

负压封闭引流技术治疗剖宫产术后切口愈合不良 41 例的分析

张俊茹 刘淑娟[△] 李亚宁 张燕妮 李佳 冯媛

(第四军医大学西京医院妇产科 陕西 西安 710032)

摘要 目的:探讨负压封闭引流技术在剖宫产术后切口愈合不良中的应用及疗效。方法:剖宫产术后切口愈合不良 41 例,其中脂肪液化 35 例,切口感染 7 例,应用负压封闭引流装置治疗 3~7 天后再行局部换药或二次手术缝合。结果:负压封闭引流治疗时间平均为 4.15 ± 1.24 天,之后采取换药治疗者 15 例,平均愈合时间 14.6 ± 3.36 天;采取二次手术缝合者 26 例,伤口均一期愈合。结论:负压封闭引流治疗剖宫产术后切口愈合不良,可明显促进肉芽组织生长,缩短创面愈合时间,同时为二次手术缝合创造条件。

关键词: 负压封闭引流;剖宫产术;愈合不良

中图分类号:R719.8 文献标识码:A 文章编号:1673-6273(2011)21-4166-02

The Analysis of the Vacuum Sealing Drainage in Dealing with Delayed Wound Healing after Cesarean Section.

ZHANG Jun-ru, LIU Shu-juan[△], LI Ya-ning, ZHANG Yan-ni, LI Jia, FENG Yuan

(Department of Gynecology and Obstetrics, Xijing Hospital of The Fourth Military Medical University, Shaanxi Xi'an 710032, China)

ABSTRACT Objective: To investigate the clinical outcome and the application of vacuum sealing drainage (VSD) in dealing with delayed wound healing after cesarean section. **Methods:** 41 cases of delayed wound healing after cesarean section were involved, including 35 cases fat liquefaction of incision and 7 cases of wound infection. Firstly, the VSD was used on the wound. Then, the wound was treated by dressing change or secondary suture according to the condition of wound after VSD had been removed. **Results:** The average time of VSD on the wound was 4.15 ± 1.24 days. 15 cases were treated by dressing change after the therapy of VSD and the average time of wound healing was 14.6 ± 3.36 days. 26 cases were treated by secondary suture and the wounds were all primary healing in 7 days. **Conclusion:** For the delayed wound healing after cesarean section, the application of VSD could significantly enhance the proliferation of granulation tissue, shorten the time of wound healing, and provide good condition for secondary suture.

Key word: Vacuum sealing drainage (VSD); Cesarean section; Delayed wound healing

Chinese Library Classification(CLC): R719.8 Document code: A

Article ID:1673-6273(2011)21-4166-02

创面封闭负压引流技术(Vacuum Sealing drainage, VSD)是近年来兴起的一种促进创面愈合的新型疗法,国内外学者将其应用于多种急慢性创面的治疗^[1]。自 2008 年 5 月到 2010 年 10 月,笔者应用封闭负压引流技术治疗剖宫产术后切口愈合不良 41 例,取得良好效果,报告如下。

1 资料与方法

1.1 一般资料

2008 年 5 月到 2010 年 10 月,我院共进行剖宫产手术 3200 例,其中有 55 例出现不同程度的切口愈合不良,我们对其中的 41 例进行了 VSD 治疗,患者年龄 22~30 岁,平均(25.7 ± 1.68)岁。

1.2 治疗方法

1.2.1 切口愈合不良的判断 ①脂肪液化:术后 3~7 天,换药可

见伤口有淡黄色清亮渗液,可混有少量脂肪滴,渗液镜检可见较多脂肪细胞,切口无红肿及压痛,全身无发热,血常规检查基本正常。②切口感染:术后 3~5 天,切口换药有红肿压痛,渗液以血性为主。术后 5~10 天可见脓性渗出液,镜检有脓细胞,伴全身发热症状,血常规检查白细胞明显高于正常值。

1.2.2 处理 拆除切口渗液处缝合线,范围达正常愈合处,以生理盐水及甲硝唑液简单冲洗伤口后充填 VSD 材料,包括聚乙稀酒精水化海藻盐泡沫材料,多侧孔引流管及半透性粘贴薄膜,外接负压吸引装置并维持负压在 0.017~0.060 MPa。持续治疗 3~7 天后拆除 VSD,根据伤口大小及患者要求采取换药或二次手术缝合。

2 结果

41 例患者中切口脂肪液化 35 例,占 85.4%;切口感染 7 例,占 14.6%。VSD 治疗时间为 3~7 天,平均 4.15 ± 1.24 天。拆除 VSD 装置后创面肉芽组织生长良好,7 例切口感染患者伤口炎症明显减轻,全身症状消失。后续治疗中,采取换药治疗者 15 例,愈合时间 7~20 天,平均 14.6 ± 3.36 天;采取二次手术缝合者 26 例,伤口均一期愈合,7 天拆线。

3 讨论

作者简介:张俊茹(1977-),硕士研究生,主管护师,产科护士长。主要从事妇产科专科护理研究

Tel: (029) 84775429. Tel: (029) 13629288182

Email:zhangjr@fmmu.edu.cn/zjr.xa@163.com

△通讯作者:刘淑娟,hanliu@fmmu.edu.cn

(收稿日期:2011-06-03 接受日期:2011-06-28)

剖宫产术是处理高危妊娠、异常分娩、挽救孕产妇和围生儿生命的有效手段。近年来,随着手术、麻醉技术、输血和抗感染水平的进步,剖宫产术已成为一种比较安全的分娩方式。近10年来,我国的剖宫产率更是呈逐年升高趋势,从90年代初的20%~30%,上升至现今的50%~70%,部分地区更是高达80%^[2,3]。但随之而来的剖宫产术后并发症也逐步增多,其中术后切口愈合不良是最常见的并发症之一,有报道称其发生率为2%~8%^[4,5]。

切口愈合不良的常见类型主要为脂肪液化和切口感染,其原因与孕产妇的特殊体质如低蛋白血症、妊娠水肿等全身因素有关,也与腹壁脂肪堆积,操作中电刀使用频繁,缝合不紧密等局部因素相关。一旦出现切口愈合不良,不仅增加患者的病痛,延长住院时间,增加医疗费用,同时也使临床医生受到困扰,甚至出现医疗纠纷^[6,7]。

针对此类伤口,传统的治疗方法是在脂肪液化早期拆除部分缝线后以凡士林纱布或生理盐水纱布行伤口换药,同时静脉用抗生素防止伤口感染;已感染的伤口除加强局部换药外,尚需应用有效的广谱抗生素。待伤口形成新鲜肉芽组织,局部炎症得到有效控制且无全身无发热等症状后,再视情况给予继续换药或二次手术缝合。对于感染较重或范围较大的伤口,即使如此处理,在二次缝合后仍会面临因血供差或感染导致的伤口愈合不良等问题,因此也有人认为长期换药预防感染,让其肉芽组织向心性生长是此类伤口最好的选择。但这无疑大大延长了患者的住院时间,增加了患者的痛苦及相关治疗费用^[8,9]。

负压封闭引流技术由德国Fleischmann博士于1992年最先应用于临床^[10],目前已成为治疗各种急慢性创面的最先进技术之一,而且操作简便易行,而且对实施条件要求不高,在床边亦可进行^[11,12]。其促进创面愈合的机理在于减轻组织水肿,刺激了创面修复信号的启动,通过增加创缘组织血管内皮细胞、成纤维细胞的增殖及伤口局部毛细血管的口径和密度,改善局部微循环,促进创面肉芽组织的生长^[13~15]。同时,VSD技术还能明显减少创面的细菌数量,并通过激活宿主的多种吞噬细胞达到控制感染,削除炎症的目的^[16,17]。此外,VSD还通过促使机体纤溶蛋白激活物及其他酶的释放,对伤口进行自溶性清创^[18]。

自2009年5月开始,我们应用该项技术处理剖宫产术后切口愈合不良,获得了良好的效果,不仅明显减轻了频繁换药给患者带来的痛苦,减少了医护人员的工作量,而且缩短了治疗周期,减少了医疗费用,值得进一步推广应用。

参考文献(References)

- [1] 杨帆,白祥军.负压封闭引流技术在各类创面的应用研究进展[J].创伤外科杂志,2011,13(1): 82-85
Yang F, Bai XJ. Research progress of vacuum sealing drainage technology on various kinds of wounds[J]. Chuang Shang Wai Ke Za Zhi, 2011,13(1):82-85
- [2] 宋祥兰,刘兰兰,孙梅玲,等.剖宫产率及剖宫指征10年变化的临床分析[J].中国妇幼保健,2008,23(18):2590-2591
Song XL, Liu LL ,Sun ML, et al. Clinical analysis on uterine -incision delivery rate and its indications in recent ten years [J].Zhong Guo Fu You Bao Jian ,2008, 23(18): 2590-2591
- [3] 蔡圣芸,惠宁,费梅.近10年剖宫产率及指征变化分析[J].中国妇幼保健,2008,23(13): 1847-1849
Cai SY, Hui N ,Fei M. Analysis on uterine -incision delivery rate and its indications in recent ten years [J].Zhong Guo Fu You Bao Jian, 2008, 23(18): 1847-1849
- [4] 曹泽毅.中华妇产科学[M].北京:人民卫生出版社,2004 :823-825
Cao ZY.Zhong Hua Fu Chan Ke Xue [M]. Bei Jing: The People's Medical Publishing House, 2004 :823-825
- [5] 黄醒华.对剖宫产术的思考[J].中国实用妇科与产科杂志,2003,19 (7):385-388
Huang XH. Reflections on cesarean section [J].Zhong Guo Shi Yong Fu Ke Yu Chan Ke Za Zhi,2003,19(7):385-388
- [6] 佟林林,王春晓,孙淑娥.剖宫产术后切口愈合不良临床分析[J].中国妇幼保健,2008,23(20): 2909-2910
Tong LL, Wang CX ,Sun SE. Clinical analysis on delayed wound healing after Cesarean Section [J].Zhong Guo Fu You Bao Jian ,2008, 23(20): 2909-2910
- [7] 潘秀明.剖宫产切口愈合不良的相关因素探讨及预防[J].中国实用医药,2009,4(13):45-46
Pan XM. The related factors and prevention of Cesarean section wound healing[J].Zhong Guo Shi Yong Yi Yao,2009,4(13):45-46
- [8] 邢海燕.妇产科腹部切口脂肪液化的治疗[J].中国妇幼保健,2008,23 (21):3045-3046
Xing HY. The treatment of abdominal incision fat liquefaction in Obstetrics and gynecology [J]. Zhong Guo Fu You Bao Jian ,2008, 23 (21): 3045-3046
- [9] 陈燕.剖宫产术后腹壁切口愈合不良62例[J].医学理论与实践, 2010,23(10):1233-1234
Chen Y. 62 cases of abdominal incision healing after cesarean section [J]. Yi Xue Li Lun Yu Shi Jian,2010,23(10):1233-1234
- [10] Fleischmann W, Strecker W, Bombelli M, et al. Vacuum sealing as treatment of soft tissue damage in open fractures [J].Unfallchirurg, 1993,96(9):488-492
Fleischmann W, Strecker W, Bombelli M, et al. 负压封闭引流技术在开放性骨折治疗软组织损伤的应用[J].Unfallchirurg,1993,96(9): 488-492
- [11] Zhang CQ, Zheng HY, Wang B, et al. Treatment of Gustilo grade III leg fractures by external fixation associated with limited internal fixation[J].Chinese Journal of Traumatology, 2010, 13(2): 96-100
Zhang CQ, Zheng HY, Wang B, et al. 应用外固定结合有限内固定或负压引流治疗小腿Gustilo III骨折 [J].Chinese Journal of Traumatology, 2010, 13(2): 96-100
- [12] Tang J, Guo WC, Yu L, et al. Clinical efficacy of artificial skin combined with vacuum sealing drainage in treating large-area skin defects [J]. Chin J Traumatol,2010,13(5):289-292
Tang J, Guo WC, Yu L, et al. 临床疗效结合负压封闭引流治疗大面积皮肤缺损的人工皮肤 [J]. Chin J Traumatol,2010,13(5):289-292
- [13] Fleischmann W, Strecker W, Bombelli M, et al. Vacuum sealing as treatment of soft tissue damage in open fractures [J].Unfallchirurg, 1993,96(9):488-492
Fleischmann W, Strecker W, Bombelli M, et al. 负压封闭引流技术在开放性骨折治疗软组织损伤的应用[J].Unfallchirurg,1993,96(9): 488-492

(下转第 4190 页)

- [17] Gaia S, Marzano A, Smedile A, et al. Four years of treatment with lamivudine: clinical and virological evaluations in HBe antigen-negative chronic hepatitis B [J]. Aliment Pharmacol Ther, 2004, 20(3): 281-287
- [18] 谢蝉, 张赢伐. 国产混合品型阿德福韦酯治疗慢性乙型病毒性肝炎的临床疗效观察 - 附 24 例报告[J]. 新医学, 2007, 38(6): 373-375
Xie C, Zhang YF. The observation of clinic effect of adefovir dipivoxil treated with chronic hepatitis B- Report of 24 Cases. [J]. New Medicine, 2007, 38(6): 373-375
- [19] Marcallin P, Chang TT, Lim SG, et al. Adefovir dipivoxil for the treatment of hepatitis B e antigen-positive chronic hepatitis B [J]. N Engl J Med, 2003, 348(9): 808-816
- [20] Hadziyannis SJ, Tassopoulos NC, Chang IT, et al. Long-term adefovir dipivoxil treatment induces regression of liver fibrosis in patients with HBeAg-negative chronic hepatitis B: Results after 5 years of therapy [J]. Hepatology, 2005, 42(4 suppl 1): 754
- [21] Hadziyannis S, Tassopoulos N, Chang TT, et al. Three years study of adefovir dipivoxil demonstrates sustained efficacy in presumed pre-core mutant chronic hepatitis B (CHB) patients in a long term safety and efficacy study (LTSES) [J]. Hepatology, 2004; 40(Suppl 1): 17
- [22] Chang TT, Gish RG, De Man R, et al. A comparison of entecavir and lamivudine for HBeAg-positive chronic hepatitis B [J]. N Engl J Med, 2006. 354(10): 1001-1010
- [23] Lai CL, Shouval D, Lok AS, et al. Entecavir Versus Lamivudine for patients with HBeAg-negative chronic hepatitis B [J]. N Engl J Med, 2006, 354(10): 1011-1020
- [24] European Association for the Study of the Liver. EASL Clinical practice guidelines: management of chronic hepatitis B [J]. J. Hepatol, 2009, 50, 227-242
- [25] Patrick Marcellin, E. Jenny Heathcote,, Maria Buti, et al. Tenofovir Disoproxil Fumarate versus Adefovir Dipivoxil for Chronic Hepatitis B [J]. New England J Med, 2008, 358(24): 2442-2456
- [26] 杨绍基, 任红主编. 传染病学[M]. 北京: 人民卫生出版社, 2008: 23-51
Yang SJ, Ren H. Infectious Diseases. [M]. Beijing: People's medical publishing house, 2008: 23-51
- [27] Lok AS, McMahon BJ. Chronic hepatitis B: update 2009 [J]. Hepatology, 2009, 50: 661-662
- [28] Mohamadzadeh M, Luftig R. Dendritic cells: In the forefront of immunopathogenesis and vaccine development-A review [J]. J Immune Based Ther Vaccines, 2004, 2: 221-231
- [29] Xu XW, Chen YG. Current therapy with nucleoside / nucleotide analogs for patients with chronic hepatitis B [J]. Hepatobiliary Pancreat Dis Int, 2006, 5(3): 350-359

(上接第 4167 页)

- [14] Cheng L, Chai Y. Analysis of vacuum sealing drainage complications during treatment of extremity wounds [J]. Zhong guo Xiu Fu Chong Jian Wai Ke Za Zhi, 2010, 24(11): 1354-1356
成亮, 柴益民. 持续负压吸引技术治疗肢体皮肤软组织缺损并发症分析[J]. 中国修复重建外科杂志, 2010, 24(11): 1354-1356
- [15] Zhang CQ, Zheng HY, Wang B, et al. Treatment of Gustilo grade III leg fractures by external fixation associated with limited internal fixation [J]. Chinese Journal of Traumatology, 2010, 13(2): 96-100
Zhang CQ, Zheng HY, Wang B, et al. Application of external fixation combined with limited internal fixation or vacuum sealing drainage for Gustilo III tibial fractures [J]. Chinese Journal of Traumatology, 2010, 13(2): 96-100
- [16] Beno M, Martin J, Hatzl J. Vacuum sealing in the treatment and prevention of prosthetic infections--a case review [J]. Rozhl Chir, 2010, 89 (8): 508-512
Beno M, Martin J, Hatzl J. 应用负压封闭引流技术治疗和预防假肢感染 [J]. Rozhl Chir, 2010, 89(8): 508-512
- [17] Liao D, Ning N, Liu X, et al. Vacuum sealing drainage for infection wound in earthquake [J]. Zhong Nan Da Xue Xue Bao Yi Xue Ban, 2009, 34(10): 1008-1010
廖灯彬, 宁宁, 刘晓燕, 等. 负压封闭引流技术在地震骨折伤员感染创面中的应用[J]. 中南大学学报医学版, 2009, 34(10): 1008-1010
- [18] 王春喜, 卢怡, 王晓勇. 负压封闭引流促进创伤修复机制的研究进展 [J]. 创伤外科杂志, 2009, 11(2): 184
Wang CX, Lu Y, Wang XY. Research progress of vacuum sealing drainage technology on the mechanisms of wound repair [J]. Chuang Shang Wai Ke Za Zhi, 2009, 11(2): 184