
بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Complications of valve (Ahmed)

By
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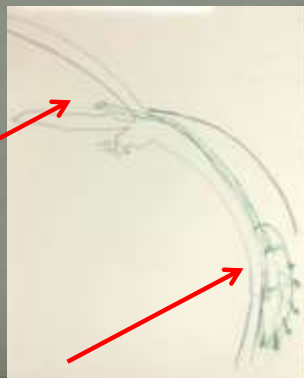
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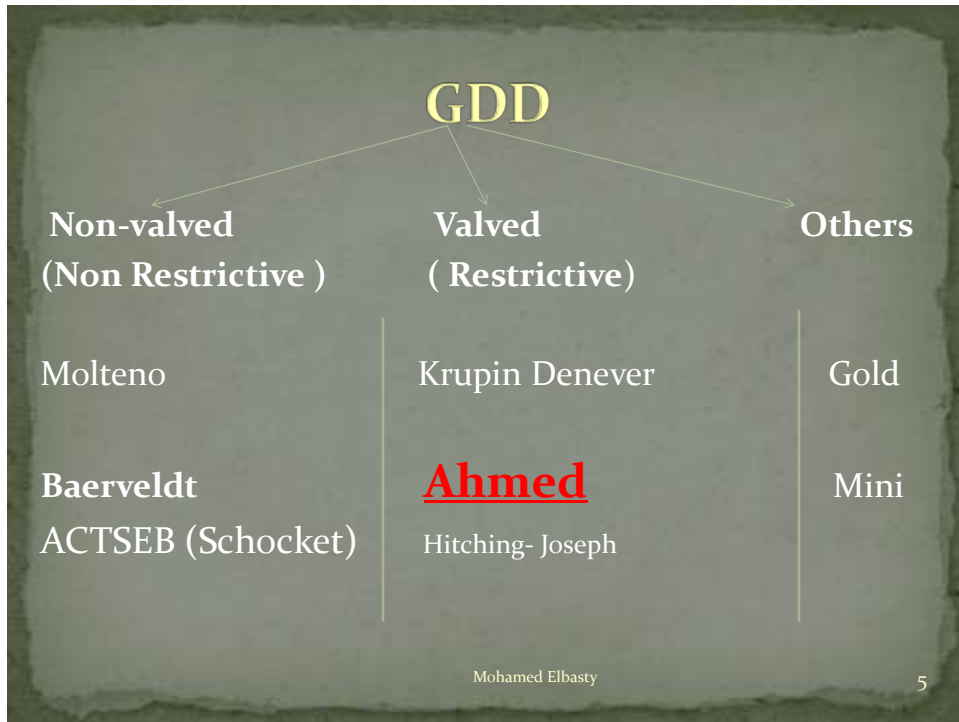


GDD : Principle

- Bleb transfer (trans limbal equatorial shunts)

to a reservoir (with certain optimal surface area)





GDD: Indications

- High risk
- Post Penetrating Keratoplasty
- No adequate conjunctiva for trabeculectomy
- Bleb Endophthalmitis
- Now : **Primary : Why Wait ??**

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GDD : Success

variable 25 %-----60 %



GDD: Complications I,II,III

- I- Pressure problems :

a) Early and Prolonged hypotony (Over filtration)

Suture (absorbable,,,))

Non absorbable (releasable ,, lysis)

Internal tube occlusion(collagen plug,,,4 /o catgut)

b) High pressure : Obstruction

- II—Position problems

a) Exposure

b) Extrusion

c) Migration

d) Short tube

e) Long tube

f) Misdirected

GDD: Complications.(cont.)

- III- Surrounding tissue problems

- a) Cornea: **1-touch** 2-hypotony 3- endothelium
- b) EOM: Diplopia : EOM , Giant reservoir.....
- c) Uvea : Uveitis
- d) Lens: Cataract
- e) Retina: RD
- f) Optic nerve fibers: Wipe out
- g) Globe: Endophthalmitis ,,,,,,Phthisis

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✓ Ahmed 1993

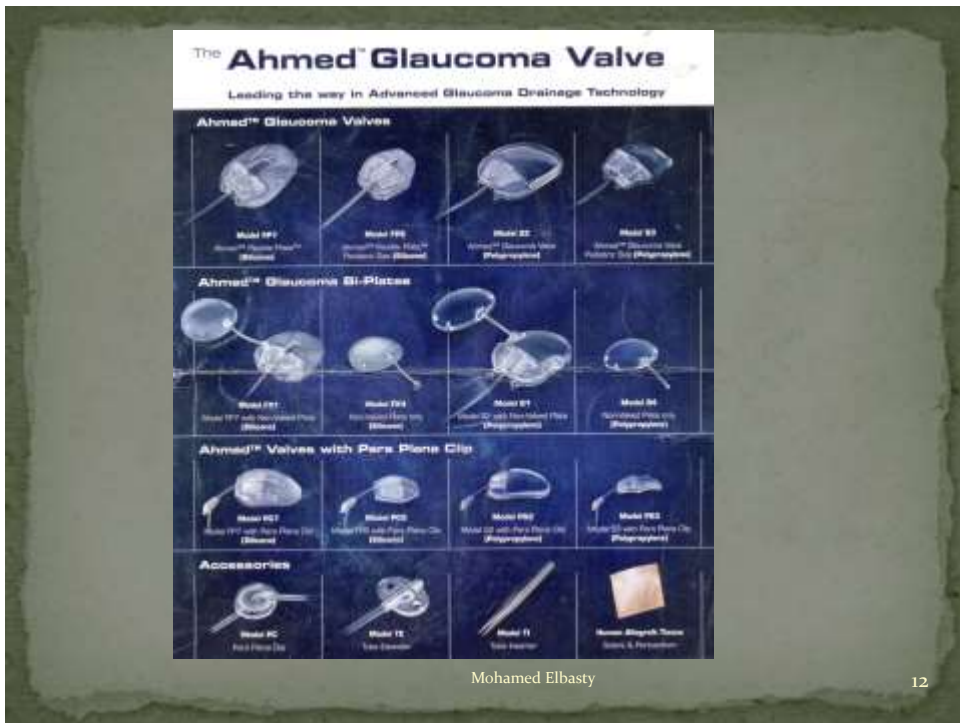
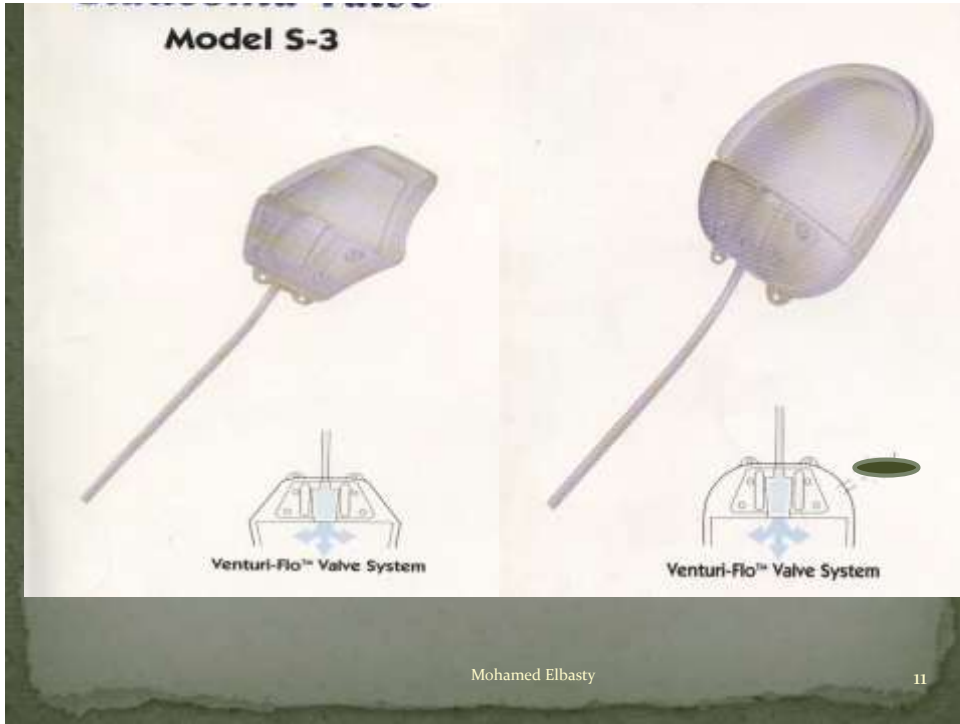
- Polypropylene plates:

S₂	S₃
PC	pars plana clip
PS₂	PS₃
B₁	double plate
B₄	accessory plate
 - Silicone plates:
 - 1- More biocompatibility...more success.
 - 2- Easier manipulation.
 - 3- Thinner Less conjunctival problems.

FP₇	FP₈
PC₇ (pars plana + clip)	PC₈
FX₁	FX₄
- Others: Tube extender (TE) ,, tube inserter (TI), pars plana clip (pc)**

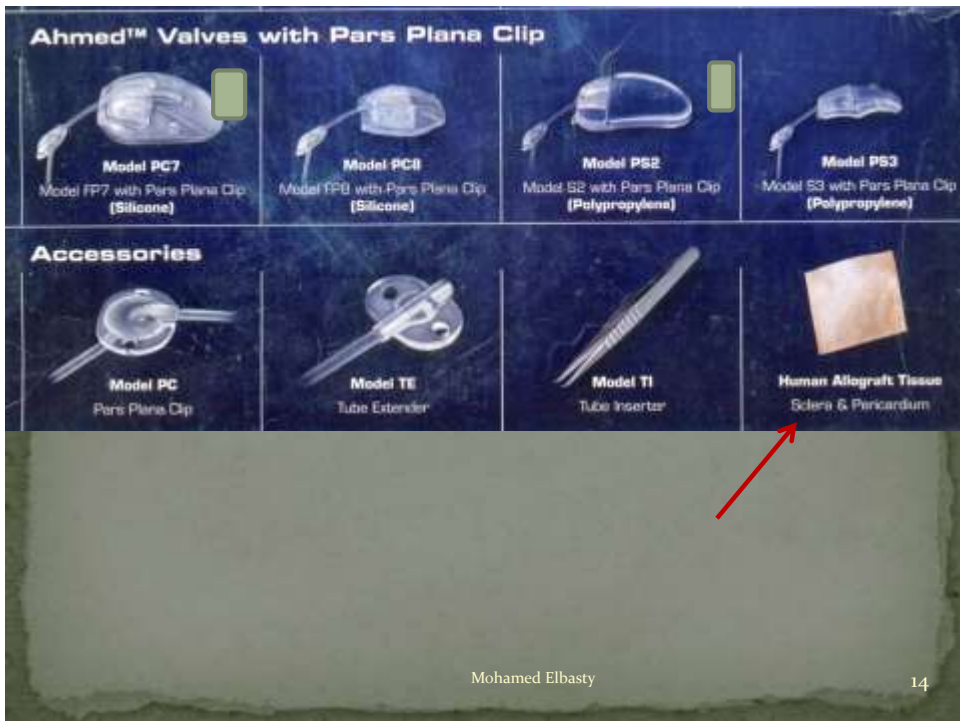
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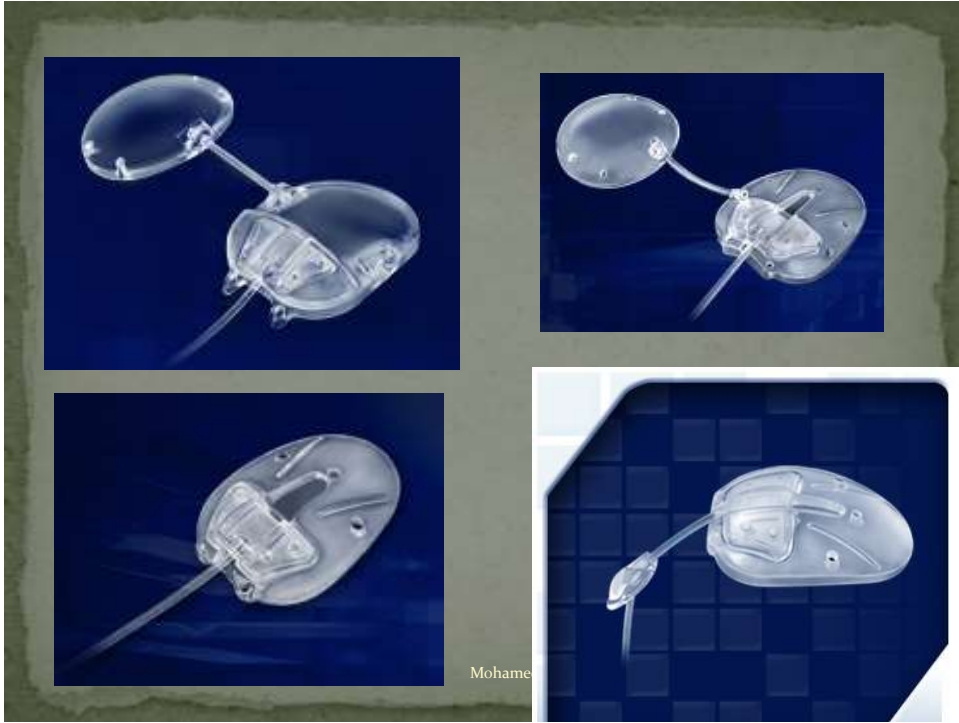




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Positioning problems

1- Exposure : tube,, valve

- Allograft : Sclera , Corneal touch ,, Pericardium

Economic burden, availability ,tissue problems

- Alternative: Flap trabeculectomy
Flap and groove (trench)
Flap and tunnel

Case 1

- Child with valve covered by pus just below the upper lid

Valve extrusion



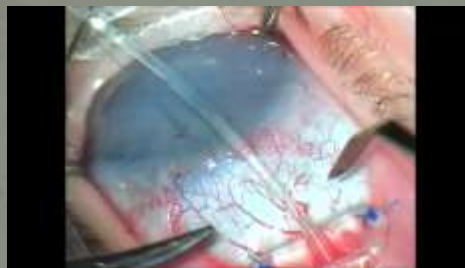
Why??

- Poor dissection : accommodative space
- Too anterior suturing
- Poor suturing : superficial ,episclera, Tenon's,
- No flap or tunnel to help holding
- Excessive rubbing early

Trab flap



Flap and groove “trench”



Flap and tunnel



Case 2

Short tube (retracted???).....

- Tube extender

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Case 3 Misdirected tube



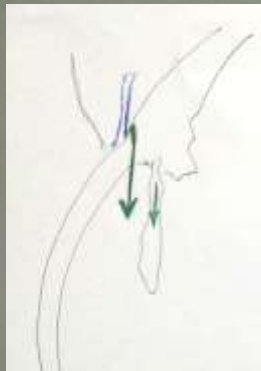
- ?? IOP was normal maturation of drainage system ??

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Direction

Direction



in infants

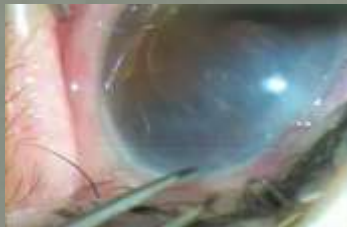


Case 4 : long tube , misdirected

- Touching endothelium...opacity



Trimming ?? May not be a solution ?
Vitreotomy forceps and scissors



Case 5 : Fibrosis ,encysted valve



- Failure,, Diplopia...

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Prevention

- MMC
- Better case selection “early“

For some of these complications:

The solution May be the new version

M4



Thank you