

# Study Spotlight: Effective and safe lens extraction with ZEISS MICOR 700



Seeing beyond

Reporting on surgical experience and learning curve for a finger-controlled, non-ultrasound lens extractor device.

## Source



**Title**  
Finger-Controlled Nonultrasonic Lens Extractor



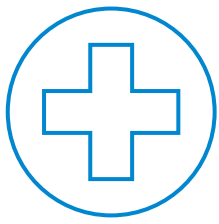
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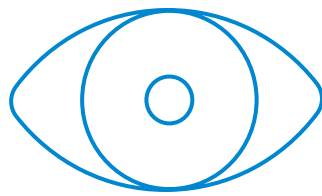
## Methodology & Setup

### Device tested



All surgeries were performed with the MICOR® 700 lens extractor by ZEISS by a single experienced physician.

### Sample size



61 eyes of 51 individuals with cataract.

### Evaluation Criteria



- Nuclear density was graded preoperatively.
- Corrected distance visual acuity (CDVA), intraocular pressure (IOP) and pachymetry were evaluated pre- and postoperatively.
- Intraoperative data included active surgical procedure time, as well as the duration of each surgical step individually (nuclear removal, cortex removal and viscoelastic removal).

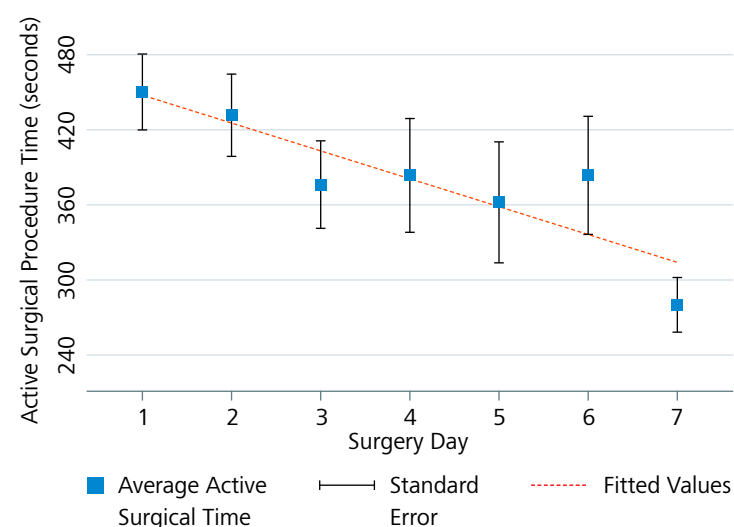
## Results and observations

ZEISS MICOR 700 lens extractor is an effective and safe device for cataract extraction.

### Fast learning curve

With ZEISS MICOR 700: a consistently significant decrease in surgical time was observed at each surgical day, even over a short experience period.

#### Average Time



### Significantly reduces fluid used



ZEISS MICOR 700  
27.1 ml (Avg.)

U/S Phaco  
50-200 ml

### Workflow efficiency

- ZEISS MICOR 700 setup was easily comprehensible and intuitive, for both the surgeon and staff.
- ZEISS MICOR 700 extractor can be swiftly replaced between cases to reduce setup, breakdown and sterilizing time.

## Additional author's opinion...

### Blunt tip provides safety

ZEISS MICOR 700 blunt tip design protects the iris and posterior capsule in cases of inadvertent contact with the probe. Notably, the anterior chamber remained extremely stable throughout lens extraction and cortex removal.

### Ultrasound Free

ZEISS MICOR 700 potentially minimizes the risk of tissue damage from cavitation and heat rise associated with ultrasound phacoemulsification.

### Portability

The device's portability is promising alternative to traditional phacoemulsification, potentially increasing accessibility and reducing socioeconomic barriers to cataract surgery.