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A 型肉毒毒素联合眼袋整形术对眼周皮肤松弛患者的疗效观察

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摘要 目的：探讨 A 型肉毒毒素联合眼袋整形术对眼周皮肤松弛患者的治疗效果和对患者满意度的影响，为临床提供参考。**方法**：选取 2015 年 6 月至 2016 年 6 月间因眼周皮肤松弛来我院治疗的患者 60 例。患者根据自身意愿选择治疗方式，按其选择的治疗方式分组为对照组（n=28）和治疗组（n=32）。对照组采用单纯眼袋整形术进行治疗，治疗组采用 A 型肉毒毒素联合眼袋整形术治疗。治疗后对两组患者均随访 6 个月。观察记录患者手术后鱼尾纹的改善效果、眼袋减轻的情况和眼周皮肤光泽的改善效果。观察患者并发症的发生情况。随访结束时采用自制的满意度调查问卷对患者满意度进行调查。**结果**：经过治疗，治疗组鱼尾纹改善率为 100.00%，明显高于对照组的 60.71%；治疗组眼袋改善率为 96.88%，明显高于对照组的 32.14%；治疗组皮肤光泽改善率为 87.50%，明显高于对照组的 53.57%，差异均具有统计学意义（均 P<0.05）。治疗后，两组患者切口红肿、少量分泌物、小血肿的发生率比较无明显差异（P>0.05），治疗组术眼红肿与外眦部切口瘢痕发生率明显少于对照组（P<0.05）。治疗组总满意率为 93.75%（30/32），明显高于对照组的 67.86%（19/28），差异具有统计学意义（P<0.05）。**结论**：A 型肉毒毒素与眼袋整形术联合应用在眼周皮肤松弛的治疗上有较好的疗效和安全性，能明显降低患者术眼红肿与外眦部切口瘢痕的发生，并提高患者满意率，值得在临床上推广应用。

关键词：A 型肉毒毒素；眼袋整形术；眼周皮肤松弛；疗效

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Curative Effect of Botulinum Toxin Type A Combined with Plastic Operation of Pouches on Patients with Eye Skin Relaxation

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ABSTRACT Objective: To investigate the curative effect of botulinum toxin type A combined with plastic operation of pouches on patients with eye skin relaxation and its impact on patients' satisfaction, and to provide reference for clinical application. **Methods:** A total of 60 patients with eye skin relaxation, who were treated in Baoji Central Hospital from June 2015 to June 2016, were selected as subjects and divided into control group (n=28) and treatment group (n=32) according to the patients' choices. The patients of control group were treated with plastic operation of pouches, while the patients of treatment group were treated with botulinum toxin type A combined with plastic operation of pouches. The two groups were followed up for 6 months. The improvement of crow's feet, the relief of pouches and the improvement of eye skin gloss of the patients after operation were observed and recorded. The incidence of complications were also observed. At the end of the follow-up, the satisfaction degrees of the patients were investigated with the self-made questionnaire. **Results:** After treatment, the improvement rate(100%) of crow's feet of the treatment group was significantly higher than that(60.71%) of the control group; the improvement rate (96.88%) of pouches of the treatment group was significantly higher than that (32.14%) of the control group; the improvement rate (87.50%) of eye skin gloss of the treatment group was significantly higher than that (53.57%) of the control group, and the differences were statistically significant (all P<0.05). After treatment, there was no significant difference in the incidence of incision swelling, small amount of secretions and small hematoma between the two groups (P>0.05), the operation eye swelling and incision bruises outer canthus in the control group were more than those in the treatment group (P<0.05). The total satisfaction rate [93.75%(30/32)] of the treatment group was significantly higher than that[67.86% (19/28)] of the control group, the difference was statistically significant (P<0.05). **Conclusion:** Botulinum toxin type A combined with plastic operation of pouches in the treatment of eye skin relaxation has a better efficacy and safety, which can significantly reduce the incidence of operation eye swelling and incision bruises outer canthus, and improve patients' satisfaction rate. It is worthy of clinical application.

Key words: Botulinum toxin type A; Plastic operation of pouches; Eye skin relaxation; Curative effect

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前言

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眼部是人体皮肤组织最薄的部位，又因其表情肌丰富、皮下几乎没有可以供给油脂的汗腺和皮脂腺，而极易衰老和产生皱纹[1]。人体出现衰老外在表现为面部皱纹的产生和增多，而有研究表明[2,3]，眼周为面部皱纹出现最早的部位。眼周皮肤松弛

主要表现为鱼尾纹的加深和增多、出现眼袋、眼周皮肤无光泽等[4]。随着整形美容行业近年来的不断发展，整形美容手术越来越被大众所接受，在治疗眼周皮肤松弛上，也有越来越多的人选择眼袋整形术[5,6]。传统的眼袋整形术在治疗眼周皮肤松弛上有一定的效果，然而其美观性较为一般，且术后并发症较多，因而患者满意度较低[7]。随着生活水平的不断提高，单纯眼袋整形术已经逐渐不能满足人们的美容需求，探寻对眼周皮肤松弛的更加有效的治疗方式也成为行业关注的重点[8]。注射 A 型肉毒毒素是整形美容行业常用的方法之一，其对动力性皱纹（如鱼尾纹、横额纹）和混合性皱纹（主要为口周皱纹）均有较好的治疗效果[9-11]，且安全性较为可靠。本文采用 A 型肉毒毒素联合眼袋整形术对皮肤松弛患者进行治疗，观察其临床疗效，以期为临床治疗皮肤松弛提供参考，报道如下。

1 资料和方法

1.1 临床资料

选取 2015 年 6 月至 2016 年 6 月间因眼周皮肤松弛来我院治疗的患者 60 例作为研究对象。纳入标准：所有患者均经我院检查为眼周皮肤松弛，眼袋类型为混合型，且鱼尾纹较深。排除标准：① 患有肌肉和（或）神经系统疾病者；② 过敏体质者；③ 妊娠及哺乳期妇女；④ 合并心、肝、肾疾病者；⑤ 有其它 A 型肉毒毒素禁忌症的患者[12]。患者根据自身意愿选择治疗方式，按其选择的治疗方式分组为对照组（采用单纯眼袋整形术治疗，28 例）和治疗组（采用 A 型肉毒毒素联合眼袋整形术治疗，32 例）。其中对照组男 11 例，女 17 例，年龄 31-72 岁，平均年龄（44.67± 10.53）岁，身高 143~179 cm，平均身高（161.21± 8.72）cm，体重 41~83 Kg，平均体重（50.91± 6.72）Kg；治疗组男 11 例，女 21 例，年龄 28~73 岁，平均年龄（45.17± 9.81）岁，身高 140~178 cm，平均身高（163.65± 9.14）cm，体重 40~81 Kg，平均体重（51.63± 6.48）Kg。两组上述一般资料比较无统计学差异（P>0.05），可以比较。

1.2 治疗方法

1.2.1 眼袋整形术治疗方法 对照组患者均选择用单纯的眼袋整形术进行治疗：在患者的下睑睫毛下方 1 mm 处切开一个与睑缘平行的小切口，并于外眦角按鱼尾纹走向做一与之平行的斜形切口。按眼部解剖原理将患者眼眶轮匝肌切开，少量多次地分离眶隔筋膜，摘除下睑的疝出脂肪。主韧带清晰暴露之后，采取横切的方式从中部切断，并将断端与眶外缘或眦韧带的骨膜用缝线进行缝合，以对下睑疗效加强。如果患者眶鼻沟或下眶缘沟有明显的凹陷存在，且眶隔的脂肪疝出并不严重，则对这些部位的疝出脂肪予以保留，并下移眶隔筋膜，于眶缘下方 4 mm 的骨膜处进行固定。对松弛的轮匝肌或下睑皮肤行常规方法切除。

1.2.2 A 型肉毒毒素联合眼袋整形术治疗 治疗组在对照组的基础上联合眼袋整形术治疗。对患者行眼袋整形术后，给予 A 型肉毒毒素（兰州生物制品研究所有限责任公司，国药准字 S10970037，规格：50-100 U/ 瓶）注射治疗：在患者眼角边缘外侧 1 cm 处取第一个注射点，定为点 A；在 A 点外侧平行 2 cm 处取第二个注射点，定为点 B；在 A 点向上 1 cm 处取第三个注射点，定为点 C；在 A 点下方 1 cm 处取第四个注射点，定为点 D。注意避开相应部位的血管，对四个点位行皮下肌肉内注射 2.5 UA 型肉毒毒素。

1.3 观察指标

治疗后对两组患者均随访 6 个月。观察记录患者鱼尾纹、眼袋和手术后眼周皮肤光泽的改善情况。随访中同时观察患者不良反应的发生情况及其具体的并发症类型。随访结束时采用自制的满意度调查问卷对患者满意度进行调查，问卷满分 100 分，大于 90 分为非常满意、80-89 分为满意、70-79 分为基本满意、低于 70 分为不满意，总满意人数 = 非常满意人数 + 满意人数 + 基本满意人数。所发放的 60 份问卷全部收回，且所回收的问卷均为有效问卷。

1.4 统计学方法

本研究所有数据均采用 SPSS18.0 进行处理和分析。计量资料采用 t 检验，以（$\bar{x}$± s）的形式表示，计数资料采用 X2 检验，以%表示。检验标准设置为α=0.05。

2 结果

2.1 患者鱼尾纹、眼袋、皮肤光泽改善情况

经过治疗，治疗组鱼尾纹改善 32 例，改善率为 100.00%，明显高于对照组的 60.71%（17/28）；治疗组眼袋改善 31 例，改善率为 96.88%，明显高于对照组的 32.14%（9/28）；治疗组皮肤光泽改善 28 例，改善率为 87.50%，明显高于对照组的 53.57%（15/28）（均 P<0.05）。见表 1。

表 1 患者鱼尾纹、眼袋、皮肤光泽改善情况[n(%)]

Table 1 Improvement of crow's feet, pouches the eyes and skin gloss in patients [n(%)]

Groups	n	Improvement of crow's feet	Improvement of pouches	Improvement of skin gloss
Control group	28	17(60.71)	9(32.14)	15(53.57)
Treatment group	32	32(100.00)	31(96.88)	28(87.50)
x^2	-	15.394	28.185	8.466
P	-	0.000	0.000	0.004

2.2 患者并发症发生情况

对照组发生切口红肿 2 例，术眼红肿 4 例，少量分泌物 2 例，小血肿 2 例，外眦部切口瘀痕 4 例；治疗组发生切口红肿 1 例，少量分泌物 3 例，小血肿 2 例。两组切口红肿、少量分泌物、小血肿的发生率比较无明显差异（P>0.05），治疗组术眼红肿与外眦部切口瘀痕发生率明显少于对照组（P<0.05）。见表 2。

2.3 患者满意度情况比较

对照组总满意人数为 19 人，总满意率为 67.86%；治疗组总满意人数为 30 人，总满意率为 93.75%。治疗组总满意率明显高于对照组，差异具有统计学意义（P<0.05）。见表 3。

表 2 患者并发症发生情况[n(%)]

Table 2 Complications of patients [n(%)]

Groups	n	Incision swelling	Operation eye swelling	Small amount of secretions	Small hematoma	Incision bruises outer canthus
Control group	28	2(7.14)	4(14.29)	2(7.14)	2(7.14)	4(14.29)
Treatment group	32	1(3.13)	0(0.00)	3(9.38)	2(6.25)	0(0.00)
x^2		0.506	4.898	0.097	0.019	4.898
P		0.476	0.000	0.755	0.890	0.000

表 3 患者满意度情况比较

Table 3 Comparison of patient satisfaction

Groups	n	Very satisfied	Satisfied	Basically satisfied	Dissatisfied	Total satisfaction rate [n(%)]
Control group	28	4	8	7	9	19(67.86)
Treatment group	32	11	13	6	2	30(93.75)
x^2	-					6.687
P	-					0.010

3 讨论

眼周是面部皱纹出现最早的部分,眼周皮肤松弛主要有以下原因[13,14]:① 眼部皮肤组织薄,而女性因其皮肤真皮要薄于男性,因而眼部皮肤更为容易衰老变形;② 有丰富的表情肌,极为容易出现老化、皱纹;③ 皮下有丰富的毛细血管和神经末梢,在眼周易发生血肿和水肿;④ 皮下几乎无汗腺和皮脂腺,能供应的油脂较少;⑤ 眼周皮肤敏感脆弱,熬夜或血液循环不良时容易有黑眼圈和眼袋出现。眼袋的形成是皮肤老化的一种表现,其发生的时间与每个人所处的环境、职业、生活习惯等诸多因素有关,而眼袋出现后,主要的解决方式是手术治疗[12]。眼袋整形术是目前临床常用手术方法,其在眼睑外缘处切口,将疝出脂肪摘除,并通过提紧眶隔筋膜、眼轮匝肌等方式达到祛除眼袋、消除皱纹的目的[5]。然而行眼袋整形术后患者眼部常出现疼痛、出血、肿胀、切口瘀痕等并发症,使得患者对该手术的满意度不高。注射 A 型肉毒毒素是目前美容医疗常用的方法之一[15]。A 型肉毒毒素毒性强,除要格外注意其禁忌症之外,在剂量方面也需严格控制。大剂量注射 A 型肉毒毒素时会导致毒素扩散,引发肌肉无力[16];而采用低剂量 A 型肉毒毒素时,则对眼球震颤、痉挛性肌张力障碍等与肌肉功能障碍有关的疾病有较好的治疗作用,同时能缓解患者术后的疼痛与肿胀,且安全可靠[17-19]。目前,A 型肉毒毒素在咬肌注射瘦脸、面部除皱等方面均取得了较好的治疗效果[20-23]。本研究将其与眼袋整形术联用,以期为其治疗眼周皮肤松弛提供临床依据。

本研究中,经过治疗,治疗组鱼尾纹、眼袋、皮肤光泽改善率分别为 100.00%、96.88%和 87.50%, 均明显高于对照组的 60.71%、32.14%和 53.57(均 P<0.05)。提示 A 型肉毒毒素联合眼袋整形术在对眼周皮肤松弛患者的治疗疗效上有较大的提高,赵文明的研究中也得到了类似的结论[24]。推测其原因为 A 型肉毒毒素可作用于胆碱能运动神经末梢, 能拮抗体内 Ca^{2+},因而对乙酰胆碱的释放有干扰作用,从而阻止肌纤维的收缩松弛肌肉,达到除皱的效果[25]。治疗后对照组术眼红肿与外眦部切口瘀痕发生明显多于治疗组, 提示 A 型肉毒毒素联合眼袋整形术对于降低患者并发症的发生有较好的作用。推测其原因为 A 型肉毒毒素注射对眼袋皮肤松弛有矫正作用, 且造成的鱼尾纹及术后局部肿胀较轻,临床操作简便,术后恢复快,也不会产生明显瘀痕[26],与胡洋红等人[27]的研究结果相一致。本研究对两组所有患者均采取问卷调查的方式对患者满意度进行调查, 而治疗组总满意人数为 30 人, 其总满意率明显高于对照组, 提示在提高患者满意度方面,A 型肉毒毒素联合眼袋整形术起到了较好的效果,该治疗方案更为患者所接受。笔者认为除了与 A 型肉毒毒素联合眼袋整形术有更好的疗效和更低的并发症发生率之外, 也与 A 型肉毒毒素能够有效地降低患者术后的疼痛与肿胀,能够改善患者的术后体验有关[28,29]。A 型肉毒毒素与其它美容手术的联用中对患者满意度也取得了类似结果[30]。

综上所述,A 型肉毒毒素与眼袋整形术联合在眼周皮肤松弛的治疗上有较好的疗效,并能明显降低患者术眼红肿与外眦部切口瘀痕的发生,安全性较好,值得在临床上推广应用。

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