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VSD 负压引流技术结合游离植皮治疗大面积皮肤缺损的临床疗效研究 *

陈 磊 孙建华 阮 智 方钦正 彭方亮 董金波

(新疆石河子大学医学院第一附属医院骨一科 新疆 石河子 832008)

摘要 目的:研究 VSD 负压引流技术结合游离植皮治疗大面积皮肤缺损临床疗效。**方法:**选择 2012 年 4 月至 2013 年 10 月入我院接受治疗的大面积皮肤缺损患者 65 例,将其随机分为观察组(35 例)与对照组(30 例)。观察组患者术前先采用 VSD 治疗,游离植皮术后继续给予 VSD 治疗;对照组患者采取打压植皮或传统打包加压治疗。观察和比较两组患者的皮片成活时间、皮片成活率、术后住院治疗时间、换药次数、疼痛评分及家属满意度。**结果:**观察组患者的皮片成活时间短于对照组、皮片成活率高于对照组、住院时间短于对照组,换药次数少于对照组,两组之间的差异具有统计学意义(P<0.05)。此外,观察组患者的疼痛视觉模拟评分明显低于对照组,患者家属的满意度评分明显高于对照组,差异具有统计学意义(P<0.05)。**结论:**相对于传统的打压植皮或传统打包加压的技术而言,VSD 负压引流技术结合游离植皮在治疗大面积皮肤缺损的临床疗效更好,值得在临床上推广使用。

关键词:VSD 负压引流技术;游离植皮;皮肤缺损;临床疗效

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Research on the Clinical Efficacy of VSD Negative Pressure Drainage Technology Combined with Free Skin Graft in the Treatment of Large Area Skin Defect*

CHEN Lei, SUN Jian-hua, RUAN Zhi, FANG Qin-zheng, PENG Fang-liang, DONG Jin-bo

(Department of Orthopedics, the 1st Affiliated Hospital of Shihezi University, Shihezi, Xinjiang, 832008, China)

ABSTRACT Objective: To study the clinical efficacy of VSD negative pressure drainage technology combined with free skin graft in the treatment of large area skin defect of clinical curative effect. **Methods:** 65 patients with large area skin defects admitted in our hospital from April 2012 to October 2013 were chosen and randomly divided into the observation group (35 cases) and control group (30 cases). Patients of observation group were treated by VSD before surgery and after free skin grafting. Patients of control group were treated by traditional suppression of skin graft or traditional pressurized packaging technology. The skin graft survival time, skin graft survival, hospital days, switching frequency, pain score and family satisfaction were observed and compared between two groups. **Results:** Compared with the control group, the skin graft survival time of observation group was shorter, the flap survival rate was higher, the length of time was shorter, the switching frequency was less, the pain score of observation group was significantly lower, the family satisfaction was higher, the differences between the two groups had statistical significance (P<0.05). **Conclusion:** Compared with the traditional suppression of skin graft or traditional pressurized packaging technology, the VSD negative pressure drainage technology combined with free skin graft was more effective in the treatment of large area skin defects, which was worth popularizing in clinical use.

Key words: VSD negative pressure drainage technology; Free skin graft; Skin damage; Clinical efficacy

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前言

在临床工作中，大面积皮肤缺损创面是待解决的技术难题。传统的植皮术由于操作难度较大,手术后难以准确判断疗效,并且由于其自身技术方法的限制还存在植皮坏死以及感染的可能[1,2]。负压封闭引流技术是一种全新的治疗方法,目前已经逐渐应用与临床[2,3]。本研究通过对大面积皮肤缺损患者分别采用 VSD 负压引流技术植皮治疗和传统的植皮手术治疗,观察和比较其治疗后皮片成活时间、皮片成活率、术后住院治疗时间、术后治疗费用、患者和家属满意度、医护处置花费时间等，旨在评价负压引流技术结合游离植皮手术的临床疗效,现将结果报道如下。

1 资料与方法

1.1 一般资料

选取我院 2012 年 4 月至 2013 年 10 月收治的 65 例大面

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作者简介:陈磊(1981-),男,硕士,主治医师,主要研究方向:创伤骨科,电话:13579758836,E-mail:564386249@qq.com

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积皮肤缺损患者,随机分为观察组和对照组,观察组 35 例,对照组 30 例。其中,观察组男 22 例,女 13 例,年龄 16~55 岁,平均(35± 8.7)岁,皮肤缺损 8× 12 cm 以上,无糖尿病等内科基础疾病。对照组男 20 例,女 10 例,年龄 14~52 岁,平均(33± 9.2)岁,皮肤缺损 8× 12 cm 以上,无糖尿病等内科基础疾病。两组患者的一般临床资料比较,差异无统计学意义(P>0.05),具有可比性。见表 1。

表 1 两组患者的一般资料比较($\bar{x}$± s,%)

Table 1 Comparison of the general information between observation group and control group ($\bar{x}$± s, %)

组别 Groups	例数 The number of cases	性别 Gender		平均年龄(岁) Average age (years)
		男 Male	女 Female	
观察组 Observation group	35	22(62.9)	13(37.1)	35± 8.7
对照组 Control group	30	20(66.7)	10(33.3)	33± 9.2
P		＞0.05	＞0.05	＞0.05

1.2 方法

1.2.1 观察组所用材料 VSD 敷料由武汉维斯第公司提供,密闭单包(规格为 10× 15 cm 及 5× 15 cm 两种),外观湿润柔软,类似海绵,具有一定的生物活性。

1.2.2 治疗方法 观察组 35 例大面积皮肤缺损患者术前先采用 VSD 治疗,游离植皮术后继续给予 VSD 治疗。具体方法为:①彻底清除创面的坏死失活组织或容易坏死的组织,异常分泌物和异物等,对缺损区的皮肤边缘进行休整;②取合适部位、合适大小的中厚皮片,供皮区使用凡士林纱布进行覆盖,并且加以普通敷料包裹。皮片与皮肤破损区皮缘固定在创面上。皮片用尖刀打洞,洞孔需均匀分布。以创面大小为基础对 VSD 敷料进行形状修剪, 使得引流管的端孔以及侧孔完全被 VSD 料所包裹覆盖。完成后在 VSD 料表面覆盖生物半透薄膜,并且保持创面封闭。再使用连接负压吸引器的引流管将 VSD 敷料变瘪。从 VSD 敷料中的引流管中可以观察植皮创面所得到的压力。5~7 d 后去除敷料,对创面进行换药等常规处理[2]。

对照组 30 例大面积皮肤缺损患者采取打压植皮或传统打包加压治疗。

1.3 观察指标

两组患者的皮片成活时间、皮片成活率、术后住院治疗时间、换药次数、疼痛评分及家属满意度[4,5]。以视觉模拟评分法为基础对患者的疼痛进行评分。0 分:无痛;3 分以下:有轻微的疼痛,患者能忍受;4 分 ~6 分:患者疼痛并影响睡眠,尚能忍受;7 分 ~10 分:患者有渐强烈的疼痛,疼痛难忍。对家属满意度也分为 10 分,分数越高代表越满意。

1.4 统计学分析

所有实验数据采用 SPSS16.0 统计软件包进行统计学处理,计量资料以均数± 标准差($\bar{x}$± s)表示,组间比较采用 t 检验,计数资料的比较采用 x^2 检验,以 P＜0.05 为差异有统计学意义。

2 结果

2.1 两组临床疗效的比较

观察组 35 例患者植皮成活时间为(6.3± 2.3)天,对照组为(7.8± 2.8)天,观察组的植皮成活时间明显短于对照组,差异具有统计学意义(P<0.05)。去除 VSD 敷料后,观察组 35 例患者中,33 例植皮全部成活,2 例皮肤边缘坏死, 平均成活率为 94.29%;对照组 30 例患者中,植皮成活 19 例,11 例皮肤边缘坏死或感染,平均成活率为 63.33%,两组比较差异具有统计学意义(P<0.05)。观察组患者的住院时间为(19.6± 5.3)天,明显短于对照组的(26.6± 6.9)天,差异具有统计学意义(P<0.05)。观察组的换药次数为(1.5± 0.5)次,显著少于对照组的(4.0± 1.5)次,差异具有统计学意义(P<0.05)。见表 2。

表 2 两组临床疗效的比较($\bar{x}$± s,%)

Table 2 Comparison of the clinical efficacy between observation group and control group ($\bar{x}$± s, %)

组别 Groups	病例数 The number of cases	成活时间 /d survival time/d	成活数 /n survival number/n	成活率 survival	住院天数 /d hospital days/d	换药次数 / 次 dressing frequency/time
观察组 Observation group	35	6.3± 2.3	33	94.29%	19.6± 5.3	1.5± 0.5
对照组 Control group	30	7.8± 2.8	19	63.33%	26.6± 6.9	4.0± 1.5
P		＜0.05	＜0.05	＜0.05	＜0.05	＜0.05

2.2 两组的疼痛评分和家属满意度比较

如表 3 所示，观察组患者的疼痛平均分明显低于对照组，且在无疼痛、疼痛轻微、疼痛能忍受及疼痛剧烈四个疼痛区间中，观察组患者所占比率均明显低于对照组，差异具有统计学意义(P<0.05)；家属满意度亦明显高于对照组，差异具有统计学意义(P<0.05)。

表 3 观察组和对照组满意度调查结果对比[n(%)，$\bar{x}\pm s$]

Table 3 Comparison of satisfaction between two groups[n (%), $\bar{x}\pm s$]

组别 Groups	n	无疼痛 No pain	疼痛轻微 Mild pain	疼痛能忍受 Pain can endure	疼痛剧烈 Severe pain	患者疼痛平均分 Pain in patients with average	家属满意度 Family satisfaction
观察组 Observation group	35	14(40)	17(48.6)	2(5.7)	2(5.7)	3.23± 0.65	8.2± 0.9
对照组 Control group	30	2(6.7)	5(16.7)	16(53.3)	7(23.3)	6.48± 0.91	5.8± 1.9
P	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

3 讨论

传统植皮后打压加压治疗往往因为局部炎症，供血差等原因，皮片很难存活，术后易积液感染，拆除敷料换药也很容易引起皮片撕裂，引发感染，皮片成活率低[6-8]。VSD 负压引流是指用含有引流管的聚乙烯乙醇水化海藻盐泡沫敷料来覆盖或填充 pfizer、软组织缺损的创面，再用生物半透膜对其封闭，使其成为一个封闭空间，最后把引流管接通负压源，通过可控制的负压来促进创面愈合的一种全新治疗方法[9-11]。VSD 负压引流技术处于一个封闭的环境，减少了换药次数，也减少了创面跟外界的接触，降低了感染的发生率；此外，其还能够减少消除局部水肿，促进细胞增生，增强组织生长，使游离皮片更快更好地和创面粘附，皮片成活率高[12-17]。而提高皮片成活率是减少住院时间的重要因素，VSD 负压引流技术能有效控制创面感染，减少换药次数，减轻医护人员的工作量，避免交叉感染的发生，患者愈合加快，缩短住院时间，降低医疗费用。

本研究采用 VSD 负压引流技术配合游离植皮治疗我院大面积皮肤缺损的患者，结果显示其皮片存活率显著高于采用传统治疗的患者，且住院时间明显缩短。植皮后，肉芽组织易出血，会有少量渗血，VSD 负压吸引能有效引流，使植皮更易存活，同时减少感染，减轻疼痛[18,19]。本研究中，接受 VSD 负压引流技术结合游离植皮治疗的大面积皮肤缺损患者的视觉模拟评分较采用打压植皮或传统打包加压治疗的患者明显降低，且患者家属的满意度评分明显升高，表明打压植皮或传统打包加压治疗可有效缓解大面积皮肤缺损患者的疼痛感，提高其生活质量。

综上所述，VSD 负压引流技术结合游离植皮在治疗大面积皮肤缺损的患者疗效较打压植皮或传统打包加压治疗更好，皮片成活时间短，皮片成活率高，创面愈合快，住院时间短，疗效显著，值得临床推广[20]。

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