

R1  R2  R3  PG0  PG1  Estagiário  Tecnólogo   
PIBIC Last Name - Maia First Name - Nubia Cristina Middle - Freitas

Service (sector) Cornea and External DiseaseN° CEP

### **Automated Lamellar Therapeutic Keratoplasty – ALTK system**

Nubia Cristina de Freitas Maia, Wallace Chamon, Bruno Castelo Branco

**Purpose:** to evaluate the safety and accuracy of a manual microkeratome and an artificial anterior chamber for lamellar keratoplasty.

**Methods:** twenty and two eyes with superficial corneal opacities had been submitted to lamellar keratectomy. In recipient eyes the keratectomy was performed as in refractive surgery. The donor flap was removed from the preserved corneal shell using the same microkeratome and an artificial anterior chamber. The lamella thickness was measured by ultrasound biomicroscopy (UBM) in postoperative time.

**Results:** the opacity depth ranged from 150 to 420 micra. In most of the surgeries the head number 300 was used. An adequate thickness between the donor flap and the recipient stromal bed was gotten. Post operative visual acuity of 20/40 or better was observed in 52,6% of eyes. Complications were irregular astigmatism, undesired diameter of the flap and perforation (one case) .**Conclusion:** the use of the microkeratome in lamellar keratoplasty allows safety in the keratectomy, besides predictability and reproducibility regarding the lamella thickness.