

肛周坏死性筋膜炎的临床特征及治疗

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【摘要】 目的 总结肛周坏死性筋膜炎(FG)的临床特征,探讨该病的治疗方法。**方法** 回顾性分析 2010 年 1 月至 2012 年 2 月南京中医药大学第三附属医院收治的 12 例 FG 患者的临床资料。11 例因肛周脓肿就诊,1 例因肛周异物就诊,大部分患者表现为肛周疼痛、高热($>38.5\text{ }^{\circ}\text{C}$)和心动过速。患者发病至入院时间为 3~20 d,平均 8 d。其中 7 例患者合并糖尿病,仅 2 例患者术前服用降糖药,但血糖控制不好;6 例患者合并高血压;1 例患者 2 个月前有乙状结肠癌手术史。入院后进行相关体格检查和实验室检查。所有患者完善检查后,急诊行局部清创引流术,选取切除组织送病理检查,术后先经验性用药,再进行分泌物培养,以药物敏感试验结果指导抗感染治疗,术后定期双氧水冲洗切口,并观察疾病进展情况,一旦进展,立即再次行清创术。采用门诊和电话随访至 2012 年 6 月,了解患者恢复情况。**结果** 临床特征:肛周组织坏死、发黑,坏死组织侵犯阴囊或大阴唇并延及下腹部 8 例,最高达脐下,两侧达腋中线;可闻及捻发音;可嗅及特殊臭味。外院转入的 5 例患者可见下腹部切口,大腿部蔓延 2 例,最远达膝关节。实验室检查:WBC $(3.8\sim 27.6)\times 10^9/\text{L}$,6 例 WBC $>10\times 10^9/\text{L}$,3 例 WBC $>20\times 10^9/\text{L}$;中性粒细胞占 0.61~0.93。12 例患者中,4 例单次清创,5 例 2 次清创,3 例 >2 次清创。2 例患者术后发生脓毒血症、感染性休克,分别送入 ICU 治疗 3 d 和 4 d 后病情好转,转入普通病房。11 例患者中脓液培养结果为大肠埃希菌 6 例(1 例为产超广谱 β 内酰胺酶型)、肺炎克雷伯菌 4 例、铜绿假单胞菌 1 例。术后经病理检查确诊为 FG。住院时间为 1~49 d,平均住院时间为 25 d;术后随访 4~29 个月,1 例患者术后第 2 天自动出院,预后不详;其他患者均无死亡。**结论** FG 的临床特征为肛周皮下组织坏死引起的剧烈疼痛和感染迅速蔓延,糖尿病可能是其危险因素。早期诊断、积极外科清创和抗感染等综合治疗的效果确切。

【关键词】 肛周感染; 坏死性筋膜炎; 发病因素; 清创; 治疗

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【Abstract】 Objective To investigate the clinical features and therapy of founrier's gangrene. **Methods** The clinical data of 12 patients with founrier's gangrene who were treated at the Third Affiliated Hospital of Nanjing University of Chinese Medicine from January 2010 to February 2012 were retrospectively analyzed. Eleven patients had perianal abscess and 1 patient had perianal foreign body, most of the patients were presented with perianal pain, fever ($>38.5\text{ }^{\circ}\text{C}$) and tachycardia. The mean interval between the onset of symptoms and admission to the hospital was 8 days (range, 3-20 days). Seven patients were complicated with diabetes. Only 2 patients were administered hypoglycemic agents, but the effects were poor. Six patients were complicated with hypertension. One patient had the history of resection of sigmoid colon cancer 2 months before operation. Debridement and drainage were applied to all the patients after examination. Antimicrobial therapy applied to all the patients according to the results of drug sensitivity test. The incisions were washed by hydrogen peroxide solution postoperatively. Redebriement was applied if the disease was progressed. All patients were followed up via out-patient examination and phone call till June 2012. **Results** Results of clinical features: Perianal tissues necrotized, with the color of black. The scrotum or labia majora of 8 patients were invaded by the necrotic tissues. Results of laboratory test: the white blood cell count was $(3.8\sim 27.6)\times 10^9/\text{L}$, the white blood cell count of 6 patients was above $10\times 10^9/\text{L}$, 3 was above $20\times 10^9/\text{L}$. The ratio of neutrophil granulocytes was 0.61-0.93. Four patients received single debridement, 5 received redbriement, and 3 patients received debridement for more than 2 times. Two patients had sapremia and infectious shock, and they received treatment for 3 days and 4 days at the intensive care unit. Results of bacterial culture: 6 patients were infected by the escherichia coli, 4 by klebsiella pneumoniae, and 1 by pseudomonas aeruginosa. The mean duration of hospital stay was (25 ± 14) days (range, 1-49 days). All patients were followed up for 4-29 months, 1 patient was discharged at postoperative day 2, and the prognosis of the 11 patients was good, no mortality was observed. **Conclusions** The clinical features of founrier's gangrene include severe pain and rapid spread of infections caused by necrosis of perianal subcutaneous tissues. Diabetes might be the risk factor of founrier's gangrene. Early diagnosis and prompt and aggressive surgical debridement are critical for improving survival.

【Key words】 Perianal infection; Necrotizing fasciitis; Etidogy; Debridement; Treatment

肛周坏死性筋膜炎(fournier's gangrene, FG)是肛周皮肤、皮下组织、浅筋膜广泛坏死,常波及外生殖器、会阴部,甚至蔓延至腹壁、下肢和胸部,进展迅速,是肛肠外科的危急重症之一。本研究回顾性分析 2010 年 1 月至 2012 年 2 月我中

心收治的 12 例 FG 患者的临床资料,旨在总结该病的临床特征,探讨该病的治疗方法。

1 资料与方法

1.1 一般资料

本组 FG 患者 12 例,其中男 9 例,女 3 例;年龄 42~83 岁,中位年龄 60.5 岁。11 例因肛周脓肿就诊,1 例因肛周异物就诊。大部分患者表现为肛周疼痛、高热($>38.5\text{ }^{\circ}\text{C}$)和心动过速。本组患者发病至入院时间为 3~20 d,平均 8 d。其中 7 例患者合并糖尿病,血糖最高为 21.9 mmol/L,仅 2 例患者术前服用降糖药,但血糖控制不好;6 例患者合并高血压;1 例患者 2 个月前有乙状结肠癌手术史。患者入院后进行相关体格检查和实验室检查。

1.2 治疗方法

所有患者完善检查后,急诊行局部清创引流术,在坏死区域内行多处皮肤至筋膜层切开,在各切口皮桥间置硅胶管引流。同时切除坏死皮肤、潜在坏死组织、筋膜直至正常组织界限。术后先经验性选用三代头孢及甲硝唑类抗生素,再进行分泌物培养,以药物敏感试验结果指导抗感染治疗。术后定期双氧水冲洗切口,并观察原病变范围,一旦进展,立即再次行清创术。对坏死组织范围广泛、侵犯肛周,可能影响排便者,术后采用禁食联合肠外营养支持治疗。

1.3 随访

采用门诊和电话随访,随访时间截至 2012 年 6 月,了解患者恢复情况。

2 结果

2.1 临床特征

肛周组织坏死、发黑,坏死组织侵犯阴囊或大阴唇并延及下腹部 8 例,最高达脐下,两侧达腋中线;可闻及捻发音;可嗅及特殊臭味。外院转入的 5 例患者可见下腹部切口,大腿部蔓延 2 例,最远达膝关节。实验室检查:WBC (13.9 ± 8.0) $\times 10^9/\text{L}$ [$(3.8 \sim 27.6) \times 10^9/\text{L}$], 6 例 WBC $>10 \times 10^9/\text{L}$, 3 例 WBC $>20 \times 10^9/\text{L}$;中性粒细胞占 0.61~0.93。

2.2 治疗结果

12 例患者中,4 例单次清创,5 例 2 次清创,3 例 >2 次清创。2 例患者术后发生脓毒症、感染性休克,分别送入 ICU 治疗 3 d 和 4 d 后病情好转,转入普通病房。11 例患者中脓液培养结果为大肠埃希菌 6 例(1 例为产超广谱 β 内酰胺酶型)、肺炎克雷伯菌 4 例、铜绿假单胞菌 1 例。术后经病理检查确认为 FG。住院时间为 1~49 d,平均住院时间为 25 d。

2.3 随访结果

术后随访 4~29 个月,1 例患者术后第 2 天自动出院,预后不详;其他患者均无死亡。

3 讨论

FG 是一种不常见但却严重的临床综合征。1883 年, Fournier^[1]首次报道了该病,认为它是一种发生于阴囊坏疽的自发性疾病,并且认为只有老年男性才会发病。目前,该病的定义已经由睾丸向会阴部转变,可发生于任何性别、任何年龄^[2]。本组 12 例患者均起源于肛周疾病,发病起源与

文献报道的结果相似^[3-4]。

感染发生于细菌移植于肛周。当免疫功能受损时容易发生,如糖尿病、饮酒、肿瘤、白血病、非甾体抗炎药、获得性免疫缺陷综合征、肾衰竭、血液透析都可能成为诱因^[5-6]。本组患者中,7 例合并糖尿病,5 例为本次住院发现并诊断,2 例既往有糖尿病史,但未能有效控制血糖。笔者认为:患者在长期的高血糖状态下,已经合并有糖尿病相关血管和神经病变。当肛门直肠病为始发因素,感染未及时治疗时动脉和小动脉内血栓形成,引起局部缺血,导致感染蔓延直至表皮和深部肌肉筋膜,形成 FG 特有的筋膜坏死。

FG 的临床特征为肛周皮下组织坏疽引起剧烈疼痛和感染迅速蔓延。该病诊断主要依靠临床表现,男性患者常蔓延至睾丸,累及泌尿生殖筋膜;女性患者常常蔓延至大阴唇,并可以沿着浅筋膜继续向腹部及下肢蔓延。合并厌氧菌感染,分解蛋白质产气和化脓,引起皮下捻发音。还可合并高热、全身毒血症及感染性休克等症状。

本病治疗上主要是抗感染、抗休克、及时清创引流。由于组织坏死的速度可以达到 2~3 cm/h,快速诊断和及早的外科清创治疗很重要^[7-8]。清创的范围深达筋膜,清除坏死组织及可疑坏死组织;侵犯阴囊时,应果断行阴囊皮肤切除、睾丸裸露,甚至需行阴茎切除术^[9];同时需保留足够的皮桥,防止皮肤缺损过大。清创治疗后,暴露切口、双氧水冲洗可作为一种辅助治疗措施。正确的换药和持续的切口情况评估是必要的治疗措施。当切口感染导致出血或坏死等疾病进展信号时,必须及时进行清创,必要时多次清创。由于坏疽蔓延,大部分病变累及泌尿生殖系统,治疗过程中还需要积极与泌尿外科、妇产科等多学科合作,以提高疗效。

参考文献

- [1] Fournier JA. Jean-Alfred Fournier 1832-1914. Gangrène foudroyante de la verge (overwhelming gangrene) [J]. Sem Med 1883. Dis Colon Rectum, 1988, 31(12):984-988.
- [2] Patankar SP, Lalwani SK. Fourniers gangrene [J]. Indian Pediatr, 2004, 41(5):511.
- [3] Eke N. Fournier's gangrene; a review of 1726 cases [J]. Br J Surg, 2000, 87(6):718-728.
- [4] Koukouras D, Kallidonis P, Panagopoulos C, et al. Fournier's gangrene, a urologic and surgical emergency presentation of a multi-institutional experience with 45 cases [J]. Urol Int, 2011, 86(2):167-172.
- [5] Turhan O, Büyüktuna SA, Inan D, et al. Clinical evaluation of forty-four patients with necrotizing fasciitis [J]. Ulus Travma Acil Cerrahi Derg, 2011, 17(1):29-32.
- [6] Ugwumba FO, Nnabugwu II, Ozoemena OF, et al. Fournier's gangrene—analysis of management and outcome in south-eastern Nigeria [J]. S Afr J Surg, 2012, 50(1):16-19.
- [7] Fajdic J, Bukovic D, Hrgovic Z, et al. Management of Fournier's gangrene—report of 7 cases and review of the literature [J]. Eur J Med Res, 2007, 12(4):169-172.
- [8] 李晓杰, 陈宝元, 李凤玉. 急性坏死性筋膜炎误诊一例 [J]. 华国防医药, 2004, 16(1):62.
- [9] Ciftci H, Verit A, Oncel H, et al. Amputation of the penis and bilateral orchiectomy due to extensive debridement for Fournier's gangrene: case report and review of the literature [J]. J Pak Med Assoc, 2012, 62(3):280-282.

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