

COMBINED RESECTION/RECESSION SURGERY IN PATIENTS WITH INCOMITANT STRABISMUS

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Introduction

Surgical correction of incomitant strabismus is challenging, especially with minimal deviations in primary position. Techniques used in these scenarios include posterior fixation sutures or surgery on contralateral synergists (yoke muscle).

Posterior fixation sutures need to be placed quite posteriorly and therefore they are more difficult to perform. Combined resection/recession surgery (Scott's procedure) allows surgeons to correct the maximum deviation in eccentric gaze without changing the primary gaze position.

Our aim was to study the effect of combined resection/recession surgery in adult patients with incomitant strabismus.

Calculation:

1 Calculate the amount of incomitance
(Angle in eccentric gaze – angle in primary position).

Determine how many mm of recession are needed to correct the amount of incomitance, using the following:

- 2**
- 1mm/2PD for SR
 - 1mm/2.5 PD for IR and LR
 - 1mm/3 PD for MR

3 Do you need to change the angle in primary position?

NO

The amount of recession and resection are equal

YES

4 The amount of resection needs to be smaller than recession so proceed to step 5.

The difference between recession and resection will determine how much the angle in primary position will be affected, using:

- 5**
- 1mm/2PD for SR
 - 1mm/2.5 PD for IR and LR
 - 1mm/3 PD for MR

Methods:



What is incomitance?

Presence of diplopia in one eccentric position of gaze and binocular single vision in PP.

We recruited prospectively all patients with incomitant strabismus aged 16 + years



Inclusion criteria



Exclusion criteria

Patients who had incomplete datasets.



Success criteria

Resolution of diplopia in eccentric gaze without using prisms or carrying out further surgery

Discussion:



Less overcorrection

Easier to do

No fibrosis

Adjustables

Variability in calculations among surgeons

Combined resection/recession is an option for the treatment of incomitant strabismus

Conclusions:

Our method to calculate the amount of surgery is accurate

SCOTT surgery corrects incomitant strabismus

100% resolution of diplopia in eccentric gaze position

Changes In Eccentric Gaze Angle

■ Before surgery ■ After surgery

