# MSICS Over Traditional ECCE

## Where does MSICS stand ??


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ISMSICS
International Society of Manual Small Incision Cataract Surgeons

ZIADA EYE CARE

*We should not allow it to be believed that all scientific progress can be reduced to mechanisms, machines, gearings, even though such machinery also has its beauty. Neither do I believe that the spirit of adventure runs any risk of disappearing in our world.*

*Marie Curie*

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**Surgery is a hand-made art, so we have to drive machine, not to be slaves for it .**

**Hossam Ziada**

# Objectives

- Historical profiles of the progress of this art.
- Where does MSICS stand?
- Pros & Cones of MSICS
- MSCIS over conventional ECCE
- Stepping from ECCE to MSICS

# Historical Profile

- Egypt has the oldest documented case of cataract reported throughout the history (cataract in the Nile Valley).
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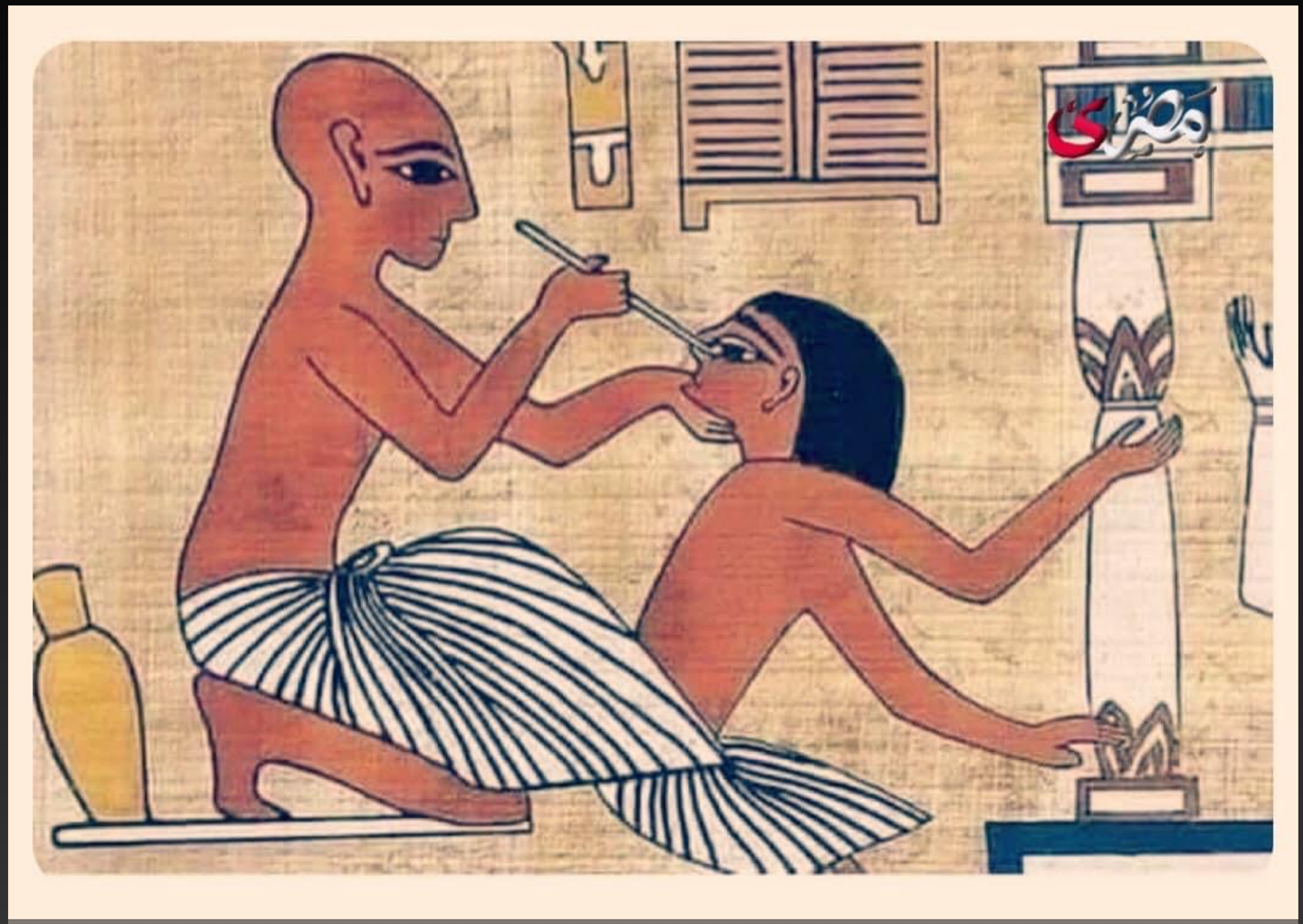


- Couching for cataract is one of the most ancient surgical procedures; it is thought to be that described by the **HOLY QURAAN** in Surat Yousef

اذْهَبُوا بِقَمِيصِي هَٰذَا فَأَلْقُوهُ عَلَىٰ وَجْهِ أَبِي يَأْتِ بَصِيرًا وَأْتُونِي بِأَهْلِكُمْ أَجْمَعِينَ ﴿٩٣﴾

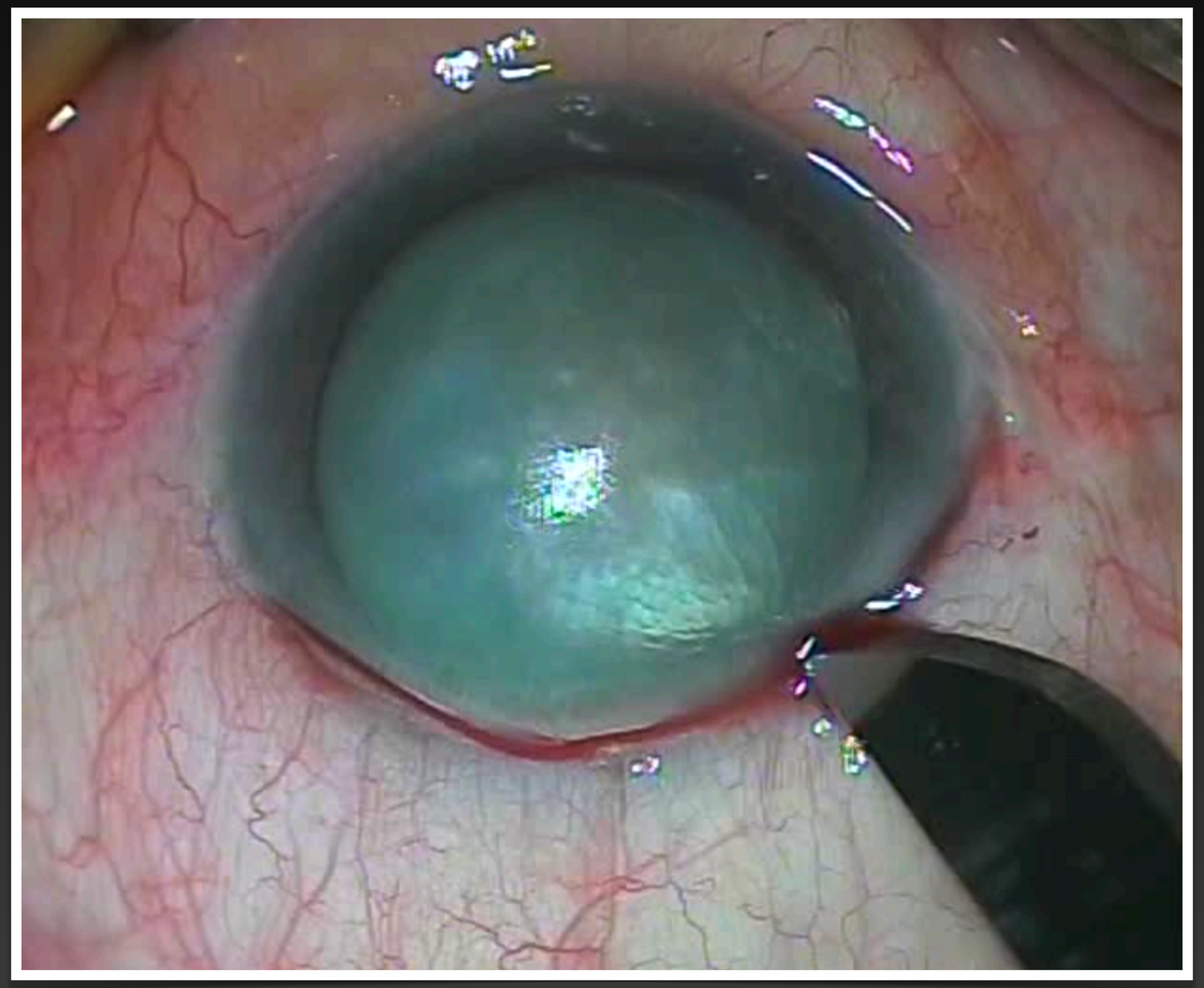
Go with this shirt of mine and cast it over my father's face, and he will regain his sight. Then come back to me with your whole family."

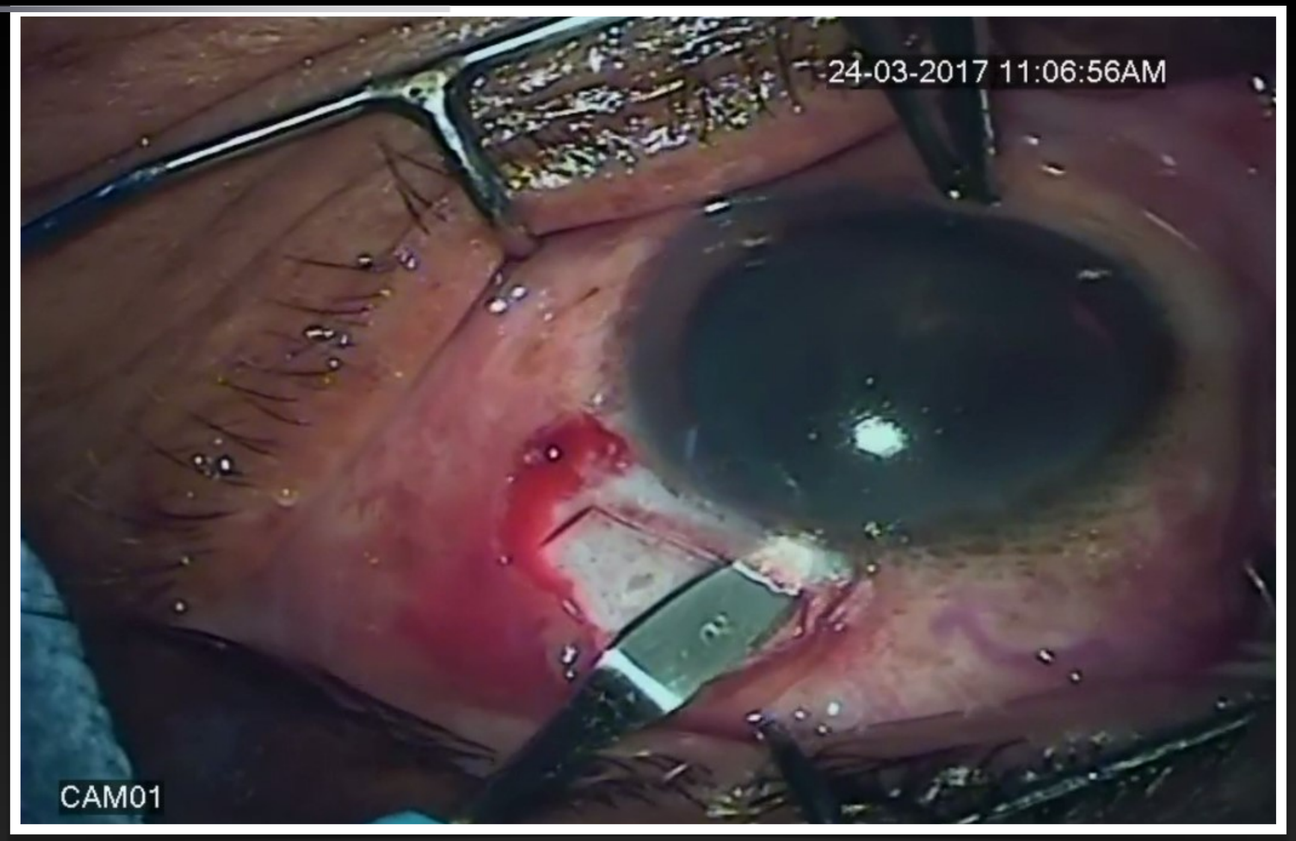
- However, **Maharshi Sushruta,** an ancient Indian surgeon, first described the procedure in (800 B.C.). a curved needle was used to push the lens into the vitreous cavity out of the field of vision.

- **Muhammad ibn Zakariya al-Razi** (10th century) & **Antyllus** (2nd-century), had desribed the revolution of Couching to Lens Extraction using large incision, hollow needle and an assistant with a great lung capacity !!!!!
- **Albrech von Graefe** (1828-1870) had added “modified linear extraction” as a new technique for cataract surgery.
- **Col. H. Smith** (1900-1926) boosted the popularity of ICCE with the Smith tumbling technique or the Amritsar Technique using a hook & a spatula.

- **Harold Ridley** implanted the first IOL (PMMA) at St. Thomas' Hospital in London successfully on 29 November 1949, and so that ICCE was turned into ECCE !!!
  - **Charles Kelman** introduced phacoemulsification in 1967.
  - **Richard Packard** implanted the 1st foldable IOL, in London 1969.
  - MSICS started to arouse during time of revolution of ECCE to phaco advances as a sutureless ECCE at mid of 1980s

# So what do you think ?






**ECCE**
**Or**
**MSICS ?**

# MSICS Over ECCE

- Better wound stability and shorter time procedure.
- Closed space so less likely to have open sky hazards; vitreous prolapse, expulsive hge,,,,
- Less induced astigmatism
- Greater satisfaction with early visual rehabilitation
- No sutures and suture-related complications
- Fewer postop f/u visits

# Where does MSICS stand ?

- Manual SICS is not a link between sutured cataract surgery and advanced phacoemulsification or Femtosecond Laser As- sisted Cataract Surgery (FLACS), but in itself an elite cataract refractive surgery.
- Manual SICS can be performed with least possible investments and can deliver results not only equal to but better than phacoemulsification.
- In Manual SICS, one can have a better control over pre-existing corneal astigmatism.
- It gives all the advantages of  a closed chamber cataract surgery with an arguably less steep learning curve and fewer complica- tions for a beginner.

# Barriers & Difficulties

- Insufficient training programs
- Refusal of surgeons to change from phaco to MSICS
- Increased complexity for surgeons who haven't mastered ECCE
- Difficult steps which need Long learning curve; Tunnel construction, nucleus prolapse into AC, nucleus extraction, and cortical removal through the main incision....

## After what I have shown, Let ’s translate it practically !!!

## It's essential to:

- Know precisely the detailed anatomy of the eye & adnexa as well as their pointing clinical applications
- Master all steps of ECCE  #######
- Be  trained sufficiently on how to deal carefully with different ocular tissues.
- Have a good perception of depth (depth of focus)
- From here, let’s go step by step to shift from ECCE to MSICS

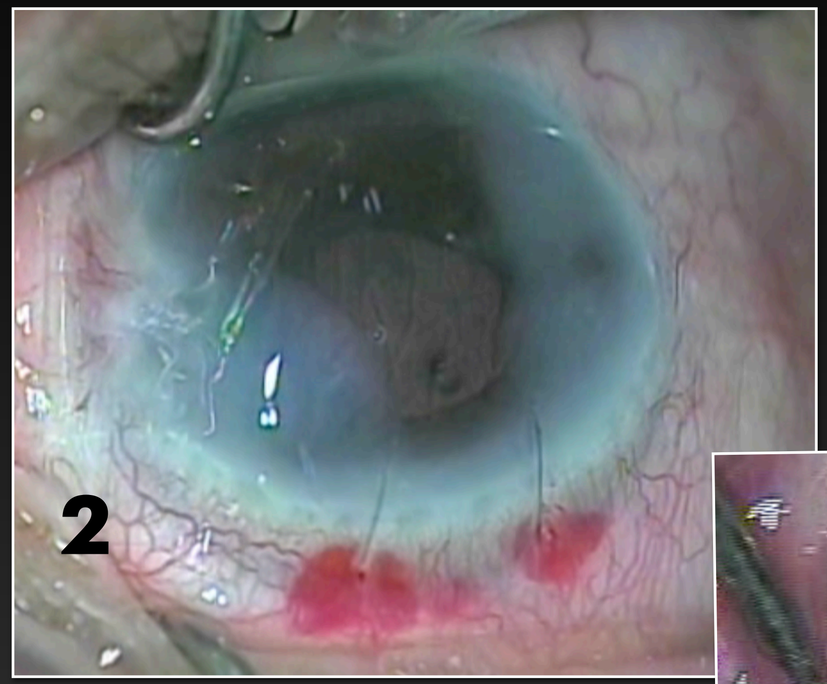
# MODERN NON-PHACO CATARACT SURGERIES

**ECCE with Regular Stitches**

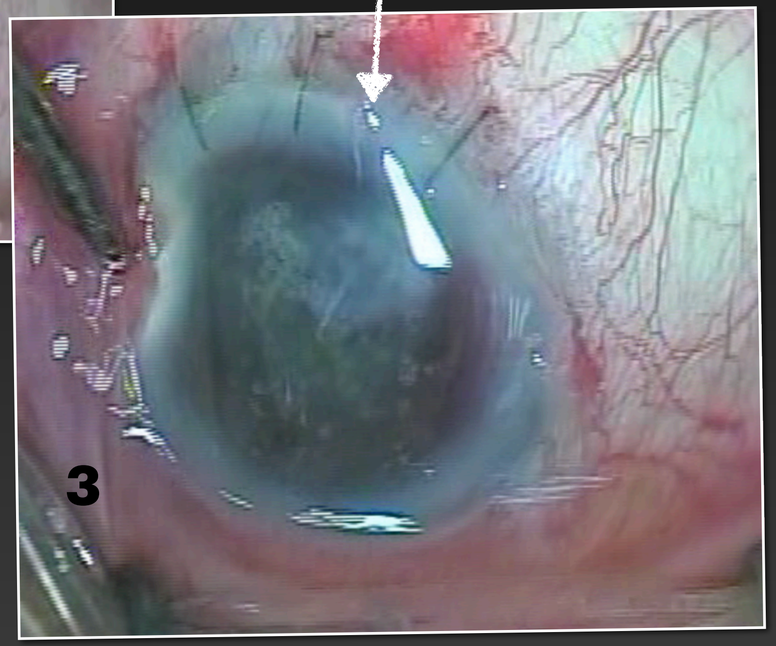
**ECCE with only one stitch Limbal/Corneal incision**

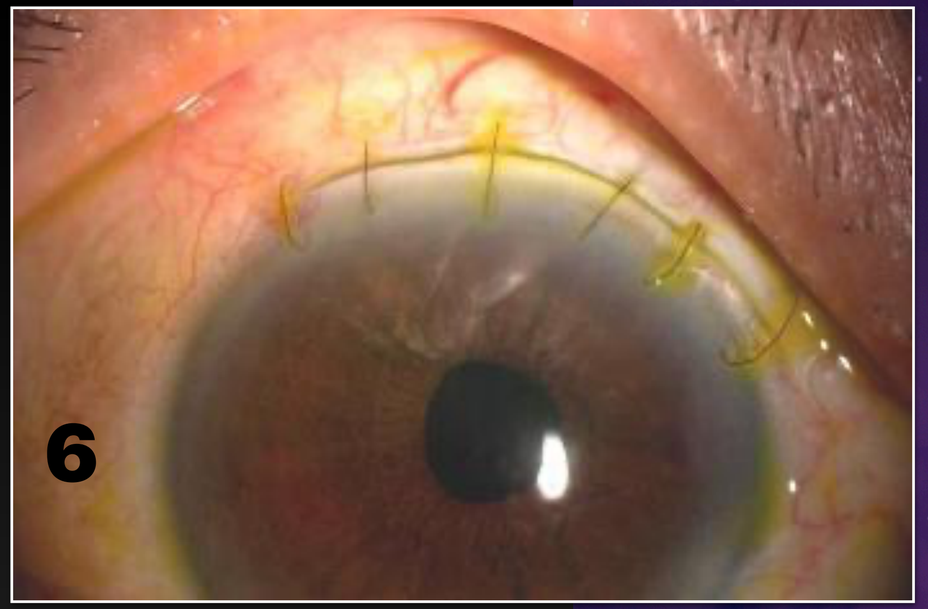
**ECCE with Sutureless scleral incision**

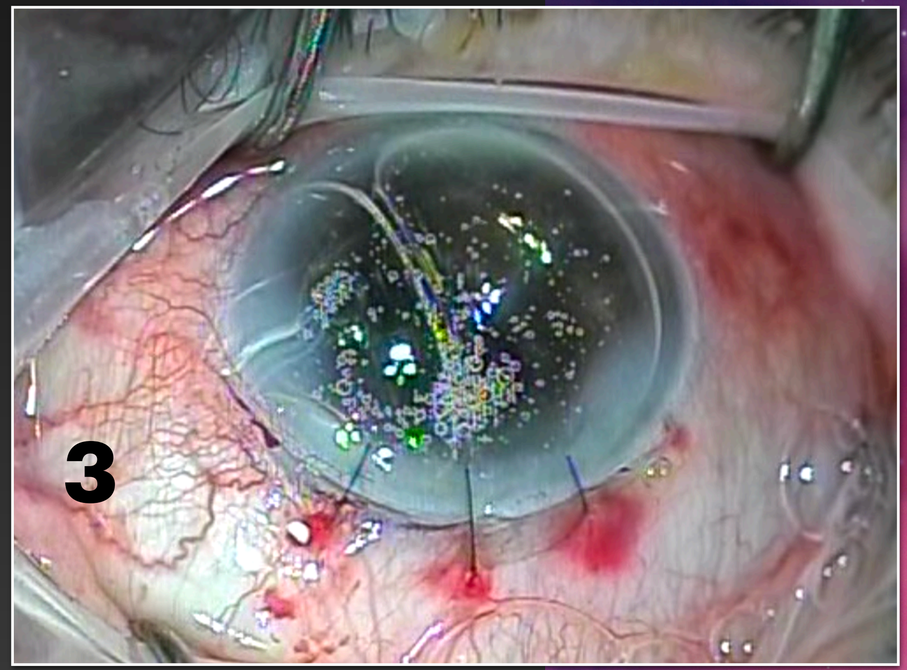
# ECCE with Regular Stitches

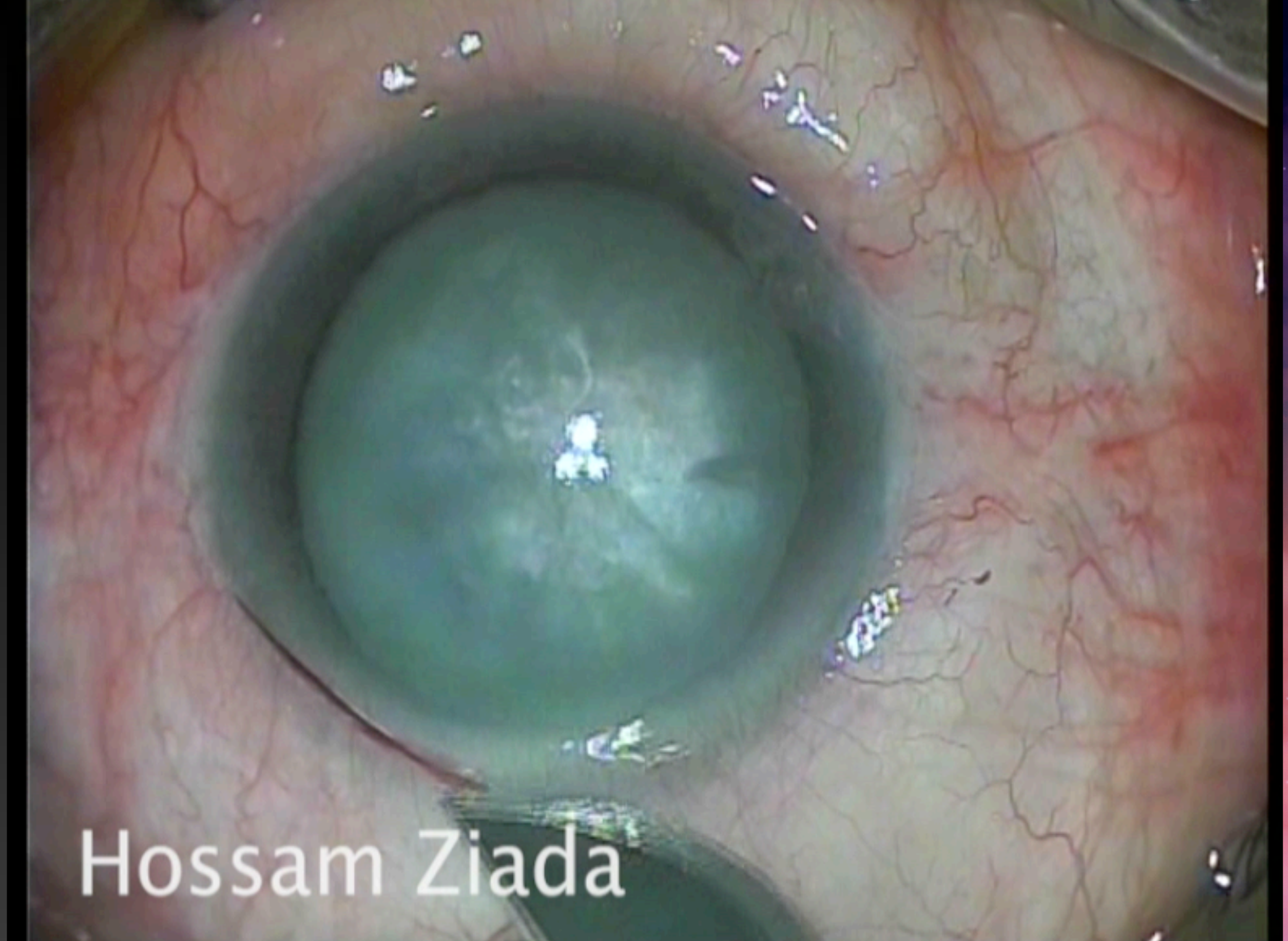



Imagine amount of astigmatism !!!!!

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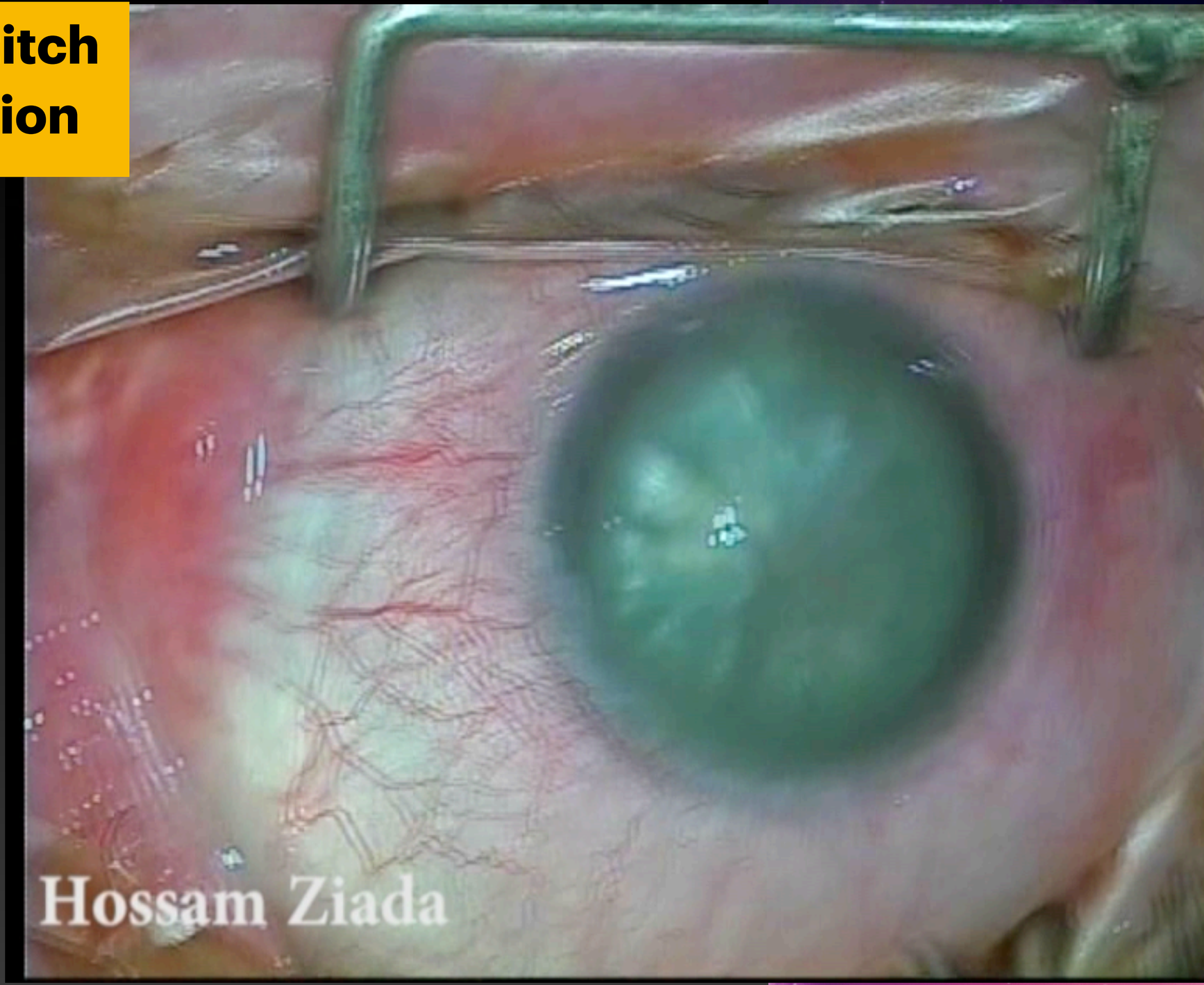
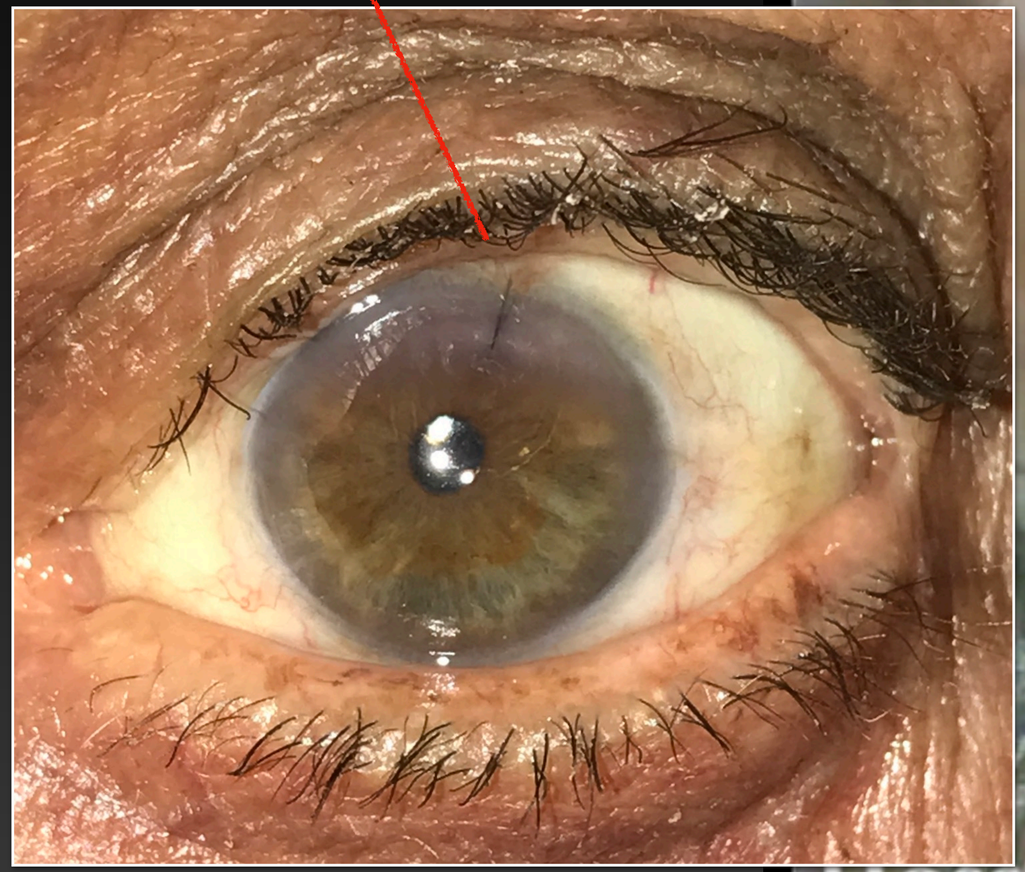
# ECCE with only one stitch Limbal/Corneal incision

Figure of 8



# ECCE with only one stitch
# Limbal/Corneal incision



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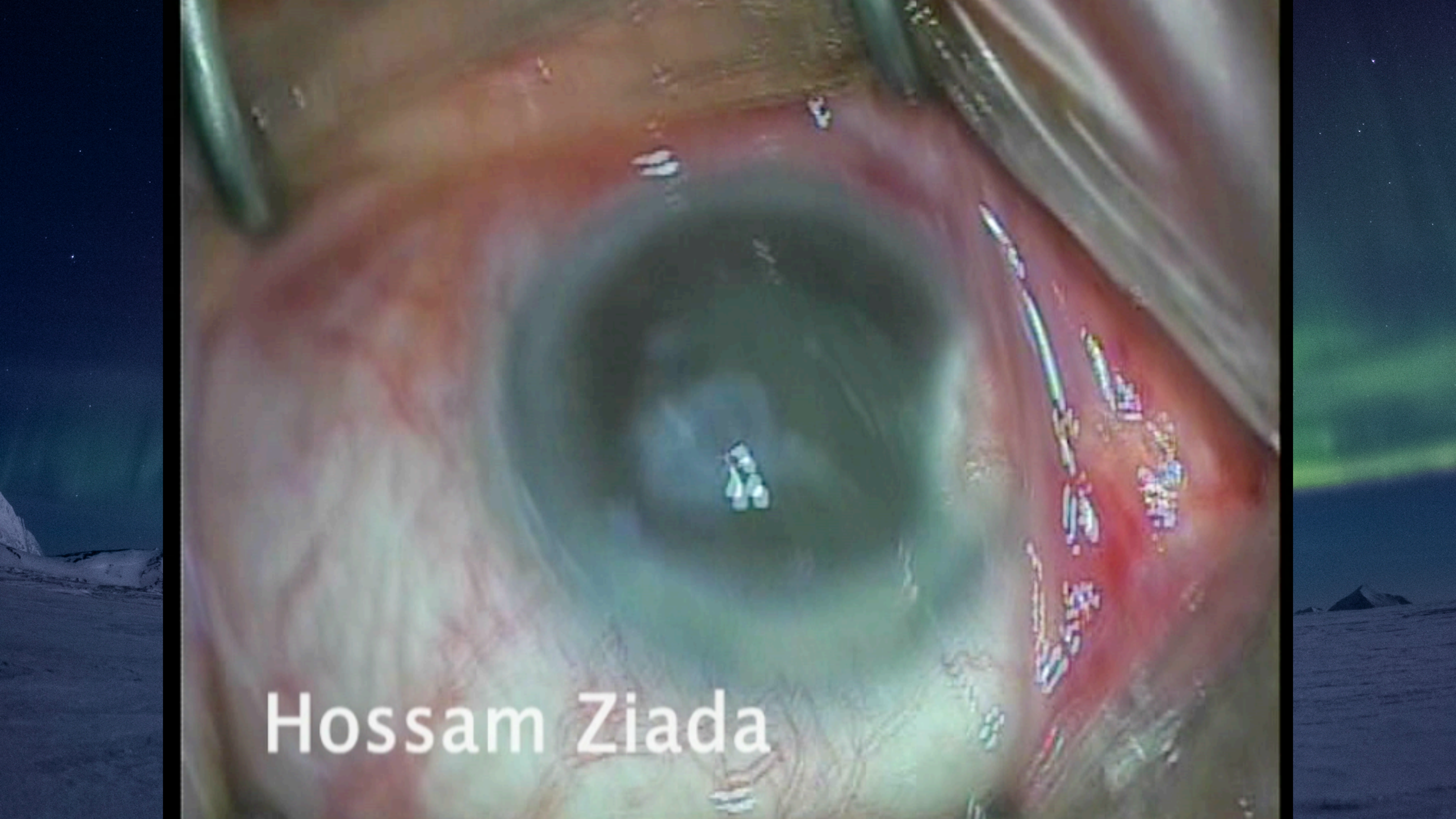
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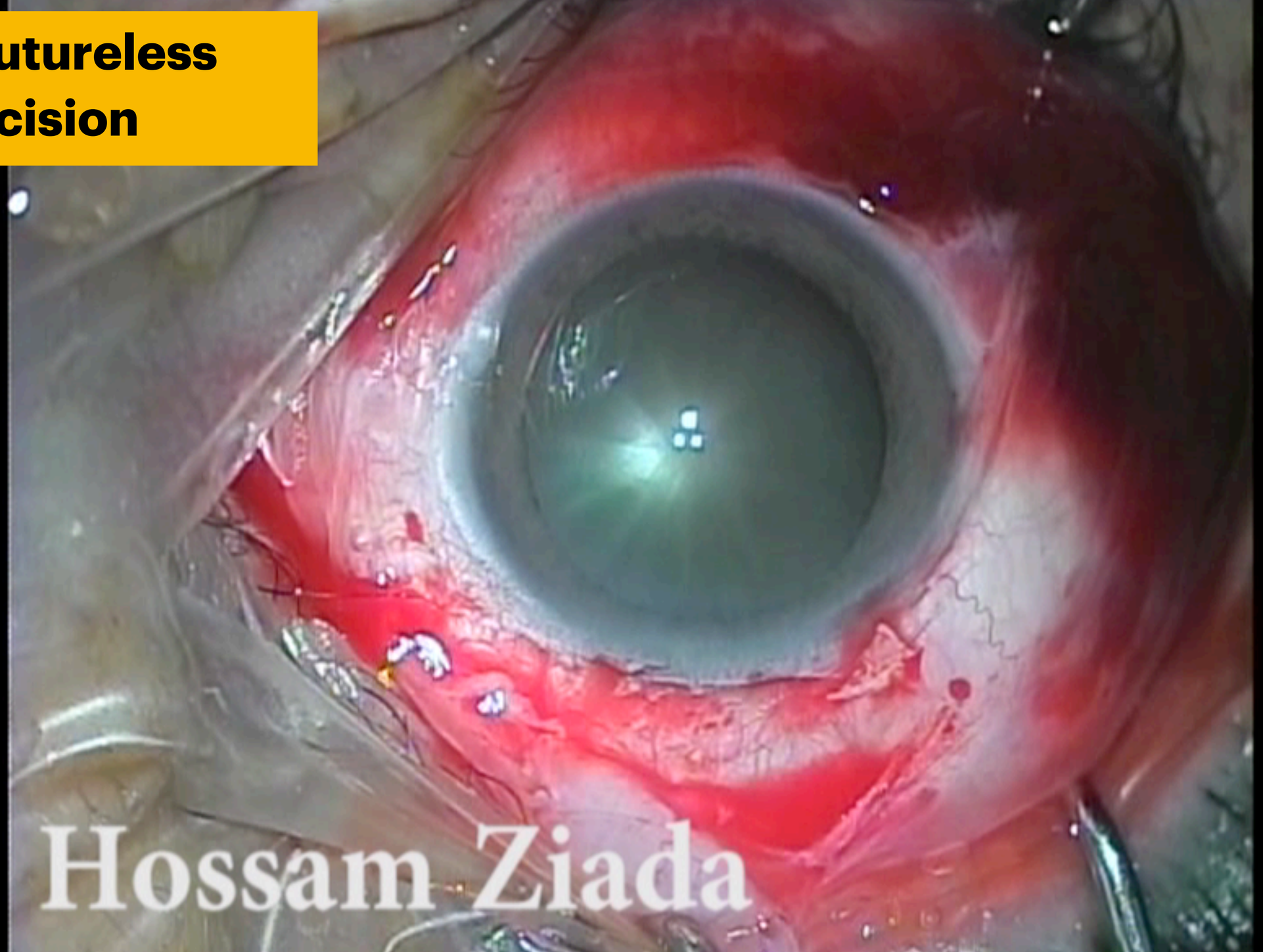
# ECCE with Sutureless scleral incision

How nice it is !!!!!!!



# Conclusion

**MSICS in very dense brown and cataracta nigra could be a better solution than ECCE and even phacoemulsification :**

- **Avoiding of open sky-related complications even though it’s rare, it's very disastrous.**
- **Avoiding sutures and their-related complications ; high astigmatism, irritation, too tight/loose, leaking wound, high incidence of infection & need for S removal. So MSICS with Sutureless covered wound will protect against infections especially in immunocompromised pts as well as very old ages.**
- **Saving the cornea in Pts who are very old or with bad endothelium.**

**Mastering MSICS, will offer you a shorter time, cheaper cost, and safer trip.**

# Thank youuuuuu