·临床研究·

外科急诊中以腹痛为主诉的老年急性心肌梗死23例临床分析

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【摘要】 目的 探讨以腹痛于外科急诊的老年急性心肌梗死(AMI)患者的临床特征,以减少误诊。方法 回顾性分析23例以腹痛于外科急诊的老年AMI患者的临床资料,并选取同期以腹痛急诊于内科的老年AMI患者30例和以腹痛急诊于外科的老年急腹症患者40例作对照组。结果 急诊于外科的老年AMI组有冠心病危险因素史比率高于外科急腹症组,伴胸闷占43.4%、心悸17.4%、心前区不适感者30.4%,均高于外科急腹症组(P值分别为0.005、0.035、0.005);有外科腹痛史者高于内科急诊组(56.5% vs 26.7%,P=0.028);伴恶心、呕吐占60.9%,症状重,但腹部阳性体征少,心电图表现Ⅱ、Ⅲ、avF多见,常合并V7～V9改变;有就诊心电图记录者占78.3%,高于外科急腹症组、但低于内科急诊组(P值0.036、0.027);行腹B超、立位腹平片检查高于就诊于内科组(52.2%,26.1%;P值0.006、0.015)。结论 以腹痛急诊于外科的老年AMI患者有其临床特征,详细询问病史、认真查体、及时查心电图是避免延误治疗的关键。

【关键词】 腹痛;心肌梗死;老年人

Acute myocardial infarction in elderly patients complained of abdominal pain in surgery emergency: clinical analysis of 23 cases

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【Abstract】 Objective To explore the clinical characteristics of elderly acute myocardial infarction(AMI) in surgery emergency because of abdominal pain, in order to decrease misdiagnosis. Methods Retrospective analysis of clinical data of 23 elderly AMI cases in surgery emergency because of abdominal pain were carried out. Thirty cases admitted to the medical department and 40 cases admitted to the surgical department because of abdominal pain were selected as controls. Results In surgery emergency patients, the rate of history of coronary heart disease risk factor was higher than that in surgerical acute abdomen patients. They had chest distress in 43.4%, palpitation in 17.4%, precordial discomfort in 30.4%, which were higher than the incidences in surgical acute abdomen group(P=0.005, 0.035, 0.005). They also had higher incidence of surgerical abdominal pain than that in medical emergency group (56.5% vs 26.7%, P=0.028). They had nausea and vomiting in 60.9% with severe symptoms, but usually few abdomen physical sign. They had changes of electrocardiogram in Ⅱ, Ⅲ, avF, usually complicated with V7-V9 changes. They had electrocardiogram record immediately in 78.3%, which was higher than surgical acute abdomen group, but lower than medical emergency group (P=0.036, 0.027); For the patients with normal electrocardiogram (ECG) on admission, ECG reexamination was performed. More abdomen B ultrasound and erect position abdomen X-ray examinations were performed for these cases than for patients of medical emergency group(52.2%, 26.1%; P=0.006, 0.015). Conclusion Elderly AMI patients in surgery emergency because of abdominal pain have their clinical characteristics. In order to avoid misoliagnosis surgeons in emergency department should collect case history in detail, perform physical examination carefully and examine ECG in time.

【Key words】 abdominal pain; myocardial infarction; elderly

随着人口老龄化进程的加速,急性心肌梗死(acute myocardial infarction, AMI)发病率和死亡率增高[1]。老年人AMI合并症多,症状多不典型[2]。以腹痛伴恶心、呕吐为首发症状的老年AMI

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在临床上并不少见，而部分患者会急诊于外科，易误诊。老年AMI患者常伴有多脏器功能减退及各种慢性基础疾病，是老年人的重要死因之一[3]。目前针对急诊于外科的老年AMI的研究较少，有必要加强关注，并引起急诊外科医生的重视。

1 资料与方法

1.1 一般资料 回顾性分析自1998年1月至2007年12月以腹痛急诊于北京老年医院与北京中关村医院外科，后被明确诊断为AMI的老年患者的临床资料。入选患者23例(A组)，年龄≥65岁，其中男10例，女13例；非ST段抬高型心肌梗死(non-ST-segment elevation acute myocardial infarction，NSTEMI)8例，ST段抬高型心肌梗死(ST-segment elevation acute myocardial infarction，STEMI)15例。随机选取同期以腹痛于内科急诊就诊，年龄≥65岁的AMI患者30例做对照组(B组)，男14例，女16例；NSTEMI 12例，STEMI 18例，与外科急诊组比较两组在性别、AMI分型均无显著差异。随机选取同期以腹痛于外科急诊就诊的年龄≥65岁，主要诊断为外科急腹症的患者40例(C组)，男21例，女19例；急性阑尾炎8例、急性胆囊炎胆石症14例、胃肠穿孔10例、肠梗阻4例、泌尿系结石4例。

1.2 诊断标准 STEMI、NSTEMI诊断符合2000年欧美心脏病学会对心肌梗死的重新定义[4]：肌钙蛋白Ⅰ于症状发作24h内典型升高(超过参考对照组的99%上限)之后逐渐下降，至少伴下列情况之一者：心肌缺血症状(如活动或静息时出现的胸部、上腹部、肩部、腕部或下颌部不适疼痛等)；心电图病理性Q波的出现；心电图示心肌缺血(ST段抬高或压低)；冠状动脉介入治疗。急性STEMI的诊断：依据相邻两个导联ST段抬高在V1～V3≥0.2mV，其他导联≥0.1mV，考虑可能存在右心室或后壁的心肌梗死，加做V_{3R}～V_{5R}，V7～V9导联。急性NSTEMI的诊断：依据心电图未见ST段明显抬高，并要求冠状动脉造影前生化检查提示肌酸激酶及其同工酶大于正常上限2倍或肌钙蛋白Ⅰ超过参考对照组的99%上限。其他参照欧美心脏病学会对心肌梗死的重新定义。新出现的左束支或右束支阻滞排除在本研究外。

1.3 评价指标 年龄、性别、冠心病危险因素史、冠心病史、外科腹痛疾病史，疼痛部位、伴随症状、腹部体征，就诊时心电图表现(ST-T改变及心动过缓、房室传导阻滞、室性早搏等心律失常)，行腹B超、立位腹平片、血尿淀粉酶检查例数，即刻转内科或请内科会诊例数及外科留观例数等。

1.4 数据分析 应用SPSS12.0软件，数据用$\bar{x}\pm s$及百分数形式表达，单因素分析采用卡方检验和t检验。$P<0.05$为差异有统计学意义。

2 结 果

2.1 病史 急诊于外科的老年AMI组(A组)有冠心病危险因素史比率高于外科急腹症组(C组)，高血压、糖尿病、高脂血症、吸烟等分别占47.8%、21.7%、21.7%、34.8%，其中有高血压病史与C组比较差异有统计学意义($P=0.038$)；有冠心病史者占13.0%，少于内科急诊组(B组，$P=0.031$)；A组有外科腹痛疾病史者占56.5%，高于B组($P=0.028$)；其中有胆道疾病史者占34.8%，高于B组($P=0.027$)，差异均有统计学意义(表1)。

2.2 症状及腹部体征 A组表现为上腹痛者占73.9%，高于C组($P=0.041$)；脐周与下腹痛占4.3%，低于C组($P=0.038$)；腹痛但部位描述不清者占21.7%；有左肩或背部放散痛占69.6%，高于C组，但差异无统计学意义。A组伴胸闷占43.4%、心悸17.4%、心前区不适感者30.4%，均高于C组，差异有统计学意义(P值分别为0.005、0.035、0.005)；伴恶心、呕吐者占60.9%，上腹部饱胀感、厌食者69.6%；伴发热4.3%，低于C组($P=0.038$)。A组伴腹部压痛86.9%，但压痛均不明显，且位置不确定；腹肌紧张者9.4%，可疑反跳痛者4.3%，均低于C组，差异有统计学意义($P=0.000$；表1)。

2.3 就诊时心电图 A组有就诊12导联心电图记录者18例，占78.3%；B组除1例就诊时已临床死亡，心电图呈直线外，其余29例均有18导联心电图记录；C组有就诊即刻12导联心电图记录者20例，占50%；A组低于B组、高于C组(P值0.036、0.027)。其中A组有心电图改变者15例，占83.3%；有ST段压低和(或)T波低平、双向、倒置占83.3%，发生于Ⅱ、Ⅲ、avF占38.9%，V1～V6 38.9%，Ⅰ、avL33.3%；ST段抬高占66.7%，发生于Ⅱ、Ⅲ、avF 44.4%，V1～V6 22.2%，Ⅰ、avL 16.7%，均高于C组；C组亦有Ⅱ、Ⅲ、avF及V1～V6 ST段抬高各1例，后被明确诊断为早期复极综合征和室壁瘤。A组伴心动过缓占27.8%、房室传导阻滞22.2%，均高于C组(表1)。

2.4 辅助检查及处置 A组行腹B超检查占52.2%、立位腹平片26.1%，高于B组，差异均有统计学意义(P值0.006、0.015)。A组即刻转内科或请内科会诊占14例(60.7%)，高于C组($P=0.047$)，

表1 三组患者临床资料比较〔例(%)〕

组别	年龄(岁)	男性	心血管危险因素史			
			高血压	糖尿病	高脂血症	吸烟
A组(n=23)	75±6.3	9(39.1)	11(47.8)	5(21.7)	5(21.7)	8(34.8)
B组(n=30)	76±2.7	14(46.7)	16(53.3)	9(30.0)	11(33.3)	14(46.7)
C组(n=40)	74±8.9	21(57.5)	9(22.5)#	3(7.5)	4(10.0)	15(37.5)

组别	冠心病史	外科腹痛疾病史	胆囊炎胆石症	消化道溃疡	泌尿系结石	阑尾炎
A组(n=23)	3(13.0)	13(56.5)	8(34.8)	2(8.7)	1(4.3)	1(4.3)
B组(n=30)	12(40.0)*	8(26.7)*	3(10.0)*	2(6.7)	1(3.3)	1(3.3)
C组(n=40)	6(15.0)	21(52.5)	9(22.5)	7(17.5)	3(7.5)	1(2.5)

组别	肠梗阻	疼痛部位			左肩或背部放散痛
		剑突下上腹部	脐周下腹部	描述不清	
A组(n=23)	1(4.3)	17(73.9)	1(4.3)	5(21.7)	16(69.6)
B组(n=30)	1(3.3)	21(70.0)	1(3.3)	8(26.7)	20(66.7)
C组(n=40)	1(2.5)	19(47.5)#	10(25.0)#	11(27.5)	18(45.0)

组别	伴随症状					
	胸闷	心悸	心前区不适	恶心呕吐	厌食饱胀感	发热
A组(n=23)	10(43.4)	4(17.4)	7(30.4)	14(60.9)	26(69.6)	1(4.3)
B组(n=30)	15(50.0)	11(33.3)	12(40.0)	16(53.3)	19(63.3)	2(6.7)
C组(n=40)	5(12.5)#	1(2.5)#	2(5.0)#	16(40)	19(47.5)	10(25)#

组别	腹部体征			有就诊时心电图记录	有就诊时心电图改变	ST段压低和(或)T波改变
	压痛	反跳痛	肌紧张			
A组(n=23)	20(86.9)	1(4.3)	3(9.4)	18(78.3)	15/18(83.3)	15/18(83.3)
B组(n=30)	22(73.3)	0(0)	3(7.5)	29(96.7)*	25/29(86.2)	24/29(82.6)
C组(n=40)	40(100)	33(82.5)#	31(87.5)#	20(50.0)#	10/20(50.0)#	9/20(45.0)#

组别	Ⅱ、Ⅲ、avF	V1～V6	Ⅰ、avL	ST段抬高	Ⅱ、Ⅲ、avF	V1～V6
A组(n=23)	7/18(38.9)	7/18(38.9)	6/18(33.3)	12/18(66.7)	8/18(44.4)	4/18(22.2)
B组(n=30)	14/29(48.3)	10/29(34.5)	12/29(41.4)	15/29(51.7)	10/29(34.9)	5/29(17.2)
C组(n=40)	2/20(10.0)#	3/20(15.00)	5/20(25.0)	2/20(10.0)#	1/20(5.0)#	1/20(5.0)

组别	Ⅰ、avL	心律失常				腹B超
		心动过缓	房室传导阻滞	室性早搏	房颤	
A组(n=23)	3/18(16.7)	5/18(27.8)	4/18(22.2)	3/18(16.7)	2/18(6.9)	12(52.2)
B组(n=30)	6/29(20.7)	7/29(24.1)	8/29(27.6)	5/29(17.2)	4/29(13.8)	5(16.7)*
C组(n=40)	0(0)	1/20(5.0)	1/20(5.0)	2/20(10.0)	2/20(10.0)	38(95)

组别	立位腹平片	血尿淀粉酶	即刻转内科或内科会诊	外科留观
A组(n=23)	6(26.1)	10(43.4)	14(60.7)	9(39.3)
B组(n=30)	1(3.3)*	7(23.3)		
C组(n=40)	20(50.0)	26(65.0)	14(35.0)#	40(100)

注:A组:以腹痛急诊于外科的老年AMI组;B组:以腹痛急诊于内科的老年AMI组;C组:以腹痛急诊于外科的老年急腹症组。A组与B组比较,* $P<0.05$;A组与C组比较,# $P<0.05$

其中加做V7～V9导联心电图有ST段抬高8例;外科留观9例(39.3%),其中有3例急诊检查心电图时无明显改变,数小时后复查并加做V_{3R}～V_{5R}及V7～V9导联后,证实为下壁加正后壁AMI;有5例未行急诊即刻心电图检查,后3例行常规心电图检查证实为AMI,2例留观症状无缓解、内科会诊后心电图检查证实为AMI。

3 讨 论

老年人AMI的不典型表现以非典型胸痛、呼吸困难多见[5],少数可表现为腹痛等消化道症状、出汗、头晕及认知障碍等,容易误诊。

分析老年AMI患者腹痛及急诊于外科的主要原因:(1)心肌缺血、坏死刺激心脏自主神经的传入神经末梢,而心脏与腹部的感觉纤维共同聚合于同

一脊髓纤维束，经同一传导途径上传，至丘脑和大脑皮层后，产生腹痛的错觉。(2)迷走神经传入纤维感受器几乎都位于心脏下后壁表面，下后壁心肌梗死时迷走神经兴奋引起胃肠反射，可表现为腹痛、恶心、呕吐、厌食及饱胀感等消化道症状，甚至可因膈肌痉挛而导致不同程度的腹肌紧张[6]。(3)胃肠道缺血及迷走神经反射，诱发或加重其原有的腹部疾患。(4)老年冠心病患者常多器官疾病并存[7]，伴随症状及体征也较多，并常有脑动脉硬化、痛觉迟钝、神经传导功能减退，且常伴植物神经功能紊乱，机体对疾病的反应各异，导致常缺乏典型症状和体征[8]。(5)老年尤其是高龄患者常因受自身智能及性格改变影响[9]，致主诉模糊，对疼痛表达不清，并常伴失语、失聪，有时家人也无法提供准确的病史，且有查体不配合情况。本研究中，A组有冠心病史者少于B组，既往没有病史、对冠心病缺乏了解，而有外科腹痛疾病史，可能参与构成了急诊于外科的因素。A组有心血管危险因素史者较C组多，高血压、糖尿病、高脂血症、吸烟等均为冠心病的危险因素，对于有危险因素史的老年腹痛患者应警惕AMI，尤其是有多个危险因素的患者。

本研究分析发现，A组腹痛伴恶心、呕吐占60.9%，往往症状重，以上腹痛多见，而腹部阳性体征反跳痛、肌紧张等显著低于C组，触诊腹软，多为上腹部轻压痛，且多位置不确定，偶有肌紧张，可能与膈肌痉挛有关[6]，多无反跳痛；而伴胸闷、心悸、心前区不适感者均高于C组。A组心电图改变以下壁导联多见，部分发生于前壁，加做后壁、右室导联心电图者阳性表现多见；伴心动过缓、房室传导阻滞者多，与文献报道相符[10]，但在本研究结果差异无统计学意义，分析原因与病例数较少、部分患者未及时查心电图有关。由此可见，以腹痛急诊于外科的老年AMI患者虽有一定的复杂性，但仍有其临床特征，详细询问病史、认真查体、及时查心电图是避免延误治疗的关键。本研究中，A组有就诊心电图记录者占78.3%，高于C组，但低于B组，其中有心电图改变者占83.3%；未及时行心电图检查者5例，有3例就诊时心电图正常，而留观数小时后复查并加做正后壁及右室导联后证实为AMI，提示加做V7～V9、V_{3R}～V_{5R}导联及追踪复查心电图的重要性。

本研究表明，急诊于外科的老年AMI组行腹B超、立位腹平片检查高于急诊于内科组。尽早开通罪犯血管、实现有效的心肌再灌注是急性心肌梗死患者改善预后及降低病死率的关键，指南要求患者被送达急诊室后医生应迅速作出诊断，并尽早给予再灌注治疗[11,12]，力争在10～20min内完成病史采集、临床检查和18导联心电图；而对于ST段抬高的心肌梗死患者，应在30min内溶栓，或收住心脏病监护病房、在90min内开始行急诊经皮冠状动脉成形术治疗。有研究显示，冠脉闭塞30min后心肌开始发生坏死，1h后约20%心肌坏死，6h后85%～90%心肌发生坏死，"时间就是心肌，时间就是生命"[13]。患者行腹B超、立位腹平片不仅造成治疗时机的延误，且检查过程中可能发生再梗、猝死、心律失常等急性事件；而老年急性冠脉综合征患者多支和复杂冠脉病变发生率高[14]，常与高血压、糖尿病、心力衰竭等并存，有较高的死亡率[15]。本研究组中即刻转内科或请内科会诊占60.7%，外科留观9例中未及时行心电图检查者5例，有3例就诊时心电图正常，仅予一般对症治疗。老龄社会的到来对急诊外科医生提出了挑战，故应提高对老年不典型心肌梗死的认识，认真询问病史、仔细查体、及时行心电图检查，用动态、联系、全面的观点辨证地分析[16]，避免延误诊治。

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