

内皮细胞层是由单层六角形扁平细胞镶嵌而成，从下生到死亡，细胞不能再生，衰老与死亡的细胞留下的位置，靠其他内皮细胞的扩大移行来铺垫，受损后亦由邻近内皮细胞增大、扩展和移行滑动来覆盖，内皮细胞层不断地将基质层中的水分子排入前房，使基质处在脱水状态而保持透明，因此内皮功能不正常，关系到整个角膜的透明<sup>[25-28]</sup>。深板层角膜移植内皮细胞慢性丢失率明显优于穿透性角膜移植，移植后半年内皮细胞的丢失率为11%，然后为1%~2%的生理丢失率<sup>[29]</sup>，而穿透性角膜移植后10年内的内皮细胞丢失率则为4.2%<sup>[19]</sup>。

**3.2 文章的偏倚和不足** 角膜移植后视力的恢复主要与植孔的大小和病种有关，研究中一般固定一种变量而言就另一种变量的变化对结果的影响，而文中的角膜移植手术植孔大小有一定的限制，如无限制手术效果将受到植孔大小和病种双变量的影响，结果分析会有一定难度。其次，在实际临床工作中圆锥角膜的角膜移植一般采用相同大小的植床和植片，文中方法部分由于临床需要，根据植床大小选择不同直径环钻，植床直径大于病灶直径1.0 mm，植片直径大于植床直径0.25~0.5 mm，这可能会对实验结果带来一些偏倚。

**3.3 实验的意义及提供临床借鉴的价值** 深板层角膜移植由于手术技术要求高，而且费时，学习曲线长，受体基质切除不彻底，易发生后弹力膜微穿孔、小穿孔及撕裂，未得到广泛应用<sup>[30]</sup>。但由于深板层角膜移植可以减少并发症的发生，治疗效果同穿透性角膜移植相似，而且对供体材料要求条件低的特点，能够缓解角膜移植供体紧缺的困难，更适于中国眼科疾病的治疗和技术的发展。穿透性角膜移植和深板层角膜移植都是治疗角膜病的有效方法，移植后视力恢复相似，深板层角膜移植由于手术技术要求高等原因未得到广泛应用，但深板层角膜移植可以减少排斥反应的发生率和并发症，对供体材料要求条件低的特点，能够缓解角膜移植供体紧缺的困难，更适于眼科疾病的治疗和技术的发展，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。

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