



Xth CONGRESS OF THE EUROPEAN SOCIETY OF OPHTALMOLOGY MILANO, ITALY, JUNE 25-30, 1995

10.45

09.00

Room D

7-25

/E PAPERS ORNEA CORNEAL TRANSPLANT Chairpersons: J. DRAEGER (Germany) E. MASELLI (Italy)

AETIOLOGIC MANAGEMENT OF CORNEAL GRAFT FAILURE AFTER PENETRATING KERATOPLASTY

4. 8 P. - 200

D. Droutsas, E. Syrbopoulos, G. Tsioulias, P. Bousalis, G. Theodossiadis; Athens University Eye-Clinic, Athens, Greece.

Purpose. One of the most important complications of full thickness keratoplasty is the so called corneal graft sickness. This leads to corneal graft opacification and to the failure of an otherwise successful corneal transplantation. Apart from the immunologic graft rejection, there are still other non immunologic factors which result in corneal graft failure. For the proper actiologic management of the corneal graft failure, the diagnosis of the responsible cause is needed.

Methods. In 61 cases of comeal graft opacification, the predisposing factors were studied. The follow up ranged between 1 and 10 years. Results. From the 61 cases, 29 were found to be comeal graft rejection and 32 corneal opacification caused by non-immunologic factors.

Conclusions. Immunologic graft rejection is the leading cause of corneal graft sickness. Corneal graft sickness is a concept that included immunologic factors but is not limited to graft rejection. The establishment of the correct diagnosis plays a major role in the actiologic management of the corneal graft failure.

09.08

A COMPARISON BETWEEN TWO SUTURE TECHNIQUES IN PENETRATING KERATOPLASTY

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D. Ghiglione, S. Grozzo, B. Frau, S. Saced, G. Ciurlo; University Eye Clinic, Genoa, Italy.

Purpose. The authors have assessed the changes in astigmatism induced by two different suture techniques by means of corneal topography in penetrating keratoplasty.

Methods. A first group of 42 eyes (mean age of patients=67.8 years) underwent penetrating keratoplasty and were sutured by means of an interrupted suture (8 interrupted stitches) in combination with an antitorsional isosceles whipstitch in 10.0 nylon (8 stitches). A second group of 42 eyes (mean age of patients=57.9 years) was sutured with a double antitorsional isosceles whipstitch (16 stitches) in 10.0 nylon. During follow-up (mean 18 month) the changes in astigmatism were assessed by means of comeal topography (TMS-1) at 3 month intervals.

Results. In the first group an astigmatism equal to or less than 3D was found in 17.39% of cases, between 3 and 6D in 47.82% of cases, greater than 6D in 30.43% of cases. In the second group of patients the astigmatism equal to or less than 3 was found in 52.94%, between 3 and 6D in 35.29%, and greater than 6D in 11.76% of cases. The astigmatism axis was mainly oblique in both types of suture.

Conclusions. In the group of eyes transplanted with a double antitorsional whipstitch a significantly greater number of astigmatism with less than 3D was found, with an early visual rehabilitation, as well as the absence of giant astigmatism (greater than 8D).

09.16

PENETRATING KERATOPLASTY: A PERSPECTIVE STUDY OF 560 CASES CONCERNING THE PREEXISTING CORNEAL DISEASE

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D. Droutsas, E. Syrbopoulos, G. Tsioulias, P. Bousalis, G. Theodossiadis; Athens University Eye Clinic, Athens, Greece.

Purpose. The purpose of our study was to assess the rate at which the most often met corneal diseases lead to penetrating keratoplasty in Greece.

Methods. Five hundred 60 cases of penetrating keratoplasty, performed within the last 10 years, were classified according to the responsible corneal disease, which led to the penetrating keratoplasty. The age of the patients ranged between 15 and 72 years.

Results. Of the 560 cases 98 (17.5%) had keratoconus, 74 (13.2%) corneal macular dystrophy, 84 (15%) post-traumatic corneal opacity,

79 (14.1%) opacified comea because of herpetic keratitis recurrences. 103 (18.3%) were comeal chemical burns, 21 (3.75%) comeal scarring after a microbial keratitis, 63 (11.25%) pseudophakic bullous keratopathy, 2 (0.35%) lattice, 1 (0.17%) granular and 35 (6.25%) opacified graft. Of the 63 cases with bullosa 45 were operated within the first 5 years of the study and the 18 within the last 5 years. Conclusions. 1) Although the selection of the patients with

keratoconus for keratoplasty is based on strict criteria, keratoconus is the second leading cause after comeal chemical burns.

2) Lattice and granular dystrophies are very rare causes in Greece and 3) The rate of the pseudophakic bullous keratopathy is decreased probably because of ECCE, use of viscoelastic substances and IOL P/C implantation.

09.24 FOLLOW-UP OF HUMORAL IMMUNEREACTIVITY IN PATIENTS WITH CY-A / SANDIMMUNE / TREATMENT AFTER KERATOPLASTY

C. Kelenhegyi; Debrecen, Hungary

Purpose. The purpose of the study has been to decide the alterations of total serum complement level /CH50/, serum C3 complement fraction and immunecomplex /IC/ were followed up quantitatively.

Methods. Two groups of patients were studied. Group L receied Cy-A immunosuppressive treatment in the form of eye drops. Group IL was administered Cy-A drink solution.

Patients were followed up for 26 weeks after operation. The correlation between the changes of the above parameters and the state of the corneal graft were studied.

Results. It has been concluded that the alteration of serum CH50 level and that of serum C3 complement fraction can precede graft rejection or can occur simultaneously with it. However, the increase in immune complex titer follows immune rejection.

09.32

LONG TERM RESULTS OF KERATOPLASTY

T: Popovski, M. Antova, V. Celeva, Z. Arnaudovski; Ophthalmology Clinic, University Sent Kliment and Methody, Skopje, Macedonia.

In this study the authors present their experience of the op. treatment of the keratoconus with the keratoplasty in the Ophthalmology Clinic of the University Sent Kliment and Methody in Skopje in the period of 1973-1993

They confirm that the keratoplasty-partial thickness (lamellar) preserving the Descemet's membrane of the recipient comea.

The authors used op. technique which is preserving the integrity of the camera anterior i.e. the surgery of the close eye.

After the treatment of the keratoconus with the partial thickness (lamellar) they succeeded in satisfing anatomically and functional resultats.

09.40

KERATOPROSTHETICS. (ANALYSIS OF 750 OPERATIONS RESULTS)

S.A. Yakimenko; Filatov Research Institute of Eye Diseases and Tissue Therapy, Odessa, Ukraine,

Purpose. The aim of this work was to study the efficacy of keratoprosthetics as the reliable method for visual restoration in corneal leucomas, unsuitable or not subject to keratoplasty.

Methods. Analysis of the results of 750 operations on keratoprosthesing, performed at the Filatov Institute since 1968 till 1994 is presented.

Results. Application of keratoprostheses models, constantly perfecting, and techniques and methods, constantly developing, enabled to restore vision in 90% of patients and to reduce the number of keratoprostheses rejections from 100% in 1968-1970 years till 3,5% in 1976-1994.

Conclusions. The techniques of keratoprosthesing, developed by the author, enable to restore and preserve vision in patients with so-called "hopeless" leucomas, which were not subject to surgery earlier.