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 rates and reducing the complications following deep lamellar corneal transplantation and penetrating corneal transplantation. METHODS: A total of 43 cases (45 eyes) receiving deep lamellar corneal transplantation and penetrating corneal transplantation were selected, including 26 cases (28 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. Postoperative anti-inflammatory medications were 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 transplant surgery (P < 0.05). One case suffered from corneal elastic lamina separation and 2 cases of rejection following deep lamellar corneal transplantation. One case suffered anterior synechia, 3 cases with corneal dysplasia, 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 naked vision compared with penetrating corneal transplantation, patients with normal corneal endothelial loss may be advised to select deep lamellar corneal transplantation.


Keywords: Deep lamellar keratoplasty, penetrating keratoplasty, keratoplasty, repair, severity, retina cell

0 引言

角膜疾病是眼表的常见病，也是我国致盲眼病之一，其中圆锥角膜、角膜变性和角膜白班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，双角膜中央部进行性变薄，向前呈圆锥样突出及产生高度不规则近似散光的角膜变病，常见于青年人，16-20 岁高发，女性较多，开始突感眼痛，继而第二眼发病，双眼发病率 70%，国内发病率居国外低，目前通过硬性隐形眼镜或接触式隐形镜片矫正，严重的进行性角膜移植治疗[1]，真菌性角膜溃疡在农村居民中多见，农民易患，与植物伤有关，若因抗生素治疗不当而使病情恶化，真菌多为白色念珠菌。角膜白班是外伤性感染性角膜疾病后遗症，会使视力下降，为双失明，导致角膜白班的病因均为表皮角膜炎。

角膜移植是治疗角膜病最有效的方法[2-3]，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