

An Epicanthoplasty

BY

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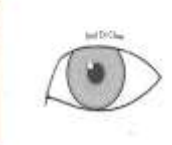

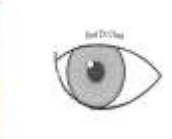
Epicanthal Folds

- Epicanthal folds are oblique or vertical folds from the upper or lower eyelids towards the medial canthus.
- Usually bilateral, they may involve both the upper and lower eyelids.
- These folds are caused by excessive development of the skin across the bridge of the nose.
- Produce pseudoesotropia

Evolution of the Epicanthus (Kwon's Theory): Etiology and Processes

- * Underdeveloped nasal bone,
- * An excess of horizontal medial canthal skin relative to the vertical skin shortening,
- * An excess of orbicularis muscle, and abnormal skin tension are causes of the epicanthus

Classifications of Epicanthus Fold

<p>Type I</p> <ul style="list-style-type: none"> - Full exposure of the lacrimal lake - There is no epicanthal fold in this type 	<p style="text-align: center;">Type I</p>  <p style="text-align: center;">Prof Dr CN Chou</p>	 <p style="text-align: center;">Prof Dr Chou</p>
<p>Type II</p> <ul style="list-style-type: none"> - Partially covers the lacrimal lake - The epicanthal fold joins the skin at the margin of the lacrimal lake 	<p style="text-align: center;">Type II</p>  <p style="text-align: center;">Prof Dr CN Chou</p>	 <p style="text-align: center;">Prof Dr Chou</p>
<p>Type III</p> <ul style="list-style-type: none"> - The lacrimal lake and caruncle are covered almost completely - Fold in the lower eyelid curves laterally to blend in with the lower eyelid skin - Round medial palpebral fissures 	<p style="text-align: center;">Type III</p>  <p style="text-align: center;">Prof Dr CN Chou</p>	 <p style="text-align: center;">Prof Dr Chou</p>
<p>Type IV</p> <ul style="list-style-type: none"> - Rare anomaly of the reversed epicanthal fold - Fold originates from the lower eyelid and blends with the upper eyelid skin 	<p style="text-align: center;">Type IV</p>  <p style="text-align: center;">Prof Dr CN Chou</p>	 <p style="text-align: center;">Prof Dr Chou</p>

Epicanthus are classified by Duke-Elder into 4 types :

Epicanthus superciliaris:

fold originates from the brow and follows down to the lacrimal sac

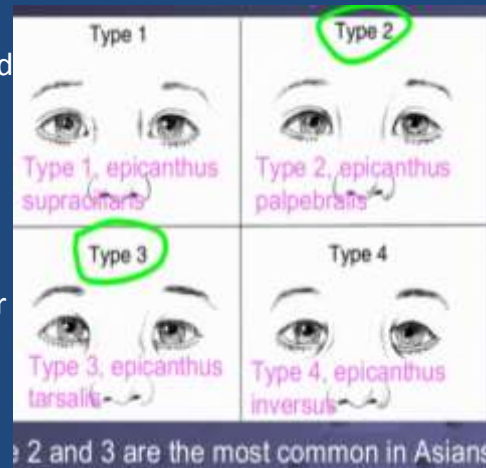
Epicanthus palpebralis:

involves both upper and lower eyelids

Epicanthus tarsalis:

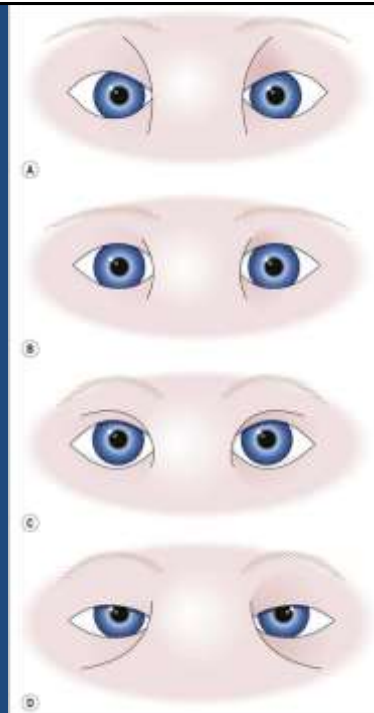
fold most prominent along upper eyelid

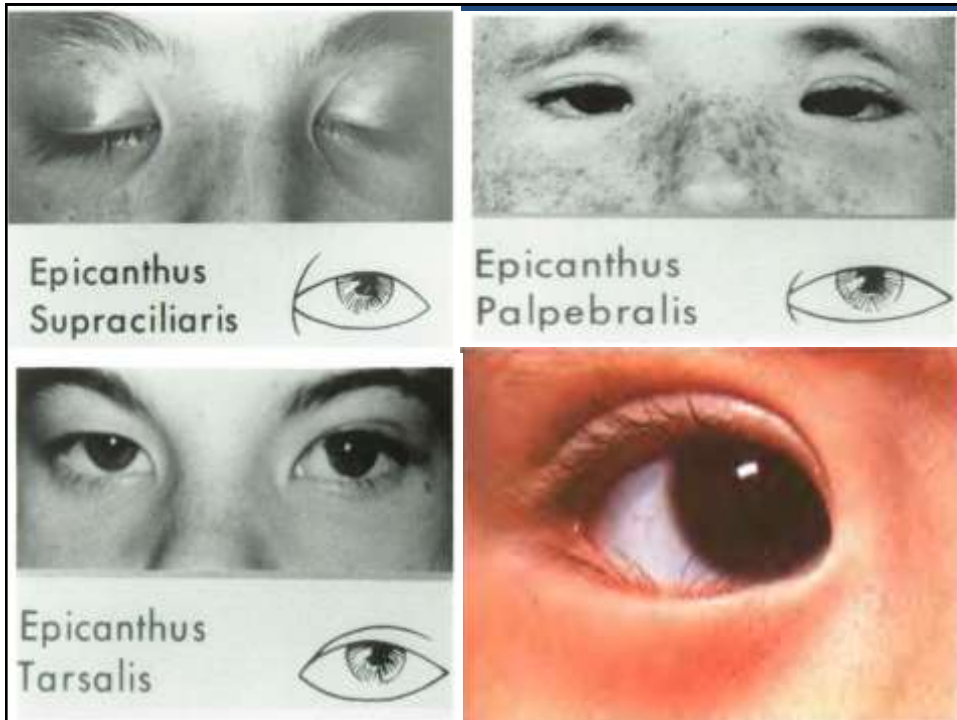
Epicanthus inversus: most prominent along lower eyelid



Epicanthus.

- (A) Superciliaris;
- (B) palpebralis (most frequent);
- (C) tarsalis (“Asian epicanthus”);
- (D) inversus





Telecanthus

- Widening intercanthal distance due to long medial canthal tendons
- Associated with
 - Fetal alcohol
 - Waardenburg's
 - Blepharophimosis



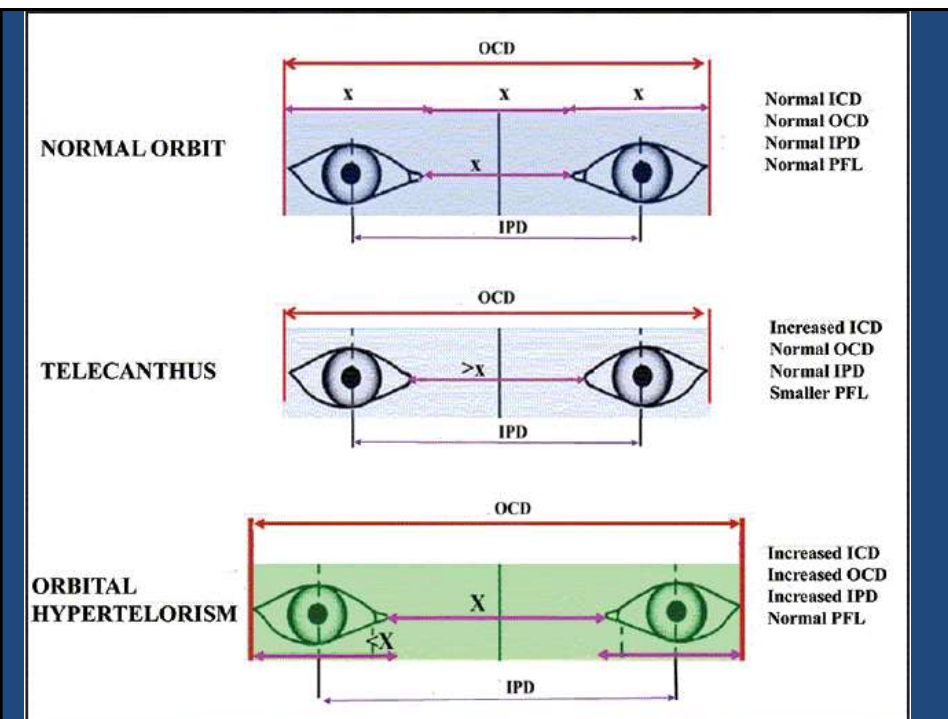
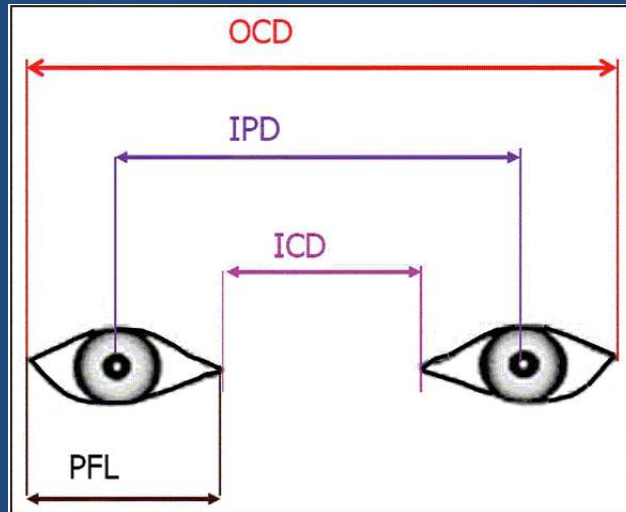
Normaly

ICD

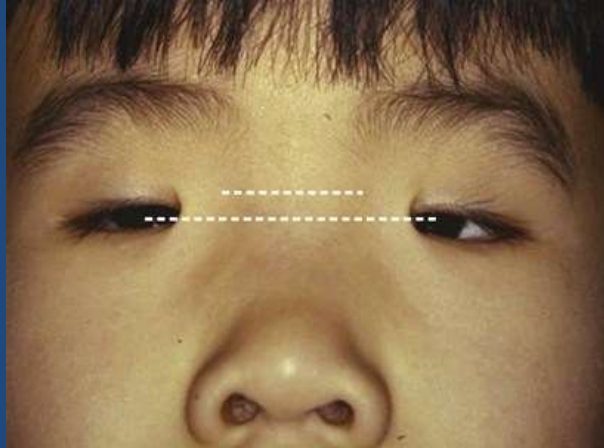
= $1/2$ IPD

= $1/3$ OCD

= PFL



Telecanthus



EPICANTHOPLASTY

- The goals of the surgical treatment of the epicanthal fold :

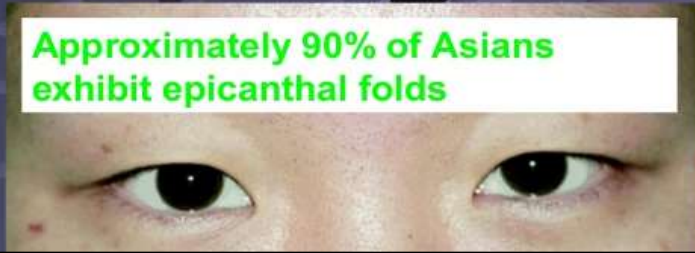
are elimination of the fold and establishment of normal relationships between the different anatomic structures with a minimum of scarring.

Preoperative assessment:

Epicanthal Folds:

- Excessive skin, muscle, fat, long MCT
- Smaller, less open eye vertically and horizontally
- Illusion of narrow-set eyes
- Obscures the lacrimal lake region and eyelashes
- Important in considering the outside fold double eyelidplasty

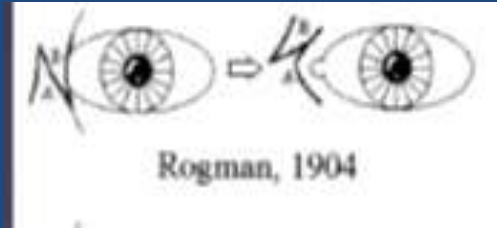
Approximately 90% of Asians exhibit epicanthal folds



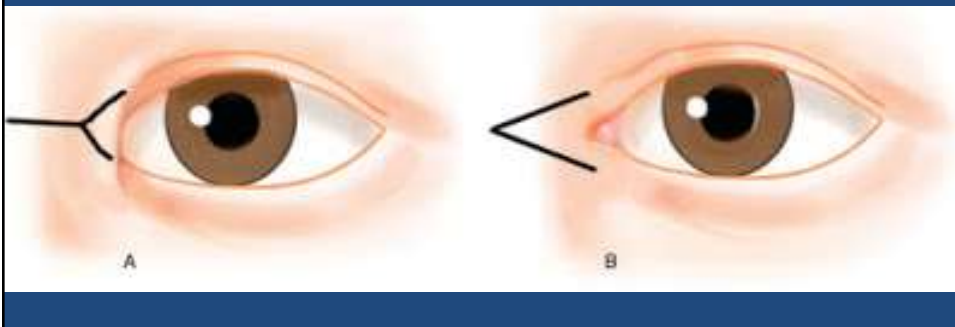
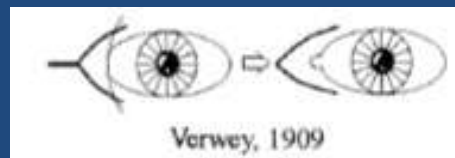
Many techniques have been described to eliminate the epicanthal fold:

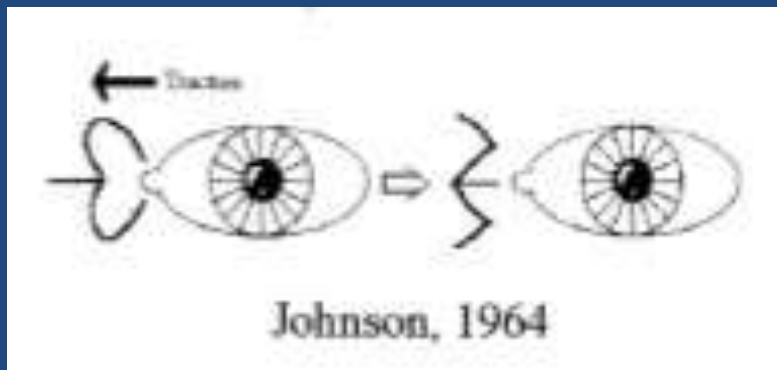
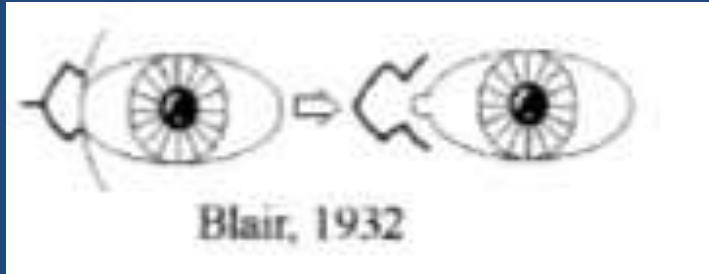
Epicanthoplasty
and Past
Procedures:

Rogeman mthod.

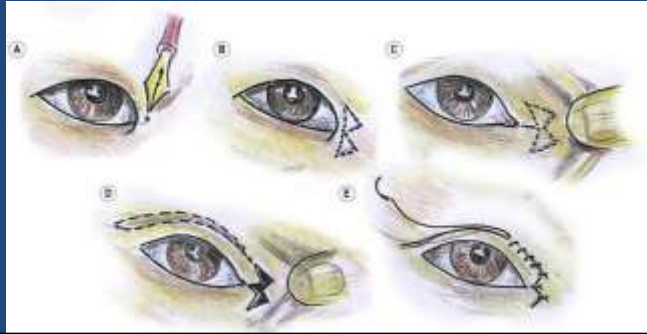
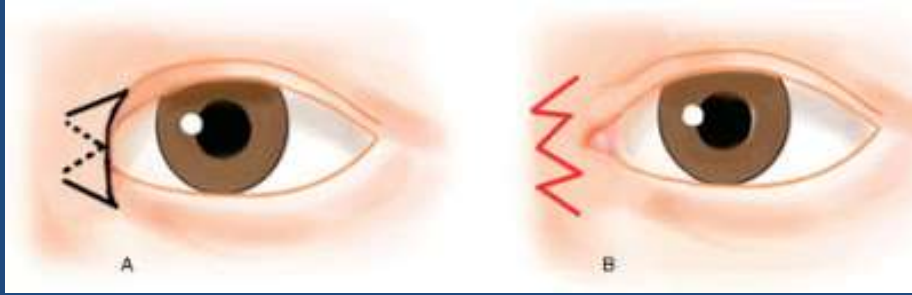


Y-V method.

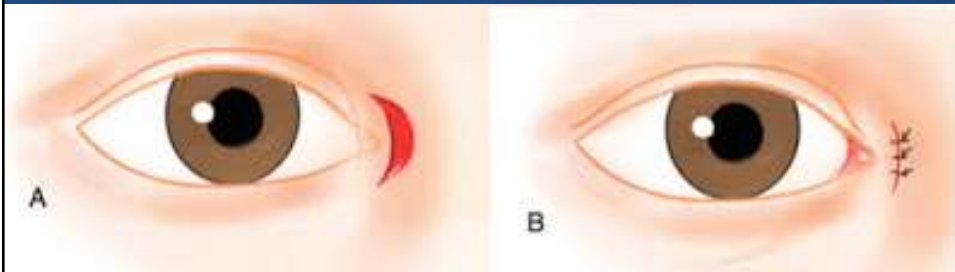




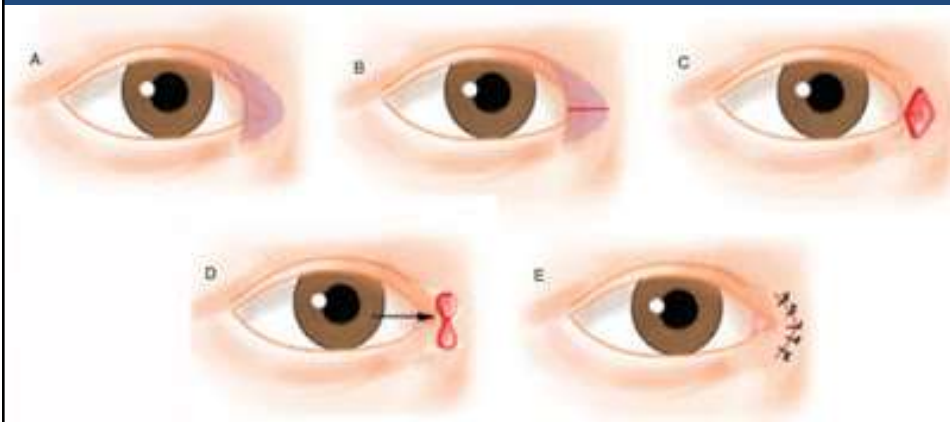
Converse method.



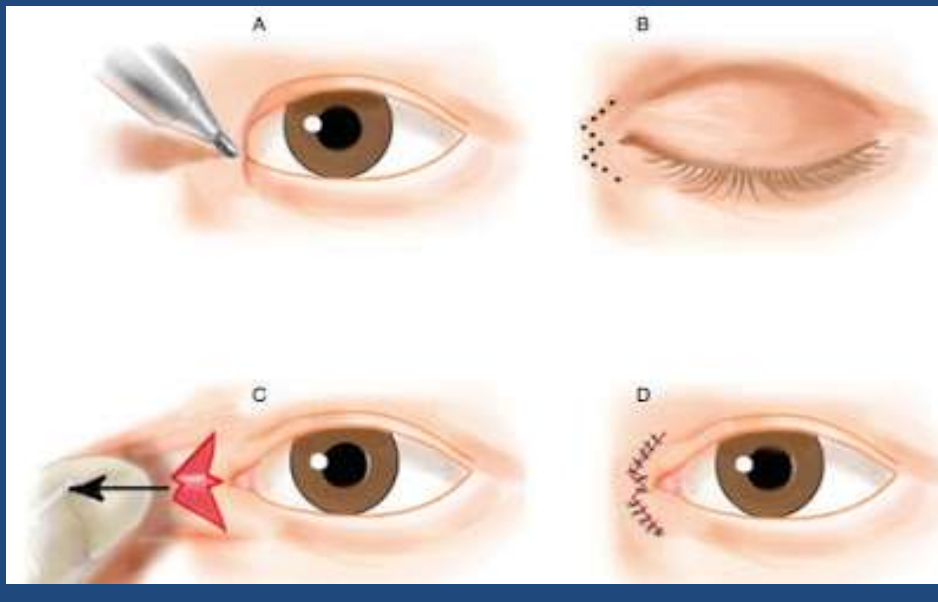
Arlt method



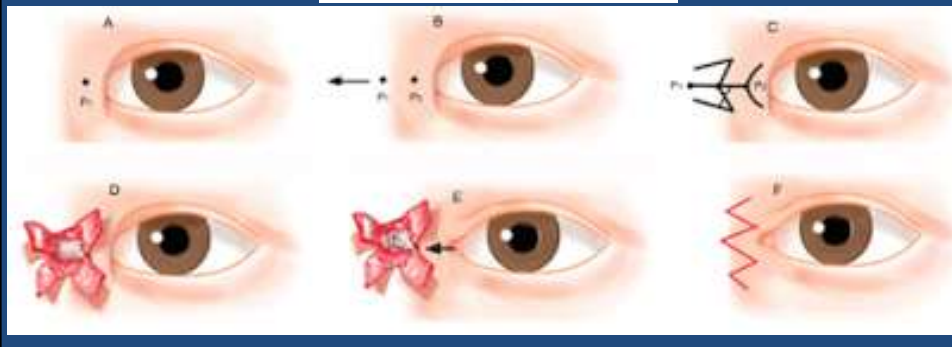
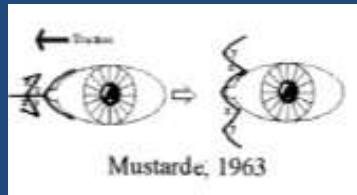
Hiraga method.



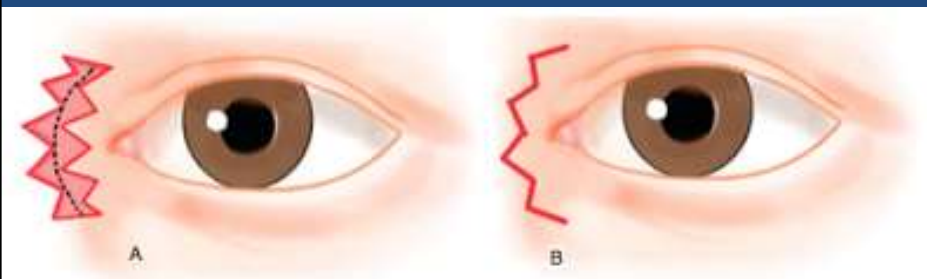
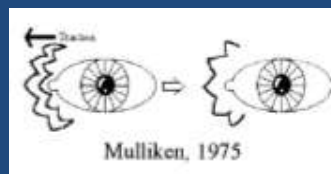
V-W advancement method.



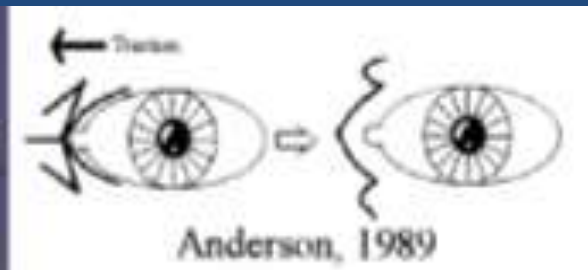
Mustarde method.



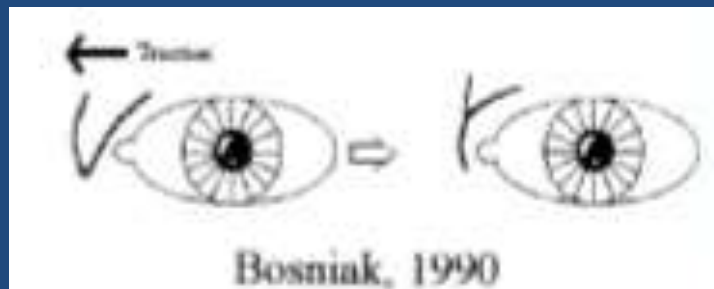
W-plasty method



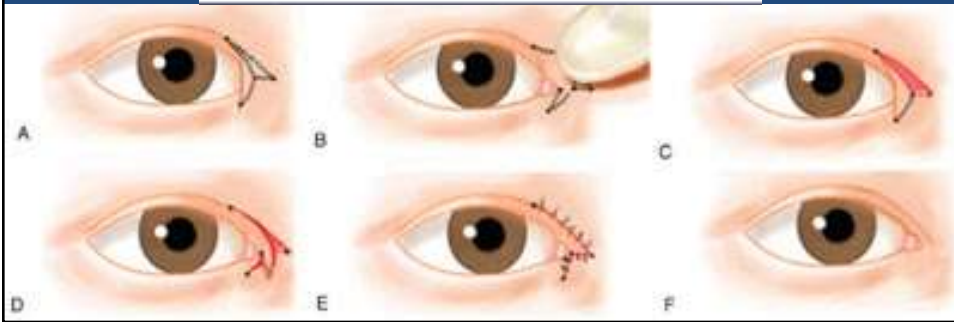
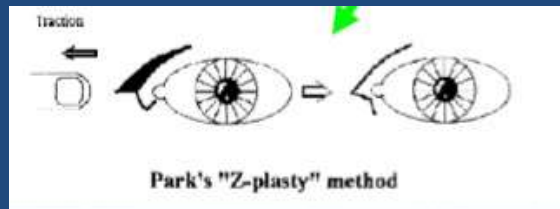
Anderson *method.*



V – Y method.



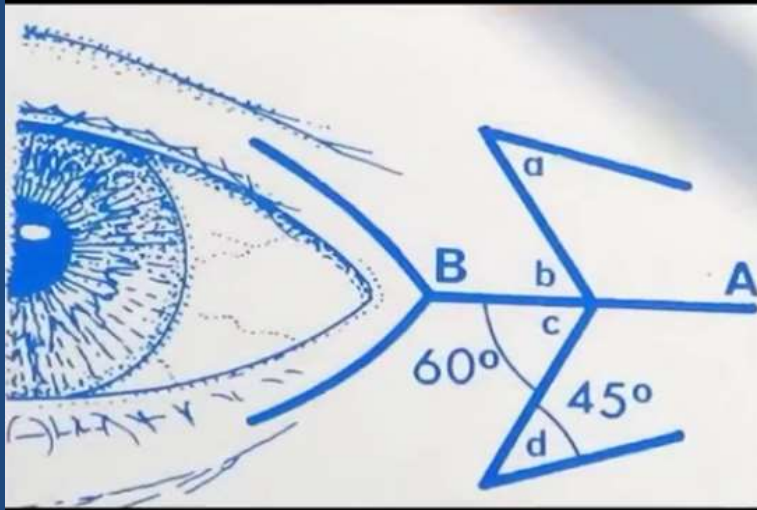
Park Z-plasty method.



The most popular techniques

- * Mustarde method. (Double Z Plasty) •
- * Y-V Plasty •
- * Combine epicanthoplasty and doubled eyelid surgery (Park Z-plasty method). •

Mustarde method. (Double Z Plasty)



Case 1



Double Z shape lines



Double Z shape incisions & creations of flaps



MPL Tucking



Transpositions of the flaps



Skin closure



Outer canthoplasty



Outer canthoplasty





Outer canthoplasty



At the end of operation



Posoperative



Preoperative

Postoperative



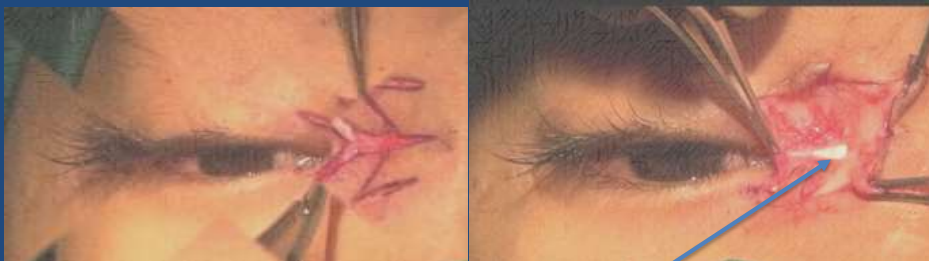
Case 2 Preoperative photos
Epicanthus Palparis



Double Z shape lines



Double Z shape incisions & creations of flaps



MPL

MPL Tucking & Transpositions of the flaps



Skin closure



At the end of operation



Postoperative photos



Preoperative

Postoperative



Case 3
Epicanthus tarsalis



Mustarde method. (Double Z Plasty) and Outer canthoplasty



Preoperative

Postoperative



Blepharophimosis



Mustarde method. (Double Z Plasty) and Outer canthoplasty



After frontalis sling

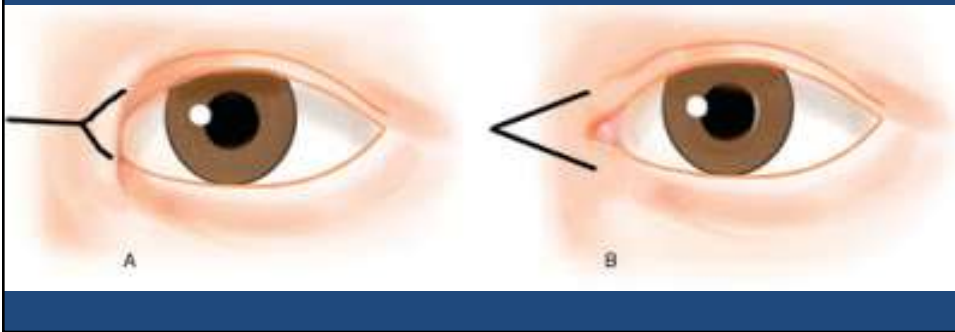
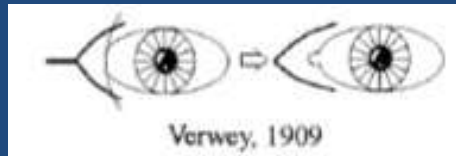


Preoperative

Postoperative



Y-V method.



Y-V Epicanthoplasty

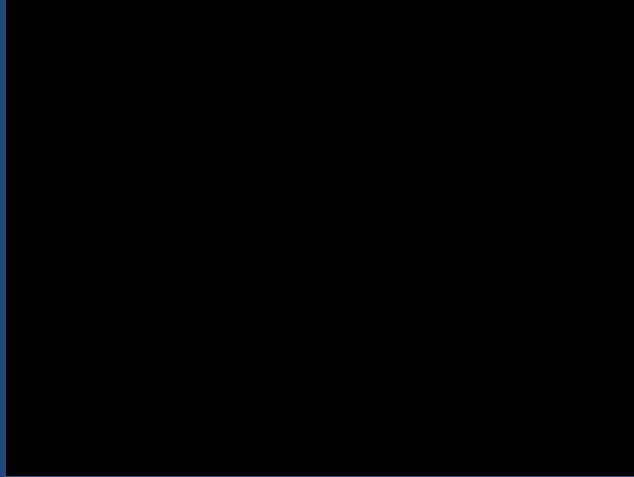


Combine epicathoplasty and doubled eyelid surgery

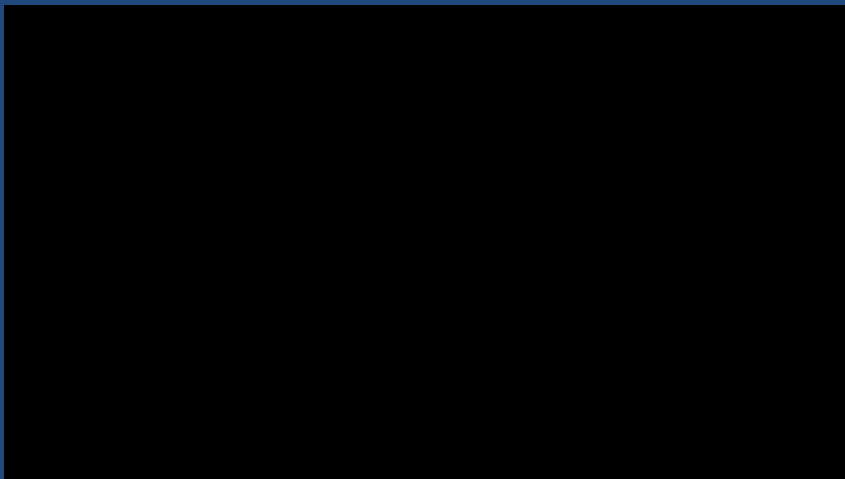
Surgical treatment of telecanthus

- MPL plication or tucking
- MPL resection
- Transnasal wiring
- Miniplate and screw

MPL plication or tucking



MPL resection



Transnasal wiring



Miniplate and screw

