

# 五点式眶隔法全切重睑术的临床应用

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## 摘要

目的: 提出一种五点式眶隔法全切的新式重睑术, 来获得自然、流畅、稳固又无需过长恢复期的重睑。  
方法: 回顾性分析2020年11月至2022年7月至青岛大学附属医院美容整形外科应用五点式眶隔法行全切重睑术的求美者。术中打开眶隔并去除切口下唇部分眼轮匝肌, 在五个缝合点位将翻转的眶隔后壁与皮肤缝合。术后1月及6月随访患者统计满意度, 评估重睑流畅性, 下唇皮肤平整性, 切口有无凹陷, 重睑是否变浅消失, 是否出现瘢痕增生等相关并发症。结果: 共纳入260例求美者, 其中女性220例, 男性40例, 年龄均在18~40岁, 平均年龄26.8岁。所有病例切口均一期愈合, 未出现感染、瘢痕增生、闭眼功能障碍等并发症。手术252例(97%)在术后1月时满意; 8例(3%)不满意。250例(95.6%)在术后6月时满意; 10例不满意(4.4%): 6例重睑变窄或脱落; 3例双侧重睑不对称; 1例重睑形态不自然。满意患者睁眼重睑形态自然、对称, 无明显淤血肿胀, 下唇皮肤未出现“肉条感”, 闭眼皮肤平整, 切口无凹陷。结论: 五点式眶隔法全切重睑术接近生理性重睑结构, 术式简单易行, 形成重睑自然、稳固且恢复期短, 具有良好的临床应用效果。

## 关键词

眼睑成形术, 切开法, 眼轮匝肌, 眼眶

# Clinical Application of Double Eyelid Surgery with Five-Point Suture of Orbital Septum Technique

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## Abstract

**Objective:** In order to obtain natural, smooth and stable double eyelids without too long recovery period, a new method of double eyelid with five-point suture of orbital septum technique was proposed. **Methods:** From November 2020 to July 2022, patients who received double eyelid surgery with five-point suture of orbital septum technique in plastic surgery department of Qingdao university affiliated hospital were retrospectively analyzed. During the operation, the orbital septum was opened and part of the orbicularis oculi muscle under the incision was removed. The orbital septum was overturned and sutured with skin of five points. The patients were followed up 1 month and 6 months after the operation to evaluate satisfaction, the fluency of the double eyelid, the flatness of skin, the indentation of the incision, the shallowness of the double eyelid and the appearance of scar hyperplasia or other related complications. **Results:** A retrospective review of 260 patients (40 males and 220 females, aged from 18 to 40 which average is 26.8) who had undergone double eyelid surgery with five-point suture of orbital septum technique were collected. All incisions were healed without complications such as infection, scar hyperplasia and eye closing dysfunction. At the follow-up of 1-month post-surgery, 252 cases (97%) and 8 cases (3%) were regarded as satisfied and dissatisfied. At the follow-up of 6-month post-surgery, 250 cases (95.6%) and 10 cases (4.4%) were regarded as satisfied and dissatisfied. There were 6 cases of double eyelid disappearance, 3 cases of asymmetry, 1 case of irregularity. But in most patients, the form of the double eyelid is natural and symmetrical, with no obvious hematoma and swelling, the skin of the upper eyelid does not appear so called "sausage" phenomena, the skin with closed eyes is smooth, and the incision is not sunken. **Conclusion:** Double eyelid surgery with five-point suture of orbital septum technique is close to the physiologic double eyelid structure. This operation method is simple for doctors, and the formation of double eyelid is natural, stable and has a short recovery period which has a good clinical application effect.

## Keywords

Blepharoplasty, Incision, Orbicularis Oculi Muscle, Orbit

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## 1. 引言

重睑成形术是整形外科中常见的手术类型。依据其做法不同包括切开法、埋线法和光电法等，各有优缺点，其中切开法重睑术以其优越的手术效果、广泛的适用人群成为最常选用的术式[1] [2] [3]。传统睑板法重睑术效果稳固，但需去除大量睑板前组织及下唇眼轮匝肌，产生睑板前组织广泛粘连，术后易产生重睑线凹陷、瘢痕过重及重睑僵硬等问题[4] [5]。现阶段以眼轮匝肌-上睑提肌腱膜固定技术为代表的各种软悬挂术式已经可以解决这些问题，但术中破坏了眶隔的完整性，缝合时易产生缝合位置深浅不一且固定力量仅依靠缝线，带来了重睑变浅甚至消失，切口部分凹陷及恢复期较长等缺点[6] [7] [8]。我院综合两种术式的优点，采用五点式眶隔法全切重睑术，对 260 例求美者行重睑成形术，取得了满意的效果。

## 2. 资料选择

### 2.1. 一般资料

分析 2020 年 3 月至 2022 年 7 月，青岛大学附属医院美容整形外科采用五点式眶隔法全切重睑技术

行重睑手术的病历。纳入标准要求求美者上睑提肌肌力 $>8$  mm, 眶周无畸形, 未行过任何眶周手术及上睑、额部的肉毒素等注射。患者同时排除了甲状腺疾病、眶内肿瘤等疾病。所有求美者收治住院签署手术同意书, 并对该研究知情同意。该研究已获得相应伦理许可。

## 2.2. 术前设计

受术者取仰卧位, 嘱患者轻轻闭眼, 轻拉眉毛使上睑皮肤展平, 于瞳孔上距睑缘 6~7 mm 设计一点, 描绘出于该点自然行走的重睑线。根据上睑皮肤松弛度设计月牙形去皮范围, 判断上睑臃肿程度决定是否去除眶隔脂肪。有内眦赘皮者同时行改良 Z 内眦成形术。

## 2.3. 手术方法

受术者取平卧位。1/10 万肾上腺素 + 1% 利多卡因 + 0.03% 罗哌卡因行上睑局部浸润麻醉, 进针点位于重睑设计线下方 2~3 mm, 平行于重睑线进针。双上睑麻醉满意后沿设计线切开皮肤至眼轮匝肌浅层, 剪除拟去皮。于切口横行打开眼轮匝肌, 剪除紧贴切口下唇部分眼轮匝肌, 切除时以不露出下唇真皮为宜, 以免损伤真皮下血管网。紧贴提上睑肌腱膜与眶隔膜融合部打开眶隔和睑板前的粘连, 直至提拉上唇眼轮匝肌时可以暴露出缝合位置的眶隔后壁, 不过分向头端分离。剪除残留于眶隔的部分 roof 层脂肪。暴露眶隔膜, 于中外侧打开眶隔约 2 mm, 于其中掏出眶隔脂肪, 剪除适量的脂肪团, 电凝充分止血。于双侧瞳孔上皮肤先标记一点, 于眼外侧 1/3 处再标记一点将重睑线分为三段, 再分别标记三段的中点共 5 点为缝合点位。7-0 尼龙线从点位下唇皮肤进针, 翻转切口上眼轮匝肌暴露出眶隔后壁, 进针悬挂适量眶隔后壁后出针, 紧贴眼轮匝肌浅层于切口上唇皮肤出针。先缝合双侧瞳孔上点位, 对比双侧重睑宽度、对称性、流畅性及上睑睫毛上翘程度, 调整缝线悬挂位置至满意后, 同样方法缝合双眼剩余点位。碘伏消毒后涂抹红霉素眼膏, 无菌纱布加压包扎(图 1, 图 2)。



**Figure 1.** Five suture sites were marked on the upper eyelid of both sides

**图 1.** 于双侧上睑标记出 5 点缝合点位



**Figure 2.** The pulled orbicularis oculi muscle exposed the isolated posterior wall of the orbital septum and sutured the skin to the orbital septum at each marked point

**图 2.** 提拉眼轮匝肌暴露出分离出的眶隔后壁, 于点位上将皮肤缝合至眶隔

## 2.4. 术后护理

受术者术后 24 h 内间断冰敷 6 h，术后第 1 天及第 4 天换药，术后 6~7 天拆线。拆线后至术后 6 月常规使用硅酮霜等祛疤用品。恢复期间保持良好用眼习惯，避免烟酒及进食辛辣刺激性食物。

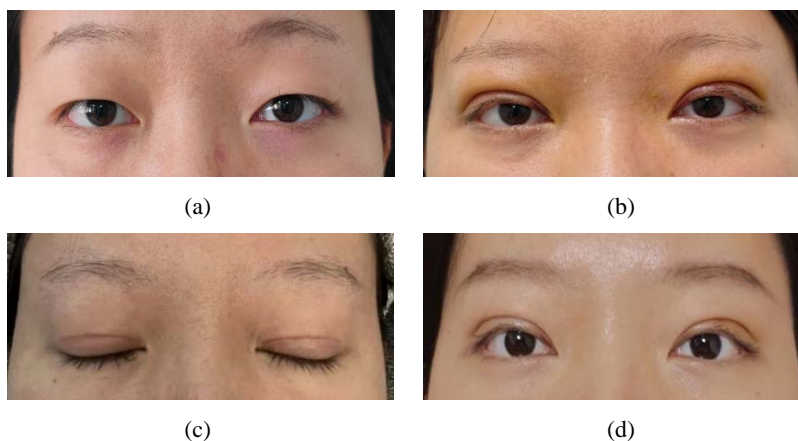
## 2.5. 术后评价

术后 1 月及 6 月时随访患者，根据患者恢复情况评价满意度。观察双侧重睑的形态、流畅性及对称性，下唇皮肤平整性，评估瘢痕大小，整体恢复期时间，是否出现重睑变浅消失、切口凹陷等情况，是否出现相关并发症。

## 3. 结果

研究共纳入 260 例求美者，其中初次行重睑病例 236 例，二次修复病例 24 例。女性 220 例，男性 40 例，年龄均在 18~40 岁，平均年龄 26.8 岁。所有病例切口均一期愈合，未出现感染、瘢痕增生、闭眼功能障碍等并发症。252 例(97%)在术后 1 月时满意；8 例不满意。250 例(95.6%)在术后 6 月时满意；10 例不满意；6 例重睑变窄或脱落；3 例双侧重睑不对称；1 例重睑形态不自然。满意患者睁眼重睑形态自然、对称，无明显淤血肿胀，下唇皮肤未出现“肉条感”，闭眼皮肤平整，切口无凹陷(图 3，图 4)。

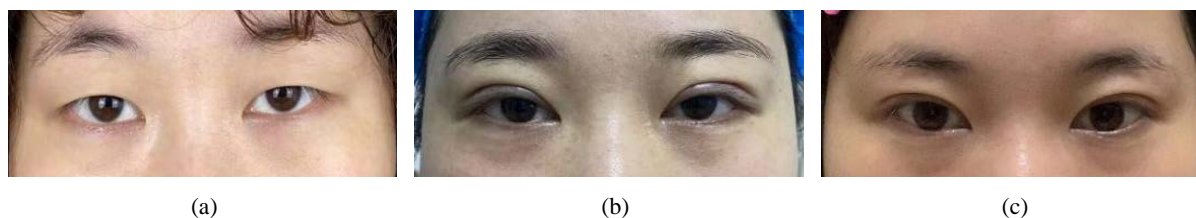
## 4. 典型病例



注：22 岁女性单睑患者，先天性重睑不对称，行五点式眶隔法全切重睑术。(a)：术前；(b)：术后即刻；(c)，(d)：术后 1 个月。

**Figure 3.** A 22-year-old female patient undergoing double eyelid surgery with five-point suture of orbital septum technique

**图 3.** 一名接受五点式眶隔法全切重睑术的 22 岁女性患者



注：34 岁女性单睑患者，伴上睑下垂 (a)：术前；(b)：术后即刻；(c)：术后 6 个月。

**Figure 4.** A 34-year old female patient undergoing double eyelid surgery with five-point suture of orbital septum technique

**图 4.** 一名接受五点式眶隔法全切重睑术的 34 岁女性患者



## 5. 讨论

在东方先天形成重睑的人群中,上睑提肌腱膜纤维有纤维束穿过眼轮匝肌分别附着于睑板和皮肤上,导致睁眼时睑板及皮肤分别向上移动,这是必要的动力学结构基础[9] [10]。以 Park 法为代表的软悬挂术式将上睑提肌腱膜与切口下眼轮匝肌缝合,模拟了该结构基础,形成的重睑生动自然,对比传统硬悬挂重睑术有较大优势[11] [12]。但由于该术式中完全保留了切口下眼轮匝肌及睑板前组织,睑板前不形成粘连,肌肉和腱膜之间只依靠缝线的悬挂,易产生缝线的切割作用,导致重睑在纵向的深浅和横向的宽窄产生变化,对于上睑组织臃肿的求美者而言,加重了重睑线变浅消失的风险[3] [13]。其次,全层分离打开眶隔膜破坏了其天然力学结构,处理不当可能导致上睑下垂,切口下唇由于眼轮匝肌的饱满度产生肿胀淤血的肉条感,延长了恢复期[14] [15]。最后,上睑提肌腱膜与眼轮匝肌缝合固定的力度和位置仅靠术者的经验,术中往往需要根据重睑的宽度及形态多次改变缝合位置,对于初学者来说操作难度较大。

为了综合两种术式的优点,五点式眶隔法全切重睑术做出了技术改进,术中去除了紧邻下唇皮肤缘的眼轮匝肌后将眶隔与皮肤缝合固定,这种固定由于眶隔与下唇皮肤及切口下的睑板前组织均会形成瘢痕粘连,重睑的固定并非仅靠缝线的张力,最大限度的保留了重睑宽度及深度的稳定性。同时下唇大部分眼轮匝肌得到了保留,不会引起皮肤与睑板前筋膜的广泛粘连,上睑提肌腱膜纤维提拉睑板上提时不会带动下唇皮肤整体移动,避免了传统睑板法重睑术导致的板结样重睑。术中同时去除了部分睑板前脂肪筋膜,加强了皮肤与睑板前的联系,避免了由于臃肿的睑板前组织导致的缝线脱落,也为向下翻转的眶隔提供了空间[16] [17]。对于眶隔的处理更精简,只打开其与睑板前的粘连,暴露出缝合位置即可,去除眶隔脂肪时也只于外侧打开约 2 mm 小口,基本保留了眶隔天然结构的完整性,减少了组织的破坏,降低了破坏静脉回流导致的术后肿胀[18]。提前标记出缝合点位且优先对比缝合瞳孔上点位,提高了操作的精准度,最大程度的减少由于缝线位置和松紧差异导致的双侧重睑不对称,同时在满足了足够张力的前提下,又避免了缝合不均匀而破坏重睑的流畅性。

五点式眶隔法全切重睑术本质上属于眶隔与皮肤固定的半软悬挂,缝合后上睑提肌的肌力可以通过眶隔直接传导至下唇皮肤,而切口上唇的眼轮匝肌及眼轮匝肌下的脂肪筋膜又适当的阻隔了眶隔与切口上唇皮肤的直接联系;同时由于没有形成睑板前粘连的整体,睑板的上提与下唇皮肤的上提依然形成了差异,这种上睑的动力学差异接近生理性重睑,使得形成的重睑线具有动态的灵动和自然[12] [19]。

术中需要注意一些问题,其中准确把握下唇眼轮匝肌的去除量是手术关键,我们认为去除量可以超过下睑缘约 1~2 mm,保留睫毛上剩余约一半的肌肉,深度以刚好不暴露出真皮层为宜,以减少真皮下血管网的损伤[20]。去除过多眼轮匝肌会造成睑板前的广泛粘连,失去了重睑的灵动性;不去除难以形成与眶隔牢固的瘢痕粘连。其次在睑板上紧贴眶隔后壁向头端分离时,应注意避免分离位置过高或过深,过高可能损伤上睑提肌造成上睑下垂,过深穿透上睑提肌腱膜会破坏下翻的整体,造成后期重睑线不流畅。最后上下唇皮肤与眶隔后壁缝合时应浅浅的进针,平行前行一小段距离后再出针,避免由于缝合深度过深固定到上睑提肌腱膜引起重睑过深及睫毛外翻,同时又可以为瘢痕粘连提供足量的组织。对于上睑皮肤紧致及脂肪较少的患者来讲,术中无需去皮去脂,此时如设计较窄,术后较易变为内双,应与患者充分的沟通,在满足患者的需求同时设计宽度应适当增宽。

## 6. 结论

五点式眶隔法全切重睑术去除适量下唇眼轮匝肌,利用瘢痕粘连完整下翻的眶隔后壁,术后形成的重睑牢固,恢复期短。形成的重睑睁眼时灵动自然,闭眼时无过度凹陷,接近天然重睑。该术式涉及解剖结构清晰,易于操作,适合在临床中推广应用。

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