·临床研究·

青光眼常规小梁切除术结膜瓣大小对手术效果的影响

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Effect of different size of conjunctival flap on trabeculectomy

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Abstract

• AIM: To investigate the antihypertensive effect and the impact of postoperative complications of different conjunctival flap size in the routine glaucoma trabeculectomy.

• METHODS: The eyes of 10 cases with chronic angle-closure glaucoma underwent conventional trabeculectomy + peripheral iris excision procedure, and the conjunctival fornix flap for the basement, without intraoperative antimetabolites. Equilateral triangle conjunctival flap with the bottom edge of 10mm long and 6mm high was performed in one eye, and the other eye was performed a long-10mm, high-6mm rectangular conjunctival flap (the actual size of the equivalent twice of the former), and the remaining operation steps were the same. From the second day after the operation, the daily measurement of intraocular pressure (IOP) (non-contact tonometer), slit-lamp examination of anterior chamber were performed for seven days until suture removal.

• RESULTS: The eyes with expanded conjunctival flap in 10 cases all had the occurrence of postoperative shallow anterior chamber of which there were 5 cases with one-stage shallow anterior chamber, 4 cases with two-stage shallow anterior chamber, 1 case with three-stage shallow anterior chamber. Dyeing: one case of two-stage shallow anterior chamber eyes with conjunctival flap wound leakage; filtration bulb of conjunctival sac intumesce in the bottom of the three-stage shallow anterior chamber eyes. No cilio-choroidal detachment occurred. IOP measurement: all IOPs were lower than 4-8mmHg, and the difference between binoculus was less than 2mmHg. One stage and two stage shallow anterior chamber eyes underwent filtering pillow compression and bandaging, and three stage shallow anterior chamber eyes were dilated with Mydrin-P daily, pressuring with filtering pillow and bandaging, without using ocular hypotensive agents orally or intravenously. When removing the suture 7 days after operation, the anterior chambers were normal; binocular IOPs were 14 mmHg in 1 case, less than 10mmHg in 9 cases, the binocular difference was less than 2mmHg, and the sizes of binocular filter bleb were the same. There was no difference in binocular filter bleb and IOP during the half month, one month, and three month review.

• CONCLUSION: The expansion of the conjunctival flap can not reduce IOP and increase the volume of the filtering bleb effectively, but can increase the occurrence of complications caused by strong filtering, low eye pressure, and large filter bleb.

• KEYWORDS: glaucoma; trabeculectomy; conjunctival flap

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摘要

目的:探讨青光眼常规小梁切除术中结膜瓣大小对降压效果及术后并发症的影响。

方法:对 10 例已确诊双眼慢性闭角型青光眼的患者行常规小梁切除术 + 虹膜周切术,均做以穹窿为基底的结膜瓣,术中不用抗代谢药物。1 眼做底边长 10mm,高 6mm 等边三角形结膜瓣,另 1 眼做边长 10mm,高 6mm 矩形结膜瓣(实际面积相当于前眼的两倍),其余手术步骤一致。于术后 2d 开始,每日测量眼压(非接触式眼压计),裂隙灯检查前房至术后 7d 拆线。分别于术后 0.5,1,3mo 复查。

结果:患者 10 例扩大结膜瓣眼于术后全部发生浅前房,对侧无 1 例发生。其中 1 级浅前房 5 例,2 级浅前房 4 例,3 级浅前房 1 例。染色:2 级浅前房中 1 例结膜瓣伤口漏。3 级浅前房患眼下方结膜囊见滤过泡隆起。无 1 例发生睫状体脉络膜脱离。眼压测量:手术眼眼压均位于 4 ~ 8mmHg,双眼相差 < 2mmHg。1,2 级浅前房眼行滤枕加压、绷带包扎,3 级浅前房眼行美多丽每日散瞳、滤枕加压、绷带包扎,均未口服及静脉使用降眼压药物。术后 7d 拆线时,术眼前房均正常,1 例双眼眼压为 14mmHg,9 例眼压 < 10mmHg,双眼相差 < 2mmHg,双眼滤过泡大小一致。术后 0.5,1,3mo 复查双眼滤过泡无差别,眼压无差别。

结论:扩大的结膜瓣并不能更有效的降低眼压,增大有效滤过泡的容积,反而会在术后早期增加滤过过强,眼压低,滤过泡大而弥散的并发症。

关键词:青光眼;小梁切除术;结膜瓣
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0 引言

青光眼小梁切除术 + 虹膜周切术是最为常见的抗青光眼术式,然而,即使不断改进,滤过术后 2a 失败率仍高达 15% ~25%。失败的最主要原因是滤过泡纤维化,使得结膜下房水引流受阻,导致眼压回升或者失控。目前临床常用抗滤过泡纤维化药物丝裂霉素 C 和 5-氟尿嘧啶,疗效确切,但作为抗代谢药物其副作用严重。能否在手术中通过扩大常规结膜瓣面积,增强术后房水引流容积,来尽量延长有效滤过容积的时间呢? 我们通过跟踪观察患者不同大小结膜瓣的小梁切除手术后至 6mo 的眼压,有效滤过泡及并发症的发生情况,来明确扩大的结膜瓣对手术的影响。

1 对象和方法

1.1 对象 自 2008-10/2009-03 选择 10 例确诊为双眼青光眼的患者。男 5 例,女 5 例,年龄 28 ~63(平均 36.5 ±5.1)岁。均为原发性青光眼,其中急性闭角型青光眼 2 例,慢性闭角型青光眼 5 例,开角型青光眼 3 例。

1.2 方法 术前充分问询患者病史,无糖尿病、高血压等全身疾病。并对患者进行如下眼部检查:(1)视力检查:双眼裸眼视力及最佳矫正远视力;(2)裂隙灯显微镜检查角膜、前房、晶状体位置、晶状体混浊程度;(3)眼底检查;(4)眼压检查;(5)B 超及超声生物显微镜(UBM)检查。患者行常规小梁切除术 + 虹膜周切术。手术均由同一术者完成。患者取仰卧位,常规消毒铺巾,爱尔凯因表面麻醉,开睑器开睑,上直肌牵引缝线固定眼球,做上方以穹窿为基底的结膜瓣,术中不用抗代谢药物。1 眼做底边长 10mm,高 6mm 等边三角形结膜瓣,另 1 眼做边长 10mm,高 6mm 矩形结膜瓣(实际面积相当于前眼的两倍),其余手术步骤一致:做以角膜缘为基底的 1/2 厚度的边长 6mm 三角形巩膜瓣,平行分离至角膜缘前 1mm,剪除 3mm ×2mm 大小小梁组织,剪除相应部位周边虹膜,10-0 无损伤缝线间断缝合巩膜瓣及结膜瓣一针。于术后 2d 开始,每日测量眼压(非接触式眼压计),裂隙灯检查前房至术后 7d 拆线。分别于术后 0.5,1,3mo 复查。

2 结果

全部 10 例患者扩大结膜瓣眼于术后全部发生浅前房,对侧无 1 例发生。其中 1 级浅前房 5 例,2 级浅前房 4 例,3 级浅前房 1 例。染色:2 级浅前房中 1 例结膜瓣伤口漏,3 级浅前房患眼下方结膜囊见滤过泡隆起。无 1 例发生睫状体脉络膜脱离。眼压测量:手术眼眼压 4 ~8mmHg,双眼相差 <2mmHg。1,2 级浅前房眼行滤枕加压、绷带包扎,3 级浅前房眼行美多丽每日散瞳、滤枕加压、绷带包扎,均未口服及静脉使用降眼压药物。术后 7d 拆线时,术眼前房均正常,1 例双眼眼压为 14mmHg,9 例眼压 <10mmHg,双眼相差 <2mmHg,双眼滤过泡大小一致。术后 0.5,1,3mo 复查双眼滤过泡无差别,眼压无差别。无并发性白内障、周边虹膜前粘连等并发症发生。

3 讨论

浅前房是青光眼术后最常见的早期并发症[1]。与患者年龄、健康状况、青光眼类型、病程及损害程度均相关,此外还与手术操作及术后治疗密切相关,主要有滤过过盛[2]、滤过泡渗漏[3]、脉络膜脱离、恶性青光眼。本研究中患者无论年龄、病程及手术方式均相同,仅有结膜瓣大小存在差异,但术后浅前房并发症明显高于对侧。可能原因在于滤过相同,而引流过畅[4]。术中结膜瓣的大面积钝性分离致术后早期结膜与巩膜面疏松粘连,滤过泡容积增加,表面张力下降,对房水引流的顺应性增加,在术后早期滤过通道未愈合的情况下,房水于前房和结膜瓣下的分布较对侧眼不同。术后观察早期滤过泡多大而弥散,其中 1 例下方结膜囊见滤过泡。但因房水分泌的恒定性,甚至因为手术创伤分泌减少,术后双眼眼压无差异性。为处理浅前房,术后 3 眼采用滤枕加压,1 例采用滤枕加压美多丽散瞳,既减少了滤过,也缩小滤过泡容积,随着巩膜瓣滤过通道的部分愈合,分布于结膜瓣下房水体积逐渐减少,结膜与巩膜面部分愈合粘连,最终达到平衡形成固定大小功能滤过泡。并且观察愈合时间,最终眼压、双眼无差异。

因此,青光眼常规小梁切除术中,扩大的结膜瓣并不能更有效的降低眼压,增大有效滤过泡的容积,延长滤过功能的时间,反而会在术后早期增加滤过过强、眼压低、滤过泡大而弥散的并发症。

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