $\pm$ 1.76	2.098	<0.05
High blood pressure	53(67.09)	50(49.50)	2.871	<0.05
Diabetes	49(62.03)	41(40.59)	1.981	<0.05
Stroke	12(16.46)	7(6.93)	3.071	<0.05
Smoking history	10(12.66)	38(37.62)	2.782	<0.05
BMI	25.56 $\pm$ 3.21	26.01 $\pm$ 2.98	0.981	>0.05
Cardiovascular disease family history	27(34.18)	33(32.67)	0.782	>0.05

2.2 两组患者实验室检查结果对比

女性 ACS 患者组 TC、TG、LDL-C、HDL-C 水平均高于男性组患者($P < 0.05$),尿酸水平低于男性组($P < 0.05$),具体数据

如表 2 所示。

2.3 两组患者 5 年预后对比

经随访对比,男性组 MACE 发生率为 9.90%(10/101),女

性组 MACE 发生率为 11.39 %(9/79), 男性组死亡率为 1.98 % (6/101), 女性组为 6.33 %(5/79), 两组上述指标对比差异无统计学意义($P>0.05$), 具体数据如表 3 所示。

表 2 两组实验室检查结果对比

Table 2 Comparison of the laboratory examination results between the two groups

Clinical data	The female group(n=79)	The male group (n=101)	t/ χ^2	P
TC(mmol/L)	4.67± 1.21	5.34± 1.98	2.987	<0.05
TG(mmol/L)	2.43± 0.98	2.11± 0.31	3.091	<0.05
LDL-C(mmol/L)	3.15± 0.98	2.64± 0.46	3.893	<0.05
HDL-C(mmol/L)	1.29± 0.56	0.79± 0.23	4.453	<0.05
尿酸(μ mol/L)	229.91± 13.28	287.89± 15.01	5.091	<0.05

表 3 两组患者 5 年预后对比[例(%)]

Table 3 Comparison of the 5-year prognosis between the two groups[n(%)]

Groups	Cases	MACE incidence	Death rate	Recurrent morbidity
The female group	79	9(11.39)	1(1.27)	5(6.33)
The male group	101	10(9.90)	2(1.98)	6(5.94)
χ^2	-	0.781	0.982	0.886
P	-	>0.05	>0.05	>0.05

3 讨论

目前,心脑血管疾病在世界上多数国家的死亡原因居第一位^[10-12],WHO 报道全球中心血管疾病死亡者约占当年全部死亡人数的 30%,死亡人数达 1730 万人^[13-15]。近年来,我国居民的饮食结构及生活方式均发生较大改变,高热、高油及高盐食物比例逐渐增多,使我国居民的血脂水平发生波动,心血管事件的发生率逐渐升高^[16-17]。2013 年,我国心脑血管疾病患者达 2.9 亿人,预计每年死于心脑血管疾病的人数达 350 万人^[18]。ACS 发病原因多为动脉粥样斑块脱落,引发冠脉狭窄或堵塞,会继发引起心肌供血不足,其临床症状包括心律不齐、胸部压榨感、心绞痛等,若患者的发病未得到有效缓解,其会发展为急性心肌梗死,对患者生命产生威胁^[19-21]。ACS 并发症包括心律失常、心力衰竭、心脏破裂等,多数 ACS 患者发病初期临床症状不明显,不能引起患者重视,会增加患者后期并发症发生率及死亡率,且该病具有较高的复发率,严重降低患者生活质量。了解不同因素及临床特征对 ACS 患者预后的影响有助于对患者建立长期监测机制^[22-24],对提高其生活意义具有积极影响。

有研究对 486 例 ACS 患者进行回顾性分析^[25],就不同性别 ACS 患者临床特征进行了分析,结果显示女性 ACS 患者平均年龄及 ≥ 60 岁比例明显高于男性组患者,同时女性组患者糖尿病、肥胖、高血脂的发生率明显高于男性组,冠脉造影显示老年女性组患者 1 支病变比率明显少于老年男性,但 3 支病变比率明显高于男性,进一步分析发现女性 ACS 危险因素包括糖尿病、肥胖、高血脂症等,同时老年女性患者预后较差,再发心肌梗死、心绞痛几率高于老年男性。有研究显示^[26]女性 ACS 患者平均年龄为(68.0± 8.5)岁,男性为(62.3± 11.2)岁,女性发病年龄明显晚于男性,同时 ACS 伴发糖尿病、高血压的女性患者多于男性患者,提示性别对 ACS 临床特征可能有一定的影

响。有研究对 619 例 ACS 患者按照性别进行分组分析的方式^[27],就性别对高龄 ACS 患者治疗策略的影响进行了探究,结果显示女性 ACS 患者合并糖尿病、高血压率明显较男性患者高,同时女性合并 3 种以上危险因素百分比明显高于男性,提示高龄女性在 ACS 治疗策略的制定上存在一定局限性,应综合考虑患者情况进行治疗。

本研究按照性别分组的方式,就 55 岁以下 ACS 患者的影响因素进行了探究,结果显示女性组发病平均年龄低于男性组,同时女性伴发高血压、糖尿病、脑卒中的比率男性患者高,且女性患者血脂指标如 TC、TG、HDL-C、LDL-C 均低于男性患者,提示女性 ACS 患者情况更为复杂,合并危险因素更多,临床上在治疗方案的确定时应更加均衡的进行考虑。其可能原因为女性雌激素是维持其正常机体活动的重要因子,临床研究表明雌激素具有抑制肥胖、降低血脂、降低高血压发生率等作用,这些都能够一定程度上减少 ACS 的发病率,而中老年女性出现绝经后,雌激素的减少会打乱其内分泌,导致糖、脂肪代谢失衡,容易引发高血脂、糖尿病等症,因而女性在发病年龄上会更趋向于绝经前后,而男性则多是由于年龄的增长导致了血管弹性下降、血脂升高等诱发 ACS 发病,故其发病年龄更靠后^[28-30]。本研究结果显示不同性别 ACS 患者 5 年预后情况并无明显差异,分析其原因为积极的治疗手段增加了患者对 ACS 干预的重视程度,同时人工降低了 ACS 患者发病危险因素的出现频率,因而不同性别 ACS 患者 5 年预后并无明显差异。

综上所述,女性 ACS 患者发病年龄高于男性患者,糖尿病、高血压等病对女性患者影响更为明显,而吸烟则对男性影响更大,女性 ACS 患者血脂、尿酸等指标异常程度甚于男性患者,但女性与男性患者远期预后相当。本研究也存在一定的不足,样本量少,人群的地域差异可能会对结果造成一定的偏移,有待于今后继续深入研究。

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