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不同泪道硅胶引流管留置时间对慢性泪囊炎患者视力、生活质量及复发率的影响*

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摘要 目的:探讨不同泪道硅胶引流管留置时间对慢性泪囊炎患者的生活质量、视力及复发率的影响。**方法:**回顾性选取 2018 年 1 月~2019 年 12 月期间于我院就诊的慢性泪囊炎患者 91 例(128 眼),根据术后泪道硅胶引流管留置时间分为 A、B 两组,其中 A 组泪道硅胶引流管留置时间 6 周,44 例(61 眼),B 组泪道硅胶引流管留置时间 12 周,47 例(67 眼)。对比两组疗效、视力、并发症发生率、主诉溢泪发生率、生活质量及复发率。**结果:**A 组拔管当天的总有效率高于 B 组($P<0.05$),两组拔管后 3 个月总有效率对比无明显差异($P>0.05$)。拔管后 6 个月两组社会功能、躯体疼痛、精神健康、生理功能、精力、情感职能、生理职能、总体健康维度评分均较术前升高($P<0.05$),但两组组间对比未见统计学差异($P>0.05$)。两组患者术前、拔管后 3 个月视力组间及组内比较均未见统计学差异($P>0.05$)。两组患者主诉溢泪发生率比较未见统计学差异($P>0.05$)。A 组并发症发生率、复发率低于 B 组($P<0.05$)。**结论:**泪道硅胶引流管留置时间的长短对慢性泪囊炎患者疗效、视力、生活质量、主诉溢泪发生率无明显影响,但留置 6 周者并发症发生率、复发率低于留置 12 周者,提示临床应视患者具体情况尽量缩短泪道硅胶引流管留置时间。

关键词:泪道硅胶引流管;留置时间;慢性泪囊炎;视力;生活质量;复发率

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The Effect of Different Retention Time of Silicone Drainage Tube for Lacrimal Passage on Vision, Quality of Life and Recurrence Rate of Chronic Dacryocystitis Patients*

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ABSTRACT Objective: To investigate the effect of different retention time of silicone drainage tube for lacrimal passage on the quality of life, vision and recurrence rate of chronic dacryocystitis patients. **Methods:** 91 cases (128 eyes) of chronic dacryocystitis patients who came to our hospital from January 2018 to December 2019 were selected retrospectively. According to the time of catheter retention after operation, they were divided into two groups: group A and group B, among group A had catheter for 6 weeks and 44 cases (61 eyes). Group B was had catheter for 12 weeks, 47 cases (67 eyes). The curative effect, vision, complication rate, incidence rate of chief complaint of tear spillation, quality of life and recurrence rate were compared between the two groups. **Results:** The total effective rate of extubation day in group A was higher than that of group B ($P<0.05$), and there was no statistically significant difference between the two groups in the total effective rate 3 months after extubation ($P>0.05$). The scores of social function, physical pain, mental health, physiological function, energy, emotional function, physiological function and overall health in the two groups at 6 months after extubation were all higher than those before operation ($P<0.05$), but there was no statistical difference between the two groups ($P>0.05$). There was no statistical difference of vision between the two groups before operation, 3 months after extubation and within the group ($P>0.05$). There was no statistical difference in the incidence rate of chief complaint of tear spillation between the two groups ($P>0.05$). The incidence rate of complications and recurrence rate in group A were lower than those in group B ($P<0.05$). **Conclusion:** The duration of indwelling of the silica gel drainage tube in the lacrimal duct has no significant influence on the curative effect, vision, quality of life, and

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incidence rate of chief complaint of tear spillation in patients with chronic dacryocystitis. However, the complication rate and recurrence rate of patients who have been indwelling for 6 weeks are lower than those who have been indwelling for 12 weeks, suggesting that the duration of indwelling of the silica gel drainage tube in the lacrimal duct should be shortened as much as possible according to the specific conditions of patients.

Key words: Silicone drainage tube for lacrimal passage; Retention time; Chronic dacryocystitis; Vision; Quality of life; Recurrence rate

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前言

慢性泪囊炎是眼科的常见疾病之一,多见于鼻泪管狭窄或阻塞后,由泪液滞留于泪囊,引起致病菌的大量生长繁殖所致^[1,2]。该病临床症状主要表现为流脓、内眦结膜充血、溢泪等,若未能及时治疗会对患者工作生活造成严重影响^[3]。手术是治疗慢性泪囊炎的主要方法,其中泪道硅胶引流管置入术因其微创、疗效较好、价格低廉等优势获得广大患者及医师的青睐,应用较为广泛^[4,5]。然而有关泪道硅胶引流管的最佳留置时间临床尚存在一定的争议,既往报道最少为2~4周,最多可达20周^[6,7]。本研究通过探讨泪道硅胶引流管为6或12周的留置时间对慢性泪囊炎患者的生活质量、视力及复发率的影响,旨在为该病患者泪道硅胶引流管留置时间的确定提供参考,报道如下。

1 资料与方法

1.1 一般资料

回顾性选取2018年1月~2019年12月期间于我院就诊的慢性泪囊炎患者91例(128眼),纳入标准:(1)慢性泪囊炎诊断标准参考《实用眼科学》^[8];(2)符合手术指征,顺利完成泪道硅胶引流管置入术;(3)年龄>18岁。排除标准:(1)合并瘢痕增生、泪囊纤维化及小泪囊;(2)合并泪小管阻塞或狭窄;(3)既往有眼眶、泪道、鼻部外伤及泪囊手术史;(4)临床资料不全或未完成随访者;(5)伴有精神疾患,无法配合沟通者;(6)过敏体质。根据术后泪道硅胶引流管留置时间将患者分为A、B两组。A组引流管留置6周,44例(61眼),其中男16例(24眼),女28例(37眼);年龄19~73岁,平均(48.73±5.24)岁;病程0.5~4年,平均(2.17±0.73)年;体质量指数20~27 kg/m²,平均(23.41±0.86)kg/m²。B组引流管留置12周,47例(67眼),其中男17例(23眼),女30例(44眼);年龄21~70岁,平均(48.52±6.19)岁;病程0.8~6年,平均(2.26±0.81)年;体质量指数21~27 kg/m²,平均(23.59±0.94)kg/m²。两组一般资料比较无差异($P>0.05$),均衡可比。

1.2 方法

两组均接受泪道硅胶引流管置入术治疗,方法如下:取仰

卧位,局麻,采用碘伏常规消毒术区皮肤,在下鼻道中填塞棉片,棉片需浸有20g/L丁卡因。泪道采用0.9%氯化钠溶液冲洗,冲洗完毕后将泪小点扩张,记忆导丝于泪小点处置入,至鼻腔外后停止,沿着导丝置入泪道硅胶引流管牵引线进入泪囊内,退出导丝,下泪小点完成泪道冲洗,冲洗完毕后将引流管位置调整好并剪断多余引流管。A组泪道硅胶引流管留置6周,B组泪道硅胶引流管留置12周。术后两组均给予妥布霉素滴眼液治疗,1~2滴/次,3次/d,治疗7d。术后1、3、7、14、28、42、56、70、84d两组均行泪道冲洗。采用门诊复查的形式随访6个月。

1.3 临床疗效

于拔管当天、拔管后3个月观察两组患者的治疗效果。疗效判定标准如下:泪道冲洗通畅且未发生返流为治愈。泪道冲洗较为通畅,但冲洗发生部分返流或有一定阻力为好转。泪道冲洗不通畅为无效。治愈率+好转率=总有效率^[9]。

1.4 观察指标

(1)采用健康调查简表(SF-36)^[10]对患者术前、拔管后6个月的生活质量进行评估,SF-36包括精力、社会功能、躯体疼痛、精神健康、生理功能、情感职能、生理职能、总体健康8个维度。每个维度均为100分,得分越高则生活质量越好。(2)采用标准对数视力表检测患者术前、拔管后3个月的视力,结果采用最小分辨角对数视力表示。(3)记录两组随访期间慢性泪囊炎复发情况、主诉溢泪发生情况。(4)记录两组术后引流管离断、拔管困难等并发症发生情况。其中拔管困难是指拔管时因鼻甲遮挡下鼻道,导致引流管下端的打结处不易被找到,需在鼻内窥镜下或用麻黄素收缩鼻甲后才能找到。引流管离断是指以止血钳夹持引流管下端拉至最大弹性状态仍未能拉出。

1.5 统计学方法

采用SPSS 23.0软件处理数据。计量资料以($\bar{x} \pm s$)表示,采用t检验。以%表述计数资料,采用 χ^2 检验。检验水准为 $\alpha=0.05$ 。

2 结果

2.1 两组疗效对比

A组拔管当天的总有效率高于B组($P<0.05$),两组拔管后3个月总有效率对比差异无统计学意义($P>0.05$),详见表1、表2。

表1 两组拔管当天疗效对比 [例(%)]

Table 1 Comparison of curative effect of extubation day of two groups [n(%)]

Groups	Number of eyes	Cure	Become better	Invalid	Total effective rate
Group A	61	19(31.15)	37(60.66)	5(8.20)	56(91.80)
Group B	67	15(22.39)	32(47.76)	20(29.85)	47(70.15)
χ^2					9.526
P					0.002

表 2 两组拔管后 3 个月疗效对比 [例(%)]

Table 2 Comparison of curative effect of two groups 3 months after extubation [n(%)]

Groups	Number of eyes	Cure	Become better	Invalid	Total effective rate
Group A	61	22(36.07)	36(59.02)	3(4.92)	58(95.08)
Group B	67	18(26.87)	41(61.19)	8(11.94)	59(88.06)
χ^2					2.004
<i>P</i>					0.157

2.2 两组生活质量对比

两组术前生活质量各维度评分组间比较差异无统计学意义($P>0.05$),两组患者拔管后 6 个月生活质量各维度评分均较

术前升高($P<0.05$),但两组拔管 6 个月后各维度评分组间对比无统计学差异($P>0.05$),详见表 3。

表 3 两组生活质量评分对比($\bar{x}\pm s$,分)Table 3 Comparison of quality of life scores between the two groups($\bar{x}\pm s$, scores)

Groups	Time	Social function	Overall health	Physiological function	Mental health	Role-physicall	Physical pain	Energy	Emotional function
Group A (n=44)	Before operation	66.89± 9.30	69.27± 8.24	64.27± 7.24	71.37± 8.83	69.27± 7.26	70.73± 7.46	69.58± 8.32	71.28± 7.86
	6 months after extubation	82.14± 8.13 ^a	84.18± 9.73 ^a	85.92± 8.62 ^a	89.28± 8.34 ^a	88.37± 9.25 ^a	87.14± 10.35 ^a	88.65± 10.48 ^a	86.37± 9.61 ^a
Group B (n=47)	Before operation	67.06± 10.14	69.84± 7.27	64.76± 6.44	71.98± 9.31	69.97± 9.84	70.28± 9.31	69.03± 8.26	71.79± 8.26
	6 months after extubation	82.05± 9.19 ^a	84.62± 6.33 ^a	85.19± 7.53 ^a	89.52± 6.57 ^a	88.84± 7.36 ^a	87.47± 8.87 ^a	88.19± 10.46 ^a	86.26± 10.41 ^a

Note: compared with before operation, ^a $P<0.05$.

2.3 两组视力对比

术前,A组患者的视力为(0.94 ± 0.14),拔管后 3 个月的视力为(0.93 ± 0.15);术前 B 组患者的视力为(0.93 ± 0.16),拔管后 3 个月的视力为(0.91 ± 0.13);两组患者视力术前、拔管后 3 个月组间及组内比较均未见统计学差异($P>0.05$)。

2.4 两组溢泪、复发情况

随访期间,A 组患者溢泪 19 例,主诉溢泪发生率为 43.18%(19/44);复发 2 例,复发率为 4.55%(2/44)。B 组患者溢泪 23 例,主诉溢泪发生率为 48.94%(23/47);复发 10 例,复发率为 21.28%(10/47)。两组患者主诉溢泪发生率比较未见统计学差异($\chi^2=0.303$, $P=0.582$)。A 组复发率低于 B 组($\chi^2=5.557$, $P=0.018$)。

2.5 两组并发症发生情况

A 组患者发生引流管离断 3 例、拔管困难 2 例,并发症发生率为 11.36%(5/44);B 组患者发生引流管离断 7 例、拔管困难 9 例,并发症发生率为 34.04%(16/47);A 组并发症发生率低于 B 组($\chi^2=6.584$, $P=0.010$)。

3 讨论

慢性泪囊炎多源自于鼻泪道阻塞性疾病,如鼻炎、沙眼等,由于泪液长期滞留于泪囊内,造成泪囊细菌滋生,并刺激泪囊壁,黏液性分泌物大量形成,逐渐形成慢性泪囊炎^[11-13]。以往的流行病学调查数据显示^[14],随着我国人口老龄化情况的加剧,慢性泪囊炎发病率逐年递增,且该病多见于农村或偏远地区的中老年群体。本病的主要症状为溢泪,如不给予相关治疗,患者将终生流泪,严重影响患者工作和日常生活^[15,16]。此外,慢性

泪囊炎还是一种潜在的感染源,一旦患者受到外伤或者施行眼部手术,极易引起化脓性感染,感染可蔓延至眼球,严重时可丧失眼球^[17,18]。鼻泪管结构细长,治疗难度较大,传统的治疗方法中疗效最为彻底的是泪囊鼻腔吻合术,然而该术式创伤较大,影响美观,且费用较高,多不被患者所接受^[19]。近年来,在其他领域广泛应用的医用硅胶被眼科医师应用于泪囊疾病的治疗,经过不断的改良,最终形成的泪道硅胶引流管置入术已具有比传统手术治疗更有效、安全、便捷、价廉的优势^[20]。泪道硅胶引流管置入术通过置入引流管可使鼻泪管阻塞部分有效支撑、扩张、引流等,总体疗效令人满意^[21,22]。

现临床针对术后泪道硅胶引流管留置时间长短仍存在一定的争议。龙正勤等^[23]学者认为慢性泪囊炎患者行泪道引流管置入术后,引流管留置 6 周或 9 周的临床获益优于 12 周。而马洪珍等^[24]学者却认为泪道硅胶引流管留置 12 周与 6 周治疗的临床疗效较为接近,且对患者视力影响无明显差异。可见有关术后泪道硅胶引流管留置的最佳时间仍需更多的研究加以验证。本次研究结果显示,泪道硅胶引流管留置 6 周的患者其拔管当天的疗效优于留置 12 周者,且留置 6 周的患者并发症发生率、复发率低于留置 12 周者。但留置 6 周与留置 12 周的慢性泪囊炎患者在视力、拔管后 3 个月的疗效、主诉溢泪发生率、SF-36 评分方面无明显差异。提示留置时间的长短对患者视力、疗效、溢泪情况及生活质量无显著影响,但留置时间越长,拔管难度越大,泪道冲洗通畅率越低,并发症发生率及复发率随之增加。既往报道证实^[25],在泪道内引流管留存 1~2 d 后可见泪囊内肉芽组织大量形成并包绕。故分析本研究中引流管留置 12 周者并发症发生率、复发率略高的原因可能在于以下几点:随

着硅胶引流管放置时间延长,引流管被瘢痕组织的包裹程度逐渐加深,进而增加炎症纤维增殖几率,导致拔管难度增加^[26];随着硅胶引流管放置时间的延长,泪囊肉芽组织形成以及感染的风险逐渐增加^[27];泪道引流管可被阻塞部位挤压变形,阻塞部位可持续增生而增加并发症发生率,并且提高复发几率^[28,29]。以往也有报道结果显示^[30],引流管置入时间 16 周以上泪囊肉芽组织形成风险是 16 周以内的 2~3 倍,严重者可导致手术的失败。本次研究的不足之处在于,样本量偏小,随访时间较短,且非多中心、前瞻性研究,同时本研究中缺乏对两组患者泪囊壁病理组织学改变的观察,有关硅胶引流管在泪道中的最佳留置时间,仍需后续研究进一步深入探讨。

综上所述,6 或 12 周的泪道硅胶引流管留置时间对慢性泪囊炎患者疗效、视力、生活质量、主诉溢泪发生率无明显影响,但留置 6 周者并发症发生率、复发率低于留置 12 周者,提示临床应视患者具体情况尽量缩短泪道硅胶引流管留置时间。

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