

AZIENDA DI RILIEVO NAZIONALE E DI ALTA
SPECIALIZZAZIONE
U.O.C. di OFTALMOLOGIA
Direttore: *Dott. M. Scimemi*

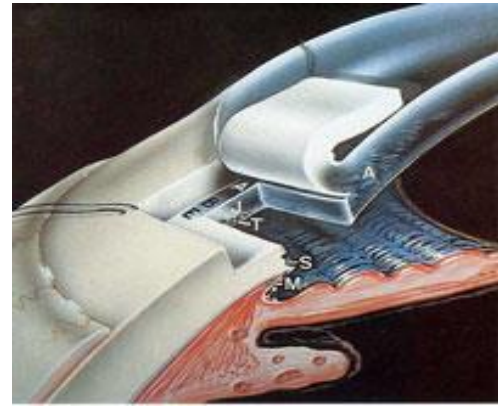


Quando la Chirurgia filtrante



Dott. Massimo Scimemi

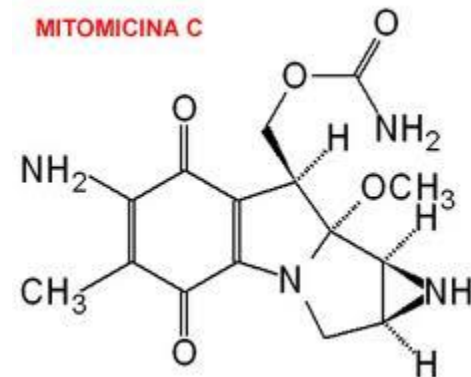
La Trabeculectomia



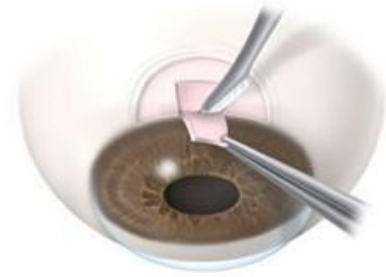
- La trabeculectomia è tutt'oggi la chirurgia filtrante di prima scelta per la riduzione della pressione intraoculare.
- Lo scopo della chirurgia filtrante è quello di preservare la funzione visiva e la qualità di vita del paziente.



- L'intervento si caratterizza per la creazione di una fistola sclerocorneale che mette in comunicazione la camera anteriore e lo spazio sottocongiuntivale.
- L'utilizzo di antimetaboliti e della mitomicina in particolare, ha migliorato la percentuale di successo della trabeculectomia.



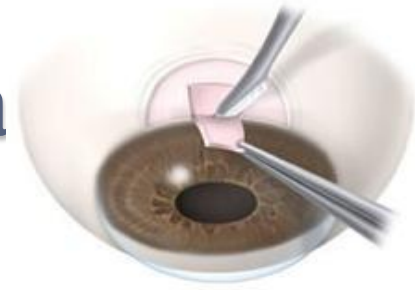
Percentuali di successo della trabeculectomia



Successo maggiore del 75% dei casi operati in presenza di:

- Glaucoma cronico ad angolo aperto
- Glaucoma cronico ad angolo stretto
- Glaucoma pseudoesfoliativo
- Sindrome da dispersione pigmentaria
- Eterocromia di Fuchs
- Glaucoma da recessione angolare

Percentuali di successo della trabeculectomia



Successo del 50% nei casi operati in presenza di:

- Glaucoma in afachico
- Glaucoma giovanile
- Sindrome irido-corneale endoteliale
- Sindrome di Sturge-Weber
- Secondo intervento fistolizzante
- Glaucoma secondario post uveite (inattiva)

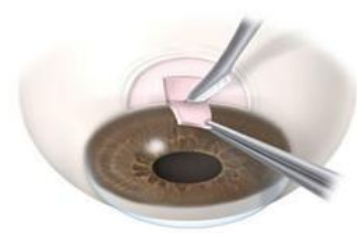
Percentuali di successo della trabeculectomia



Successo inferiore al 25% dei casi operati in presenza di:

- Glaucoma neovascolare
- Glaucoma congenito
- Glaucoma post uveite in fase attiva
- Più di due interventi fistolizzanti già eseguiti

Percentuali di successo della trabeculectomia nel paziente ideale



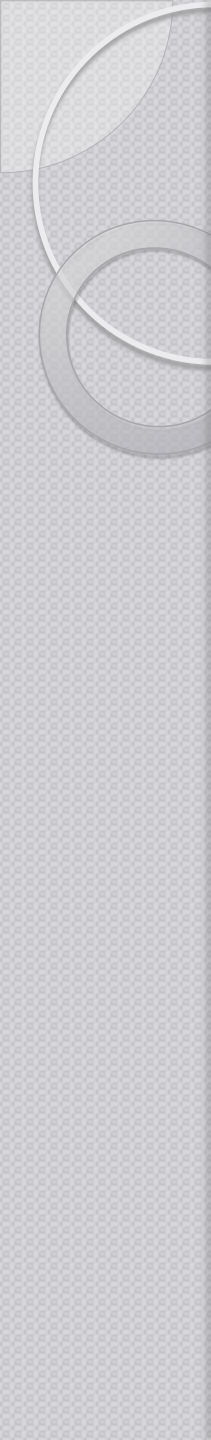
Profilo del paziente ideale:

Paziente fachico, anziano, di razza caucasica al primo intervento chirurgico per glaucoma.

Percentuale di successo variabile dal 65% al 90%.

- A 10 anni percentuale di successo 75%
- A 15 anni percentuale di successo 67%

(American Academy Ophthalmology)



Recente studio mostra follow-up a 20 anni di pazienti sottoposti a trabeculectomia per glaucoma cronico ad angolo aperto: Pressione intraoculare inferiore a 20mmHg nel 60% dei casi senza terapia ipotonizzante aggiuntiva.

Ophthalmology.

2012 Apr;119(4):694-702. doi: 10.1016/j.ophtha.2011.09.043. Epub 2011 Dec 23.

A twenty-year follow-up study of trabeculectomy: risk factors and outcomes.

[Landers J¹](#), [Martin K](#), [Sarkies N](#), [Bourne R](#), [Watson P](#).

Abstract

PURPOSE:

This study was undertaken to determine the performance of trabeculectomy surgery over a 20-year period and examine the associations between outcome and risk factors for trabeculectomy failure.

DESIGN:

Retrospective cohort study.

PARTICIPANTS:

A total of 234 patients (330 procedures) who had undergone trabeculectomy surgery at Addenbrooke's Hospital, Cambridge, United Kingdom, between January 1988 and December 1990.

METHODS:

Patients were identified through surgical logbooks (n = 521 procedures on 380 patients); after this, a case-note review was undertaken, which identified 234 patients (330 procedures) who had available case notes.

MAIN OUTCOME MEASURES:

Surgical success was defined as "complete success" while intraocular pressure (IOP) remained <21 mm Hg with no additional medication and as "qualified success" if those requiring additional topical medication were included. Functional success was defined if patients did not progress to legal blindness (visual acuity <3/60 or visual field <10 degrees).

RESULTS:

After 20 years, 57% were classified as complete success, 88% were classified as qualified success, and 15% had become blind. Those at risk of trabeculectomy failure were younger or had uveitic glaucoma. Those with pseudoexfoliation or aphakia were more likely to progress to blindness. Furthermore, those using 2 or more topical medications or with advanced visual field loss at the time of surgery were more at risk of both trabeculectomy failure and blindness.

CONCLUSIONS:

This study indicates that trabeculectomy survival at 20 years may be approximately 60% with no topical medication and approximately 90% with additional topical medication. Patient age, preoperative topical medication use, glaucoma type, and glaucoma severity will independently influence this outcome. Trabeculectomy surgery is therefore a long-term solution to IOP control.



QUANDO LA CHIRURGIA FILTRANTE?

Br J Ophthalmol.

1988 Dec; 72(12): 881–889.

PMCID: PMC1041614

Early trabeculectomy versus conventional management in primary open angle glaucoma.

[J L Jay](#) and [S B Murray](#)

Abstract

The results of a randomised, prospective, multicentre trial of the management of primary open angle glaucoma are presented at up to five years' follow up. Previously undiagnosed cases were selected with intraocular pressure of 26 mmHg or more on two occasions together with field loss characteristic of glaucoma. Analysis was performed on one eye selected at random from each of 99 patients. Conventional medical treatment followed in unsuccessful cases by trabeculectomy (group A) was compared with trabeculectomy at diagnosis followed when necessary by supplementary medical therapy (group B). The life expectancy of these glaucoma patients was found to be similar to that for the local population matched for age and sex. In group A after four years trabeculectomy had been performed in 53% of eyes because medical management had failed to control the disease. The rate of operation was lower in those patients with intraocular pressure less than 31 mmHg and mild relative field loss (17% at three years) than in those with intraocular pressure greater than 30 mmHg and dense scotomas (75% at three years). Early surgery provided much more stable control with fewer changes in treatment than in group A. The group mean intraocular pressure after trabeculectomy was 15.0 mmHg irrespective of the time of operation, and this was significantly lower than the intraocular pressure in those cases thought to be controlled on medical therapy alone at the end of the first year (20.8 mmHg). Early operation provided significantly better protection of visual field, and the extra loss of visual field with delayed operation occurred in the preoperative period. Changes in visual fields were not related to the use of miotics. There was no significant difference in the final visual acuity in the two groups, but six cases in group A lost central fixation because of progressive loss of visual field, and there were no such cases in group B. Cataract occurred in approximately 10% of cases in both groups, but in group A this happened with only half the number of operations and at a shorter postoperative follow-up than in group B. It appears that in cases of primary open angle glaucoma of this severity the risk of delaying operation are significantly greater than those of performing trabeculectomy as the primary treatment.

Ophthalmology.

1994 Oct;101(10):1651-6; discussion 1657.

Long-term functional outcome after early surgery compared with laser and medicine in open-angle glaucoma.

[Migdal C](#)¹, [Gregory W](#), [Hitchings R](#).

Author information

Abstract

PURPOSE:

This randomly allocated prospective clinical study was designed to assess the relative efficacy of laser trabeculoplasty, medical therapy, and trabeculectomy used as the primary treatment in open-angle glaucoma, with particular regard to the level of intraocular pressure control and the amount of visual field decay. No patient had received any antiglaucoma treatment before entry into the trial.

METHODS:

One hundred sixty-eight patients were entered into the trial and randomly allocated into one of the three treatment groups--laser, medicine, or surgery. Follow-up was for a minimum of 5 years. The patients were monitored in the standard way, including intraocular pressure estimations and visual field tests (initially using the Friedmann analyzer and later including Humphrey automated perimetry).

RESULTS:

Despite similar initial composition of the three treatment groups, primary surgery resulted in the lowest mean intraocular pressures. The perimeter Friedmann visual fields were shown to have deteriorated in patients in the medicine-treated group and to a lesser extent in patients in the laser-treated group, but not in patients in the surgery-treated group. Multivariate linear regression analysis showed that the difference in field changes between laser and surgical treatments could be explained entirely by the difference between the intraocular pressure values at 6 months between the two groups. The same was not true for the medicine-treated group.

CONCLUSION:

Primary trabeculectomy appears to have the desired effect in preserving visual function in patients with high-tension glaucoma. This may be related to laser treatment might be expected to have the same effect.

Ophthalmology.

2001 Nov;108(11):1943-53.

Interim clinical outcomes in the Collaborative Initial Glaucoma Treatment Study comparing initial treatment randomized to medications or surgery.

[Lichter PR¹](#), [Musch DC](#), [Gillespie BW](#), [Guire KE](#), [Janz NK](#), [Wren PA](#), [Mills RP](#); [CIGTS Study Group](#).

Abstract

PURPOSE:

To report interim outcome data, using all available follow-up through 5 years after treatment initiation, in the Collaborative Initial Glaucoma Treatment Study (CIGTS).

DESIGN:

Randomized clinical trial.

PARTICIPANTS:

Six hundred seven newly diagnosed glaucoma patients.

METHODS:

In a randomized clinical trial, 607 patients with newly diagnosed open-angle glaucoma were initially treated with either medication or trabeculectomy (with or without 5-fluorouracil). After treatment onset and early follow-up, patients were evaluated clinically at 6-month intervals. In addition, quality of life telephone interviews were conducted at similar frequency to the clinical visits. Patients in both arms of CIGTS were treated aggressively in an effort to reduce intraocular pressure (IOP) to a level at or below a predetermined target pressure specific for each individual eye. Visual field (VF) scores were analyzed by time-specific comparisons and by repeated measures models.

MAIN OUTCOME MEASURES:

VF loss was the primary outcome variable in CIGTS. Secondary outcomes of visual acuity (VA), IOP, and cataract were also studied.

RESULTS:

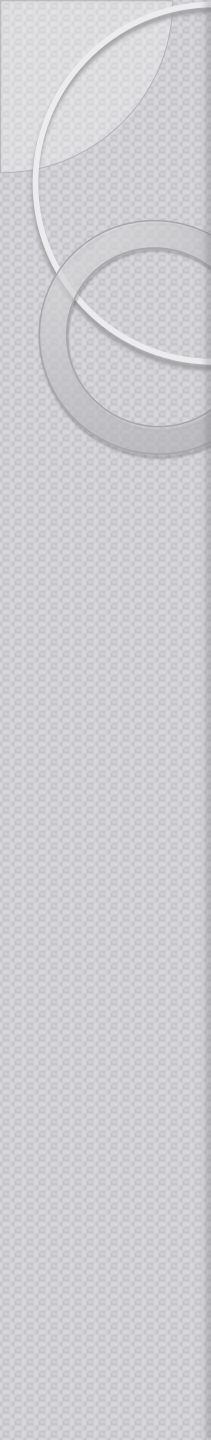
On the basis of completed follow-up through 4 years and partially completed through 5 years, VF loss did not differ significantly by initial treatment. Over the entire period of follow-up, surgical patients had a greater risk of substantial VA loss compared with medical patients. However, by 4 years after treatment, the average VA in the two groups was about equal. Over the course of follow-up, IOP in the medicine group has averaged 17 to 18 mmHg, whereas that in the surgery group averaged 14 to 15 mmHg. The rate of cataract requiring removal was greater in the surgically treated group.

CONCLUSIONS:

Both initial medical or initial surgical therapy result in about the same VF outcome after up to 5 years of follow-up. VA loss was greater in the surgery group, but the differences between groups seem to be converging as follow-up continues. When aggressive treatment aimed at substantial reduction in IOP from baseline is used, loss of VF can be seen to be minimal in general. Because 4 to 5 years of follow-up in a chronic disease is not adequate to draw treatment conclusions, these interim CIGTS outcomes do not support altering current treatment approaches to open-angle glaucoma.

Timing chirurgia filtrante secondo European Glaucoma Society

1. Nei casi in cui altre forme di terapia (farmaci e laser) abbiano fallito
2. Nei casi in cui altre forme di terapie non siano opportune (per es. quando la collaborazione è un problema) o non siano disponibili
3. Nei casi in cui è richiesto un obiettivo pressorio che non può essere raggiunto con farmaci o trattamento laser
4. Nel caso in cui il tono è così alto alla presentazione da rendere improbabile il successo di altre forme di trattamento



L' intervento filtrante non è esente da rischi ma il rovescio della medaglia può essere la cecità