



Combined phacoemulsification and viscocanalostomy with Ologen implant

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Idea :

- The first study to discuss:
- The value of implanting ologen in the subscleral reservoir in cases of combined phaco and viscocanalostomy

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RESEARCH ARTICLE

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Combined phacoemulsification and viscocanalostomy with Ologen implant versus combined phacoemulsification and viscocanalostomy



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Viscocanalostomy:

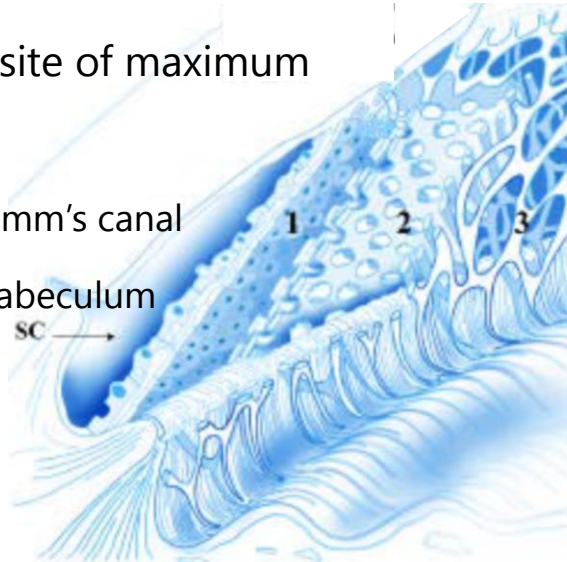
- NPGS (viscocanalostomy) are increasing alternatives in glaucoma surgery
- Which carry less complications than trabeculectomy

Viscocanalostomy principle:

- Mechanisms were described for the aqueous outflow after viscocanalostomy:

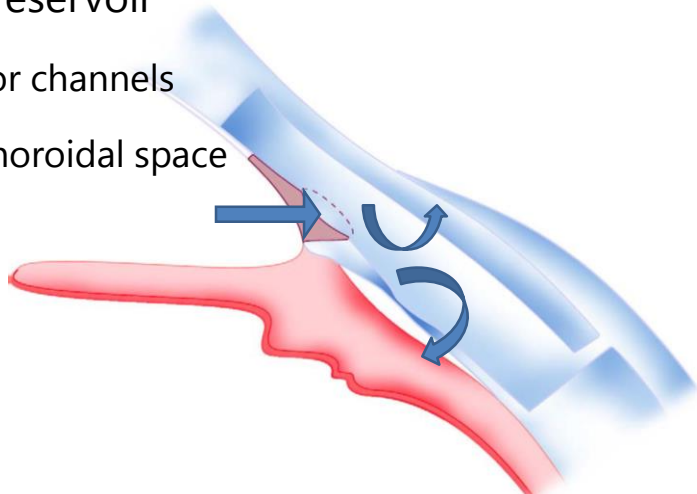
Viscocanalostomy principle:

- After removal the site of maximum resistance
 - Inner wall of Schlemm's canal
 - Juxtacanalicular trabeculum



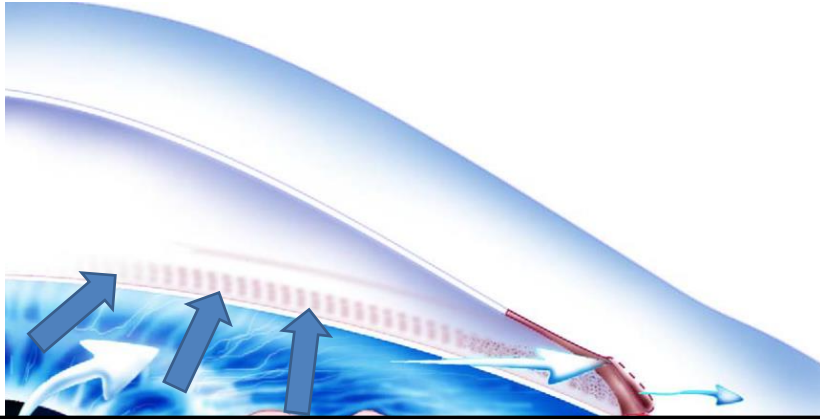
Viscocanalostomy principle:

- Subscleral reservoir
 - To collector channels
 - To suprachoroidal space



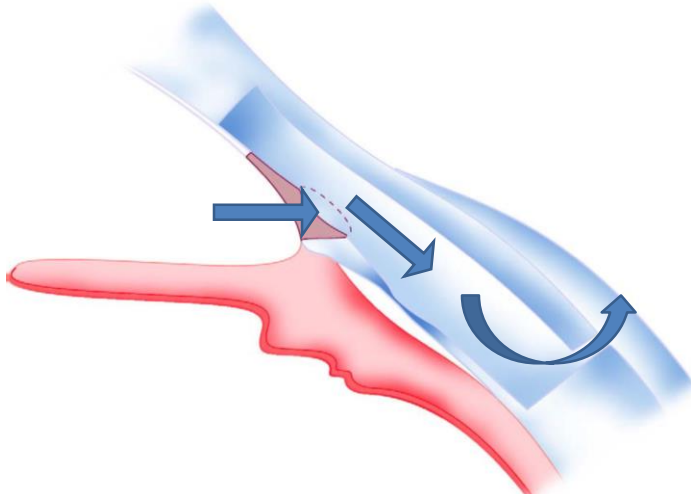
Viscocanalostomy principle:

- From micropunctures in the wall of dilated canal of Schlemm

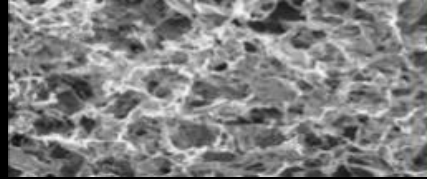


Viscocanalostomy principle:

- In the subconjunctival space

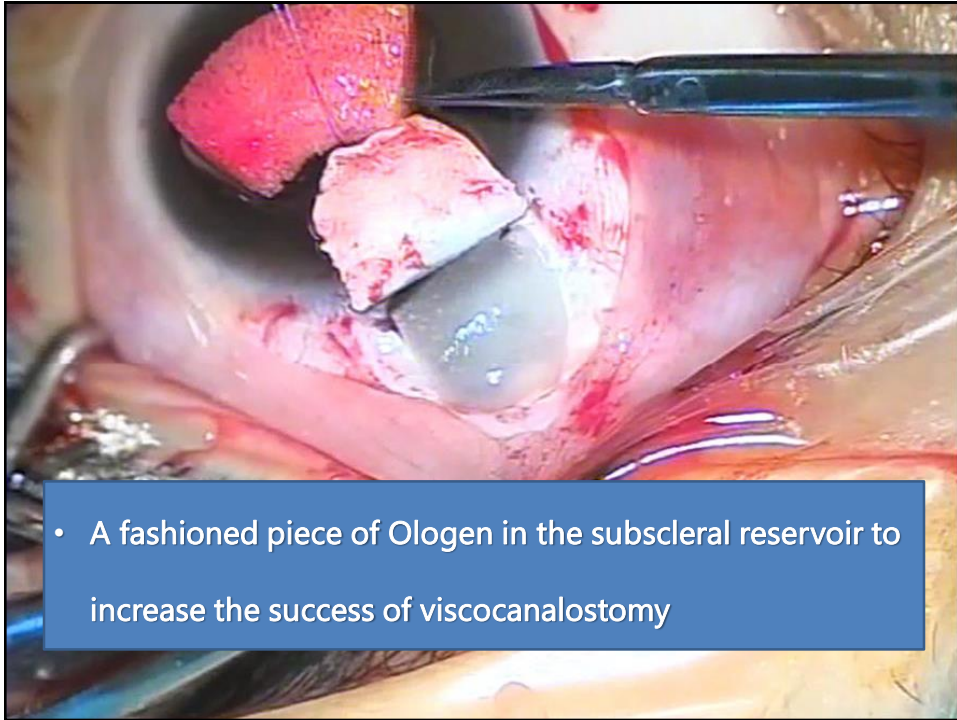


Ologen



Ologen:

- Biodegradable collagen-glycosaminoglycan copolymer
- It was used to increase the success of trabeculectomy



Methods:

Cases with POAG with age related cataract

39 eyes

Phaco

+

Viscocanalostomy

(phaco-visco group)

40 eyes

Phaco

+

Viscocanalostomy

+

Ologen implant

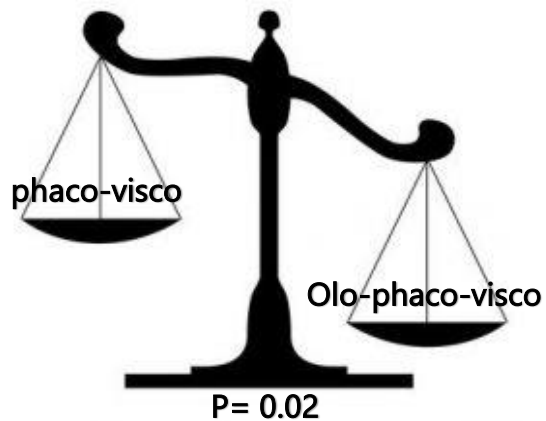
(olo-phaco-visco group)

Technique:



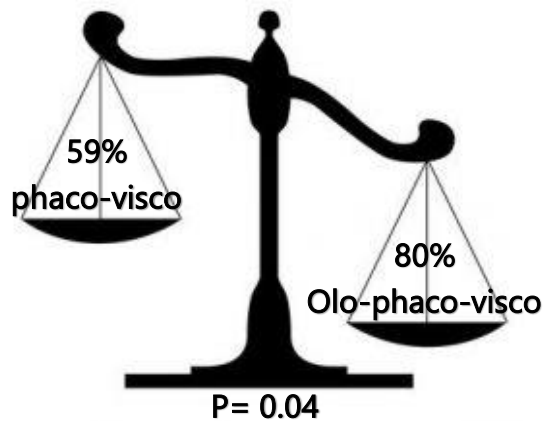
Results:

- IOP reduction from the preoperative



Results:

- Complete success



Results:

- YAG goniopuncture:
 - Ologen facilitates the technique and enhanced its effect
 - Cases with ologen less number of laser shots to open the Descemet's membrane ($p < 0.001$)
 - Iop reduction was more with ologen ($p = 0.03$)

Conclusions:

- The use of ologen implant with phacoviscocanalostomy was found to be safe
- Provided more success in the form of IOP reduction

Conclusions:

- And it improves the results of YAG goniopuncture if needed

