



DLKP 术后由于保留了受体的内皮细胞,内皮型排斥反应尚未见报道,并且植片的存活率增加^[11]。Sugia 和 Kondo^[16] 观察到 DLKP 术后 12 个月排斥率为 0; Coombes^[17] 等对 50 眼随访 6~100 个月,未发生排斥反应。本文 DLKP 组亦未出现内皮排斥反应,DLKP 的排斥反应 3 眼,2 眼基质型,1 眼上皮型。反应均较 PKP 轻,PKP 的植片排斥 6 眼,其中内皮型 4 眼,基质型 1 眼,给以大剂量的皮质类固醇及环孢霉素应用后植片除有 1 眼半透明外,其余全部透明。PKP 的其它并发症为继发性青光眼、虹膜前粘连,这与手术造成眼前部结构的拥挤及术后局部长期应用皮质类固醇有关。DLKP 因为不侵入眼内结构,它降低甚至完全避免了术后许多并发症的发生,如:眼内炎、青光眼、白内障、视网膜脱离、黄斑水肿、脉络膜下爆发性出血及上皮植入。由于 DLKP 术后局部皮质类固醇用量的减少,皮质类固醇性高眼压的危险性也减少^[7],同时也减少了皮质类固醇导致的白内障和机会感染等。我们采用角膜层间注气和黏弹剂联合应用,基本上都达到了剖切后弹力层的目的,避免了术后层间的瘢痕及散光,减少了后弹力层穿孔的机率。后弹力层穿孔是 DLKP 术中的主要并发症,本组发生穿孔 2 眼未影响手术的进行,术后亦未出现双前房。如果后弹力层撕裂范围较大,需改为 PKP。我们同期曾出现 2 眼较大的裂孔,均改作了 PKP,未包括在本组的统计范围内。后弹力层穿孔容易出现在于后弹力层有瘢痕的病例中,所以有急性角膜水肿时不宜行 DLKP。我们发现 DLKP 术后后弹力层皱褶 5 眼,这使得视力的恢复相对较慢,但最终不影响视力。

DLKP 的最大好处是术后内皮细胞的慢性丢失率比 PKP 低,术后半年内皮细胞的丢失率为 11%,然后达到一个 1%~2% 的生理丢失率^[18]。而 PKP 术后一年甚至术后 5~10 年的内皮细胞丢失率为 4.2%^[15]。

DLKP 由于手术技术要求高且费时,学习曲线陡直的缺点,目前尚未普及,但是,DLKP 能够降低排斥反应的发生;保存了受体的内皮细胞;具有术后恢复快、发生散光可能性小等优点,其应用前景比 PKP 广阔。由于其不进入眼内,损伤小,并发症少,便于术后护理,能达到同 PKP 同样的术后视力,具有对供体材料要求条件低,适用于目前我国材料紧张的现状,因而 DLKP 比 PKP 具有一定的优越性,但不适用于有急性水肿史的圆锥角膜患者。

Observation of curative effects of DLKP and PKP in patients with keratoconus. LIU Ping, WANG Yan-qing, WANG Xin et al.

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Abstract: Objective To compare the clinical curative effect after deep lamellar keratoplasty and penetrating keratoplasty in patients with keratoconus. **Methods** We reviewed the clinical 48 cases (48 eyes) who were diagnosed with keratoconus and has been received DLKP (23 eyes) or PKP (25 eyes). The follow up time was 6m~2 a. Postoperative best-corrected visual acuity, the clarity of graft and complication rate was compared and analyzed. **Results** In deep lamellar keratoplasty group 19 eyes (82.61%) whose postoperative best-corrected visual acuity was better than or equal to 0.5; in penetrating keratoplasty group 24 eyes (96.00%). Without statistical difference between two groups ($P > 0.05$). The complication included perforation of grafting bed in 2 eyes, wrinkle of Descemet's membrane in 5 eyes in DLKP group, Corneal graft rejection was seen in 3 eyes; Corneal graft rejection was seen in 6 eyes in PKP group. **Conclusions** DLKP may reduce the risk of endothelial rejection and increase the rate of late operative success. Meanwhile, BCVA are similar after DLKP and PKP. DLKP seems to be a safe alternative to the surgical treatment for keratoconus.

Key words: keratoconus; deep lamellar keratoplasty; penetrating keratoplasty

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