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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)、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、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<sup>[1-3]</sup>。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<sup>[4-6]</sup>。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<sup>[7-9]</sup>。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 $\geq 140$  mmHg 或(和)舒张压 $\geq 90$  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 $\geq 7.0$  mmol/L 或餐后 2 h 血糖 $\geq 11.1$  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)	$t/\chi^2$	$P$
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



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