

# 深板层角膜移植与穿透性角膜移植视力恢复的差异

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## Discrepancy of visual recovery following deep lamellar corneal transplantation and penetrating corneal transplantation

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### Abstract

**BACKGROUND:** Corneal transplantation comprises optical penetrating corneal transplantation and therapeutic corneal transplantation, which aimed to recover the corneal transparency, increase visual acuity or reconstruct corneal integrity.

**OBJECTIVE:** To compare the clinical results in improving the success rate and reducing complications following deep lamellar corneal transplantation and penetrating corneal transplantation.

**METHODS:** A total of 43 cases (43 eyes) receiving deep lamellar corneal transplantation and penetrating corneal transplantation were selected, including 26 cases (26 eyes) receiving deep lamellar corneal transplantation and 17 patients (17 eyes) receiving penetrating corneal transplantation. Donor corneas were from donations after death and preserved within 24 h in 4 °C wet room. Routine anti-inflammatory medication was used following transplantation. All patients were followed up for 3-37 months. The naked vision and corrected visual acuity were observed before and after transplantation, the therapeutic effect, rejection and complication were compared.

**RESULTS AND CONCLUSION:** The naked vision and corrected visual acuity in the two groups were improved after transplantation ( $P < 0.05$ ). One case suffered from posterior elastic membrane perforation and 2 cases of rejection following deep lamellar corneal transplantation. One case suffered glaucoma, 1 case with anterior synechia, and 4 cases with rejection following penetrating corneal transplantation. Deep lamellar corneal transplantation can reduce the incidence of rejection and complications, though there were no differences in restoring vision compared with penetrating corneal transplantation, patients with normal corneal endothelial lesions may be advised to select deep lamellar corneal transplantation.

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### 摘要

**背景:** 角膜移植可主要分为以恢复角膜透明性和提高视力为主要原因的光学性角膜移植和以修补及重建角膜完整性为主要原因的治疗性或结构性角膜移植。

**目的:** 对比分析深板层角膜移植与穿透性角膜移植成功率和降低并发症发生率的临床效果。

**方法:** 分析深板层角膜移植和穿透性角膜移植患者 43 例 43 眼, 26 例 26 眼行深板层角膜移植, 17 例 17 眼行穿透性角膜移植, 供体角膜均来自死亡后的捐献, 24 h 内 4 °C 湿房保存, 移植后用常规抗炎抗排斥反应, 随访 3-37 个月, 观察两组移植前后的裸眼视力和矫正视力, 对比疗效、排斥反应、并发症。

**结果与结论:** 与移植前比较, 两组患者移植后裸眼视力和矫正视力均有提高( $P < 0.05$ )。深板层角膜移植后并发症为后弹力膜穿孔 1 例, 移植排斥反应 2 例, 穿透性角膜移植后青光眼 1 例, 虹膜前粘连 1 例, 排斥反应 4 例。深板层角膜移植可以减少排斥反应的发生率和并发症, 移植后视力恢复与穿透性角膜移植无明显差异, 但建议内皮功能正常的角膜基质病变可尽量选择深板层角膜移植。

**关键词:** 深板层角膜移植; 穿透性角膜移植; 角膜移植; 修补; 重建; 内皮细胞

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## 0 引言

角膜疾病是眼科的常见病, 也是中国致盲眼病之一, 其中圆锥角膜、角膜溃疡和角膜白斑是角膜疾病中的常见病。圆锥角膜是一种先天性角膜发育异常, 以角膜扩张为特征, 致角膜中央部进行性变薄, 向前呈圆锥状突出及产生高度不规则近视散光的角膜病变, 常见于青年人, 16~20 岁高发, 女性较多, 开始常累单眼, 继而第二眼发病, 双眼发病率为 70%, 国

内发病率较国外低, 目前通过硬性隐形眼镜或接触式眼镜矫正, 严重的做穿透性角膜移植治疗<sup>[1]</sup>。真菌性角膜溃疡在农忙季节居多, 农民易好发, 与植物擦伤有关, 常因抗生素治疗不当而使病情恶化, 真菌多为曲霉菌感染。角膜白斑是外伤性和感染性角膜病变的严重后遗症, 会使视力下降, 以致失明, 导致角膜白斑的病因为病素养性角膜炎。

角膜移植是治疗角膜病最有效的方法<sup>[2-3]</sup>, 在器官移植中疗效最佳, 成功率最高, 而且费用最少。角膜移植可主要分为以恢复角膜透明

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