[19] Gandini R, Del Giudice C, Abrignani S, et al. Inexplicable late type ia endoleak associated with the low-profile Ovation endograft in a patient with favorable neck anatomy: treatment with transcaval coil embolization[J]. J Endovasc Ther, 2015, 22: 426-430.
[20] Georgakarakos E, Schoretsanitis N, Souftas VD, et al. Emergent conversion of the Ovation StentGraft System to aortouniiliac modification via occlusion of a unilateral internal iliac artery with a stentgraft as a bailout solution[J]. Vascular, 2015, 23: 440-443.
[21] Kehagias E, Kontopodis N, Tsetis D, et al. Bifurcated aortoiliac endograft limb occlusion during deployment and its bailout conversion using the external iliac artery to internal iliac artery endograft technique[J]. Ann Vasc Surg, 2015, 29: 1029-1034.
[22] Sfyroeras GS, Moulakakis KG, Antonopoulos CN, et al. Anaphylactic reaction during implantation of the Ovation StentGraft system in a patient with abdominal aortic aneurysm[J]. J Endovasc Ther, 2015, 22: 620-622.
[23] Demanget N, Duprey A, Badel P, et al. Finite element analysis of the mechanical performances of 8 marketed aortic stent-grafts [J]. J Endovasc Ther, 2013, 20: 523-535.
[24] Demanget N, Avril S, Badel P, et al. Computational comparison of the bending behavior of aortic stent-grafts[J]. J Mech Behav Biomed Mater, 2012, 5: 272-282.
[25] Verhoeven BA, Waasdorp EJ, Gorrepati ML, et al. Long-term results of talent endografts for endovascular abdominal aortic aneurysm repair[J]. J Vasc Surg, 2011, 53: 293-298.
[26] Sweet MP, Fillinger MF, Morrison TM, et al. The influence of gender and aortic aneurysm size on eligibility for endovascular abdominal aortic aneurysm repair[J]. J Vasc Surg, 2011, 54: 931-937.
[27] Georgiadis GS, Charalampidis D, Georgakarakos EI, et al. Open conversion after endovascular aortic aneurysm repair with the ovation prime endograft[J]. Int J Artif Organs, 2014, 37: 177-181.
[28] Ioannou CV, Kontopodis N, Metaxa E, et al. Graft inflow stenosis induced by the inflatable ring fixation mechanism of the Ovation stent-graft system: hemodynamic and clinical implications[J]. J Endovasc Ther, 2014, 21: 829-838.

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·病例报告 Case report·

经皮冠状动脉介入成功处理梅毒并冠状动脉双开口严重狭窄 1 例

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【关键词】 梅毒性心血管病变；急性心肌梗死；经皮冠状动脉介入
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Successful treatment of severe syphilitic bilateral coronary ostial stenosis with percutaneous coronary intervention: report of one case *DUAN Peng, ZHANG Xiao-yong, HUANG Chao-long, QIU Min, LIU Xiao-ian. Department of Cardiology, Affiliated Qingyuan Municipal People's Hospital, Guangzhou Medical University, Qingyuan, Guangdong Province 511518, China*

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【Key words】 syphilitic cardiovascular disease; acute myocardial infarction; percutaneous coronary intervention

临床资料

患者 52 岁男，因间歇性胸痛 2 个月，再发加重 4 d 入院。患者有高血压病史 1 年，吸烟史 20 余年，平均每天 10 支左右。近 2 个月反复出现活动后胸前区压榨样闷痛，伴有大汗和气促，休息 10 min 左右可以自行缓解，曾在我科住院，诊断为“不稳定性心绞痛”，给予冠心病二级预防治疗效果欠佳，建议冠脉介入治疗，患者拒绝，出院后规律服用“阿司匹林、氯吡格雷、阿托伐他汀和美托洛尔”等药物治疗心绞痛症状仍间歇发作。入院前 4 d 安静状态下心绞痛再发并持续，自行服用“头痛散”或“硝酸甘油”后症状稍缓解，但症状仍间歇加重，遂送我院急诊。心电图示完全性左束支传导阻滞。肌红蛋白 172 μg/L，肌钙蛋白 6.96 μg/L。体格检查 BP 120/62 mmHg，P 100 次/min。平卧位。颈静脉无怒张。双下肺可以闻及少许

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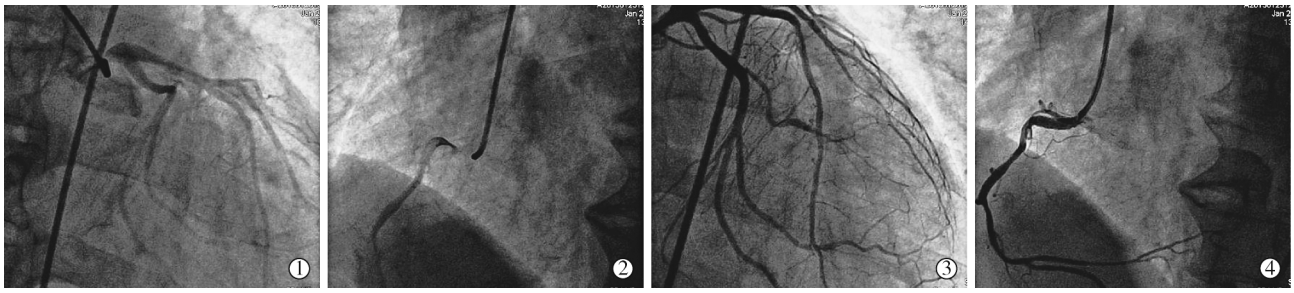
湿性啰音。胸骨左缘第 3 肋间、右缘第 2 肋间可以闻及 3/6 级舒张期泼水样杂音,心音稍减低。入院诊断为急性非 ST段抬高型心肌梗死 Killip Ⅱ级。考虑患者上次住院时心电图未见左束支传导阻滞,本次新发左束支传导阻滞,且胸痛持续不缓解,有急症冠脉介入指征,送介入室行冠脉造影提示左主干(LM)开口“鸟嘴样”狭窄约 95%,右冠脉(RCA)开口亦成“鸟嘴样”狭窄约 99%,血流 TIMI 2 级。回旋支(LCX)、前降支(LAD)、RCA 中远段未见明显狭窄。由于患者心绞痛症状持续不缓解,猝死风险极高,根据病变情况建议首选冠状动脉旁路移植术(CABG),但患者家属拒绝,遂决定行 PCI,于 LM-LAD 成功植入 4.0 mm×18 mm Partner(16 atm 释放,20 atm 支架球囊后扩张), 与 LCX 对吻扩张,RCA 开口植入 3.5 mm×15 mm Partner(14 atm 释放,18 atm 支架球囊后扩张)(图1),复查造影提示残余狭窄消失,血流 TIMI 3 级。术后行快速血浆反应素梅毒筛查试验(RPR)++(1∶16)、梅毒螺旋体特异性抗体检查阳性。心脏彩色多普勒超声:EF 44.7%、AAO(39 mm)、LVDd(75 mm)、LVDs(58 mm)、AI(6.3 cm^2)。请皮肤科会诊诊断为“梅毒Ⅲ期”,考虑梅毒所致心血管病变,给予苄星青霉素 240 万 U/周,共 3 周。1 个月后复查梅毒抗体转为阴性,RPR 抗体滴度为 0。随访期间无心绞痛发作。



①LM 开口“鸟嘴样”狭窄约 95%,血流 TIMI 2 级;②RCA 开口“鸟嘴样”狭窄约 99%,血流 TIMI 2 级;③LM-LAD 成功植入 4.0mm×18mm Partner;④RCA 开口植入 3.5 mm×15 mm Partner

图 1 冠脉造影和支架植入后所见

讨论

该患者以急性冠脉综合征(ACS)为表现入院,心电图提示新发完全性左束支传导阻滞,考虑病变为左主干或前降支近段病变可能性大,属于高危患者,早期(24 h 内)介入治疗为其Ⅰ类适应证[1]。冠脉造影提示左右开口重度狭窄,结合梅毒血清学和心脏彩超,故考虑梅毒心血管病变改变。梅毒性心血管病属于晚期梅毒,临床症状和体征大多出现在受染后 10~30 年才出现,且缺乏特异性,诊断较为困难,特别对于老年合并心血管疾病危险因素患者, 较难与动脉粥样硬化(AS)所致区分,同时还需要与长期放疗及肌纤维发育不良所致冠脉开口病变鉴别[2],需要结合病史和梅毒血清试验。梅毒性主动脉炎是其中最常见类型,炎症累及升主动脉中层导致瘢痕组织收缩引起冠状动脉开口狭窄,少数可向冠脉内延伸,但通常不超过 1.5~2 cm,且常与主动脉瓣关闭不全和升主动脉根部扩张病变并存。该类患者心绞痛症状顽固,硝酸酯类效果欠佳,心肌梗死者少见,国内外有均有散在报道[3-4],一旦出现心绞痛、心肌梗死或心力衰竭,则预后极差,猝死概率极高,3 年病死率可达 70%, 故对于此类患者需要及时准确诊断、积极处理。对于有心血管征象高度怀疑梅毒性心血管疾病者, 即使梅毒血清反应阴性亦建议驱梅治疗[5],但是需要注意在驱梅治疗中可以发生冠脉口肿胀,狭窄加重,治疗后病损好转但迅速形成大量瘢痕组织导致冠脉闭塞,使症状反而加重,对于无保护左主干病变甚至危及生命。预先处理好开口病变再行驱梅治疗不失为一种选择,过去对于冠脉开口病变一般行动脉内膜切除术或 CABG,随着 PCI 技术成熟、相关器械和药物进展,PCI 已成为此类患者有效治疗方法之一[6],但术后短期预后报道不一,存在支架内再狭窄风险[7]。考虑到该类患者病理基础与 AS 不同,哪种治疗策略更具有优势, 冠状动脉二级预防是否适合该类患者,选择药物支架、金属裸支架还生物可降解支架等诸多问题尚未解决,需要更多临床研究证实。

[参 考 文 献]

[1] Amsterdam EA, Wenger NK, Brindis RG, et al. 2014 AHA/ACC guideline for the management of patients with non-ST-elevation acute coronary syndromes: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines[J]. Circulation, 2014, 130: e344-e426.

[2] Nakazone MA, Machado MN, Barbosa RB, et al. Syphilitic coronary artery ostial stenosis resulting in acute myocardial infarction treated by percutaneous coronary intervention[J]. Case Rep Med, 2010: 830583.

[3] Choon Ta N, Chee Tang C, Chi Keong C. Syphilitic coronary artery ostial stenosis presenting with acute myocardial infarction [J]. Heart, 2013, 99: 290.

[4] 李贤峰, 陈厚良. 梅毒性冠状动脉口狭窄行经皮介入治疗一例[J]. 介入放射学杂志, 2015, 24: 182-183.

[5] Roberts WC, Ko JM, Vowels TJ. Natural history of syphilitic aortitis[J]. Am J Cardiol, 2009, 104: 1578-1587.

[6] Shankarappa RK, Moorthy N, Panneerselvam A, et al. Bilateral coronary ostial lesions in cardiovascular syphilis treated by means of percutaneous coronary stenting[J]. Tex Heart Inst J, 2013, 40: 630-632.

[7] Kharge J, Bharatha A, Raghu TR, et al. Bilateral coronary ostial stenosis with bilateral renal ostial stenosis in cardiovascular syphilis: de novo percutaneous coronary intervention and in-stent restenosis[J]. Eur Heart J, 2013, 34: 2682.

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