



XV SICSSO Congress

*The International Congress of the Italian
Society Stem Cells and Ocular Surface*



NEWS: this year DMEK

Caserta, Italy

23-25 June 2016



FINAL PROGRAM & ABSTRACT BOOK



www.sicssso.org/congresso2016

With the patronage of



Provincia di
Caserta



Città di Caserta



PRESENTAZIONE DEL CONGRESSO

Anche quest'anno abbiamo voluto dare un tema alla XV edizione del congresso internazionale SICSSO, intitolandola "News: this year DMEK".

Accanto alle letture magistrali assegnate ad alcuni tra i principali opinion leader del nostro settore, quest'anno il programma sarà focalizzato sulla live surgery e relativi dibattiti. L'obiettivo è di dare la possibilità ai Chirurghi e Moderatori di condividere e discutere le proprie esperienze in sala operatoria con l'audience.

Come per le edizioni passate, SICSSO premierà due esperti che si sono distinti a livello mondiale in ambito corneale e di superficie oculare: avremo quindi l'onore di assegnare le **Medal Lecture 2016** a **Francis Price** e a **Jorg H. Krumeich**.

Siamo molto contenti di confermare e rinnovare la collaborazione con il **Moorfields Eye Hospital** di Londra, uno tra gli ospedali oftalmici tra i più grandi d'Europa, che ha messo a disposizione della SICSSO una observership di 1 o 2 settimane. Offriremo quest'opportunità, supportata da un contributo per spese di viaggio e soggiorno di 1.000 euro, al vincitore della migliore comunicazione orale, la competizione è riservata ai colleghi giovani "under 40".

Il miglior poster scientifico, presentato da uno specializzando, verrà premiato con un soggiorno di 1 o 2 settimane presso l'**IMO - Istituto Microcirugia Ocular** di Barcellona. Un contributo di 1.000 euro verrà erogato per sostenere spese di viaggio e di soggiorno.

Allo specializzando che presenterà il poster che sarà premiato per originalità verrà messa a disposizione l'opportunità di frequentare la **Clinica degli Occhi Sarnicola** di Grosseto e di approfondire le conoscenze sulle nuove tecniche lamellari della cornea, supportata da un contributo di 500 euro per sostenere spese di viaggio e soggiorno.

Vi aspettiamo a Caserta,
Vincenzo Sarnicola



CONGRESS PRESENTATION

We decided to give the XV SICSSO Congress edition a title: “News: this year DMEK”.

Besides the keynote lectures presented by some of the main opinion leaders of our field, this year the program will be focused on live surgery sessions and debates. The aim is to give the opportunity to Surgeons and Chairs to share and discuss their experience in the operating room with the audience.

As for the past editions, SICSSO will recognize two colleagues who distinguished themselves in the study of corneal and ocular surface diseases: we will have the honor to award Francis Price and Jorg H. Krumeich with 2016 SICSSO Medal Lecture.

We are also pleased to confirm and renew the cooperation established with the London Moorfields Eye Hospital, one of the major and prestigious hospital for the eye care in Europe, which has awarded SICSSO with a 1 or 2 week observership to be offered to a young ophthalmologist (provided he/she is under 40): SICSSO will give this opportunity to the winner of the best oral communication, together with a grant of 1.000 euros to support travel and stay expenses.

Thank also to the IMO - Instituto Microcirugía Ocular in Barcelona that will give a chance to an ophthalmology resident with a best scientific poster to win 1 or 2 week observership together with a grant of 1.000 euros to support travel and stay expenses; and Clinica degli Occhi Sarnicola in Grosseto (Italy) that will give the opportunity to an ophthalmology resident with a best original poster to win 1 or 2 week observership together with a grant of 500 euros to support travel and stay expenses.

Looking forward to welcoming you in Caserta,
Vincenzo Sarnicola



S.I.C.S.S.O. PRESIDENT

Vincenzo Sarnicola

S.I.C.S.S.O. Board

Giovanni Alessio

Giorgio Marchini

Vincenzo Maurino

Rita Mencucci

Alberto Montericcio

Alessandro Mularoni

Mario Nubile



Local Scientific Committee

Coordinator: Ferninando Romano

Members: Alfonso La Banca

Vincenzo Rao



Local Organizer

Domenico Marotta



Scientific Secretariat

Caterina Sarnicola

Enrica Sarnicola



LIVE SURGEONS



Giovanni Alessio

Clinica Oculistica Università degli Studi di Bari - Bari



Aldo Caporossi

*Fondazione Policlinico Universitario A. Gemelli
Università Cattolica del Sacro Cuore - Rome*



Rajesh Fogla

*Apollo Hospitals, Jubilee Hills, Hyderabad
Telangana, INDIA*



Alessandro Galan

ULSS 16 Padova - Padua



José L. Güell

IMO - Instituto Microcirugía Ocular - Barcelona, SPAIN



Vincenzo Maurino

*Moorfields Eye Hospital - London, UK
Presidio Ospedaliero Pineta Grande - Castel Volturno (Caserta)*



Vincenzo Sarnicola

Clinica degli Occhi Sarnicola - Grosseto



Mark Terry

Devers Eye Institute - Portland, USA

LIVE SURGERY

CHIRURGIA IN DIRETTA - STREAMING

Le sessioni di chirurgia in diretta del giovedì e sabato saranno trasmesse dalle sale operatorie del Presidio Ospedaliero Pineta Grande (Via Domitiana Km 30, Castel Volturno).

Le sessioni del venerdì invece dalle sale operatorie dalla Casa di Cura Villa del Sole (Via Nazionale Appia 35, Caserta).

Si ringraziano i rispettivi Presidenti, Dottor Vincenzo Schiavone (Presidente Regionale Confindustria Campania Sezione Sanità; Presidente e General Manager del Presidio Ospedaliero Pineta Grande) e Dottor Gian Luca Maccauro (Presidente della Casa di Cura Villa del Sole), per il supporto garantito al congresso.

LIVE SURGERY STREAMING

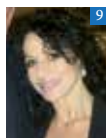
Thursday and Saturday live surgery sessions will take place in the operating rooms of Presidio Ospedaliero Pineta Grande (Via Domitiana Km 30, Castel Volturno).

Friday sessions will take place in Casa di Cura Villa del Sole (Via Nazionale Appia 35, Caserta).

The Organizing Committee thanks the Presidents, Dr. Vincenzo Schiavone of Pineta Grande and Dr. Gian Luca Maccauro of Clinica del Sole for their support.

SCRUB ASSISTANTS

- 1 - Grazia Baglioni, Siena (Nurse)
- 2 - Alfredo Calzolaio, Castel Volturno (Orthoptist)
- 3 - Valentina Cirillo, Caserta (Orthoptist)
- 4 - Eugenio Di Domenico, Castel Volturno (Orthoptist)
- 5 - Maria Di Grazia, Castel Volturno (Ophthalmologist)
- 6 - Sergio Iodice, Castel Volturno (Ophthalmologist)
- 7 - Giorgio Morisco, Bari (Nurse)
- 8 - Tommaso Pellegrino, Grosseto (Orthoptist)
- 9 - Gabriella Rocchi, Grosseto (Nurse)
- 10 - Veronica Scognamiglio, Grosseto (Nurse)
- 11 - Daniele Spataro, Grosseto (Orthoptist)
- 12 - Catiuscia Zuin, Padua (Nurse)





INFORMAZIONI GENERALI

Segreteria organizzativa e prenotazioni alberghiere



AIM Group International – Sede di Milano

Via G. Ripamonti, 129 - 20141 Milano

Tel.: 02 56601.1 - Fax: 02 70048578

E-mail: sicssso2016@aimgroup.eu

sicssso2016.hotel@aimgroup.eu

Orari di Segreteria

Giovedì, 23 giugno 12.00-19.45

Venerdì, 24 giugno 08.00-18.00

Sabato, 25 giugno 08.00-13.30

Sede congressuale

GOLDEN TULIP PLAZA CASERTA HOTEL

Viale Lamberti - 81100 Caserta - Tel: 0823 523001

Raggiungere Caserta

Consigliamo di volare su Roma.

L'aeroporto Roma Fiumicino (FCO) è collegato con la stazione dei treni Roma Termini dal treno Leonardo Express che parte ogni 15-20 minuti (14,00 euro - 32 minuti di viaggio).

La stazione dei treni Roma Termini è collegata con treni ad alta velocità direttamente con la stazione di Caserta (www.trenitalia.com).

Una volta giunti alla stazione, potrete raggiungere comodamente la sede congressuale con un taxi tel. 345 6894205 (costo approssimativo di 10,00 euro).

Badge

Tutti i partecipanti devono indossare il proprio badge nominativo per accedere alle varie aree del congresso e alle sessioni scientifiche.

Ristorazione congressuale

Pranzi e coffee break non sono inclusi nella quota d'iscrizione, ma sarà disponibile un bar a pagamento.

È possibile acquistare i coupon per un light lunch del venerdì 24 giugno al costo di € 25,00 (IVA inclusa).



Il Certificato di partecipazione

Il certificato di partecipazione sarà consegnato su richiesta al termine del congresso presso il Desk di Segreteria.

Assicurazione

Gli organizzatori non si assumono la responsabilità per danni e/o perdite subiti dai partecipanti o dagli accompagnatori.

Riprese fotografiche

Si avvisano i partecipanti che il congresso prevede la presenza di un fotografo ufficiale: le immagini riprese saranno unicamente utilizzate per scopi redazionali e promozionali legati al congresso.

La lingua ufficiale

La lingua ufficiale del congresso è l'italiano. È previsto un servizio di traduzione simultanea inglese-italiano e italiano-inglese.

Centro slide

La raccolta delle presentazioni è centralizzata. I relatori dovranno consegnare le proprie slide con almeno 2 ore di anticipo rispetto all'orario di presentazione.

WIFI

Tutti i partecipanti potranno usufruire di una rete WIFI gratuita per tutta la durata del congresso. Clicca su **PLAZAWIFI** per accedere.

Quote d'iscrizione (IVA inclusa)

Oculisti	€ 366,00
Ortottisti e Infermieri	€ 61,00
Specializzandi	€ 61,00

Si ricorda che per effetto dell'entrata in vigore del DL 201/2011, non è più possibile effettuare pagamenti in denaro contante, per importi pari o superiori a € 1.000. Tali pagamenti dovranno essere eseguiti tramite carta di credito.



GENERAL INFORMATION

Organizing Secretariat & Official Housing Bureau



AIM Group International – Milan Office

Via G. Ripamonti, 129 - 20141 Milan

Ph.: +39 02 56601.1 - Fax: +39 02 70048578

E-mail: sicssso2016@aimgroup.eu

sicssso2016.hotel@aimgroup.eu

Opening times

Thursday, 23 June	12.00-19.45
Friday, 24 June	08.00-18.00
Saturday, 25 June	08.00-13.30

Congress venue

GOLDEN TULIP PLAZA CASERTA HOTEL

Viale Lamberti - 81100 Caserta - Ph. +39 0823 523001

How to reach Caserta

We suggest to arrive in Rome.

The airport of Rome Fiumicino (FCO) is connected with the train station Rome Termini with the train Leonardo Express. It leaves every 15-20 minutes (14,00 euro – 32 minutes of trip).

The train station is connected with high speed Frecciarossa trains directly with the train station of Caserta (www.trenitalia.com).

When you arrive to the station, you can reach the congress venue by a taxi (ph. +39 345 6894205 - 10,00 euro approx.)

Badges

All participants must wear their personal badge to have access to the congress.

Food & beverage

Lunches and coffee breaks are not included in the congress fee. A bar will be available at the congress venue. Lunch ticket on 24 June can be bought at the Registration Desk (€ 25,00 - VAT included).

Certificate of attendance

The certificate of attendance will be handed out to all registered participants at the end of the congress.



Insurance

Delegates are advised to take out travel insurance to cover medical expenses, accidents, loss etc. The Organizers will not accept any liability for damage, theft or loss of any Participant's property in any circumstances.

Photos

Participants are informed that an official congress photographer will take pictures during the congress and the social events. Those images will be used only for purposes linked to the event promotion.

Official language

The official language of the congress is Italian. Simultaneous translation English-Italian and Italian-English will be available.

Slide center

All presentations are centralized. Speakers are invited to drop their presentation at the slide center not later than 2 hours before "show time".

WIFI

The XV SICSSO Congress is covered by free wi-fi connection. Click on **PLAZAWIFI** to access the free wi-fi.

Registration fees (VAT included)

Ophtalmologist	€ 366,00
Orthoptist and Nurse	€ 61,00
Resident	€ 61,00

Due to the Italian Law (Decree 6.12.2011 nr. 201) it is forbidden to transfer cash between different subjects for an amount exceeding € 999,99. Therefore please kindly note that on site payments will only be accepted by credit cards.



WET LABs

Dopo i successi riscontrati negli anni precedenti, anche questo anno il congresso S.I.C.S.S.O. propone i wet lab avvalendosi dei tessuti di scarto provenienti dalle banche degli occhi. La possibilità di esercitarsi su tessuti di scarto delle banche consente un apprendimento più reale delle nuove tecniche della chirurgia della cornea e della superficie oculare.



I corsi, della durata di un'ora, prevedono 9 partecipanti, che utilizzeranno microscopi da tavolo. Il docente effettuerà la chirurgia con un microscopio provvisto di telecamera.

Costo di partecipazione (da aggiungere alla quota d'iscrizione al congresso):
€ 150,00 (IVA inclusa)

PROGRAMMA

Direttore: G. Salvalaio

Giovedì, 23 Giugno

17.00-18.00 - **Membrana Amniotica** - Istruttore: J.S. Mehta
Lingua: Inglese

Venerdì, 24 Giugno

09.00-10.00 - **DALK** - Istruttore: R. Fogla - Lingua: Inglese

10.30-11.30 - **Stripping del donatore nella DMEK** - Istruttore: V. Maurino
Lingua: Italiano

15.00-16.00 - **DALK** - Istruttore: G. Marchini - Lingua: Italiano

16.30-17.30 - **DSAEK** - Istruttore: W.B. Lee - Lingua: Inglese

Sabato, 25 Giugno

10.00-11.00 - **DMEK** - Istruttore: M. Terry - Lingua: Inglese



WET LABs

The organization of wet labs has always registered a great success in the past editions of the SICSSO congress: that is why we are again offering young surgeons the opportunity to train using corneal tissues made available from eye banks.

Wet labs have a duration of 1 hour; 9 are allowed per session, as this is the availability of microscopes. Teacher's surgery will be shown through a camera set on his microscope.



Participation cost (*to be added to the congress registration*):
€ 150,00 (VAT included)

PROGRAM

Director: G. Salvalaio

Thursday, 23 June

17.00-18.00 - **Amniotic Membrane** - Teacher: J.S. Mehta
Language: English

Friday, 24 June

09.00-10.00 - **DALK** - Teacher: R. Fogla - Language: English
10.30-11.30 - **Donor stripping for DMEK** - Teacher: V. Maurino
Language: Italian
15.00-16.00 - **DALK** - Teacher: G. Marchini - Language: Italian
16.30-17.30 - **DSAEK** - Teacher: W.B. Lee - Language: English

Saturday, 25 June

10.00-11.00 - **DMEK** - Teacher: M. Terry - Language: English

S.I.C.S.S.O. PARTY Friday 24 June



La Reggia di Caserta e il suo parco, due gioielli di ineguagliabile splendore, sono stati inseriti nella World Heritage List dell'Unesco nel 1997. Progettata nel 700 da Luigi Vanvitelli, su incarico di Carlo III di Borbone, la Reggia, che rappresenta il trionfo del barocco italiano, è una delle opere più importanti del famoso architetto napoletano: il suo visitatore resta incantato dalla bellezza degli interni e dalle magnificenze dell'esterno. Curatissima nei dettagli ed articolata su quattro monumentali cortili, la costruzione è fronteggiata da uno scenografico parco oggi meta di migliaia di turisti. Il sontuoso palazzo è una fusione ideale e originale di altre due residenze reali: la Reggia di Versailles dei re di Francia e il madrilenio Palazzo dell'Escorial, sede dei re di Spagna.

[Non mancate!](#)

Costo di partecipazione: € 60,00 (IVA inclusa)



The Royal Palace and its park, the two unparalleled splendor jewelries, have been included in the World Heritage List in 1997. Designed in the eighteenth century by Luigi Vanvitelli, commissioned by Charles III, the Royal Palace, which is the triumph of the Italian Baroque, is one of the most important works of the famous Neapolitan architect: each visitor is enchanted by the beauty of the interior and the magnificence of external. Well-kept in the details, the building is fronted by a scenic park, destination of thousands of tourists. The sumptuous palace is a great and original blend of two other royal residences: the Royal Palace of Versailles, France and the Madrid Escorial Palace, Spain.

[Join us](#) for a nice informal gathering, among friends wishing to share the pleasure for nice music and good local cuisine.



Participation cost: € 60,00 (VAT included)

S.I.C.S.S.O. 2016 MEDAL LECTURES

FRANCIS PRICE, M.D.

Francis Price, Jr. MD is the founder and president of Price Vision Group and the Cornea Research Foundation of America. He is an internationally recognized ophthalmic surgeon and recipient of the Senior Achievement Award from the American Academy of Ophthalmology and the Barraquer Award from the International Society of Refractive Surgery. He has authored over 200 peer-reviewed publications and book chapters and been principal investigator of more than 100 clinical studies of ophthalmic devices, medications and surgical techniques. He is also an inventor and holds several patents for ophthalmic devices. Dr. Price is a graduate of Indiana University Medical School and completed a fellowship in cornea and external disease at Tulane University. He has been active in developing and teaching endothelial keratoplasty techniques to hundreds of surgeons from around the world in intensive 2-day courses offered in Indianapolis, IN.



KRUMEICH JORG H.

Dr. Jorg H. Krumeich (JK) is head of the Krumeich Outpatient Hospital in Bochum, Germany. Main interests are the anterior segment of the eye. Based on training with Dr. José Barraquer in Bogotá he was one of the first Keratomileusis surgeons generating the non-freeze technique with the Barraquer Krumeich Swinger (BKS) – Set. This technique is presently rejuvenated as individually refractively carved Epikeratophakias are employed for Keratoconus III and IV. For penetrating Keratoplasties JK developed the Guided Trephine System (GTS), which is used for about 75% of the PK surgeries in Germany. This is the first

system avoiding tilt during the cut as the major reason for astigmatism. It newly allows to include the donor radii with obturators of the respective measurements different for donor and recipient. The intrastromal ring for Penetrating Keratoplasties consisting of Titanium/Molybdenum/Cobalt/Chromium was introduced ca. 2002 and used on more than 1000 cases reducing the immune reaction rate to 2,7%. The antivasculature properties of the ring are also used to stop Pterygia when placed as a segment in the corneal parenchyma. Newly the non-IOP suction ring is introduced to fixate the globe for Lasik surgery to avoid movements of the eye during laser cutting.

For deep lamellar Keratoplasties JK developed the water pillow technique that allows visualization of Descemet's for a better control of surgically baring this membrane.

Present approach for Keratoconus I and II is topic of this SICSSO presentation addressing a closed corneal femtosecond circular incision to create a scar to stop progression of the cone.

Among the awards received by JK are 4 times the Oscar for the best development at the German organization for ocular surgeons (DOC) and the gold medal of the Societa Italiana Trapianto Di Cornea (SITRAC) in Siena 2010.

SCIENTIFIC PROGRAM

Simultaneous translation



THURSDAY, 23 JUNE

TIME	ROOM LEONARDO DA VINCI 1+2	ROOM FERMI	ROOM VOLTA	ROOM LEONARDO DA VINCI 3	OPERATING ROOM
13.45-14.00	SICSSO CONGRESS OPENING				
14.00-15.00	INNOVATIONS				
15.00-17.00	IMMUNOLOGY AND GENETIC CLINICAL CASE PRESENTATION				Live surgery V. MAURINO
17.00-18.00	OCULAR SURFACE	WET LAB Amniotic Membrane J.S. MEHTA			Live surgery J.L. GÜELL
18.00-19.00					
19.00-19.45	YOUNG ITALIAN OPHTHALMOLOGISTS				

FRIDAY, 24 JUNE

TIME	ROOM LEONARDO DA VINCI 1+2	ROOM FERMI	ROOM VOLTA	ROOM LEONARDO DA VINCI 3	OPERATING ROOM
08.30-09.00	INNOVATIONS				
09.00-09.20		WET LAB DALK R. FOGLA			
09.20-10.00					Live surgery V. SARNICOLA
10.00-10.30	LECTURES (Part 1)				
10.30-10.40					
10.40-11.00	BREAK	WET LAB Donor stripping for DMEK V. MAURINO			
11.00-11.30	LECTURES (Part 2)				Live surgery A. GALAN
11.30-12.15					
12.15-13.00	SICSSO MEDAL LECTURES				
13.00-14.30	LUNCH BREAK	WORKSHOP IVIS TECHNOLOGIES (su invito) Focus on ectatic corneal regularization and crosslinking	LUNCH SYMPOSIUM La gestione dell'occhio secco in pratica: casi clinici	LUNCH SYMPOSIUM S.I.F.I. S.P.A. Infections world - Stress the experts	
14.30-15.00	INFECTIONS CLINICAL CASE PRESENTATION		WORKSHOP C.I.O. Imaging del segmento anteriore		Live surgery M. TERRY
15.00-16.00		WET LAB DALK G. MARCHINI			
16.00-16.30					
16.30-17.30	DALK	WET LAB DSAEK W.B. LEE			Live surgery A. CAPOROSSI
17.30-18.00					

SATURDAY, 25 JUNE

TIME	ROOM LEONARDO DA VINCI 1+2	ROOM FERMI	ROOM VOLTA	ROOM LEONARDO DA VINCI 3	OPERATING ROOM	POSTER AREA
08.30-09.30	INNOVATIONS					POSTER PRESENTATION
09.30-09.50						
09.50-10.00						
10.00-10.30	KERATOCONUS AND CROSSLINKING	WET LAB DMEK M. TERRY			Live surgery R. FOGLA	
10.30-11.00						
11.00-11.30						
11.30-13.10	EK				Live surgery G. ALESSIO	
13.10-13.30	BEST ORAL AND BEST POSTER AWARDS					

13.45 -14.00 OPENING OF THE CONGRESS

V. Sarnicola (Grosseto), F. Romano (Caserta), D. Marotta (Caserta),
V. Schiavone (Presidente Regionale Confindustria Campania Sezione Sanità; Presidente
e General Manager del Presidio Ospedaliero Pineta Grande, Castel Volturno)

PANEL: G. Alessio (Bari), G. Marchini (Verona), V. Maurino (UK/Castel Volturno),
R. Mencucci (Florence), A. Montericchio (Trapani), A. Mularoni (San Marino),
V. Rao (Caserta)

Special Guest: G. Matarazzo (Commissario Straordinario ASL Caserta)

14.00 -15.00 INNOVATIONS

PRESIDENT: V. Rao (Caserta)

PANEL: A. Montericchio (Trapani), V. Petitti (Rome), F. Romano (Caserta)

14.00 New “four hands” corneal neurotization technique in the treatment of iatrogenic paralysis of the facial nerve with involvement of the ophthalmic nerve: a case report

C. Menicacci, P. Gennaro, Fl. Menicacci, S.A. Bagaglia, F. Menicacci (Siena)

14.07 Different challenging strategies for treatment of ocular GVHD

E.R. Antoniazzi, S. Pezzotta, P.E. Bianchi (Pavia)

14.14 A single-center phase II study of topical application of patlet-derived eye drops for patients with ocular chronic graft-versus-host disease

M. Astori, D. Dolcino, L. Mazzucco, R. Guaschino, F. Zallio, M. Pini, F. Monaco, M. Ladetto (Alessandria)

14.21 PTK for fish eye disease corneal dystrophy

F. Franco, A. Miele, S. Frosini (Florence)

14.28 Management of persistent epithelial defect after corneal cross-linking (CXL) plus procedure, using a new matrix therapy agent (RGTA): a case report

G. Mulè, C. Mazzola, M. Mazzola (Trento)

14.35 Angiographic and in-vivo confocal microscopic characterization of giant papillae in chronic allergic keratoconjunctivitis - a pilot study

B. Steger (Austria), V. Romano (UK), S. Kaye (UK)

14.42 Signalling pathways of two novel pro-resolving mediators, RVD1 and RVE1 in conjunctival goblet cells

R. Kaye (UK)

14.49 Discussion

15.00-17.00 IMMUNOLOGY, GENETIC and LIVE SURGERY

PRESIDENT: A. Tortori (Naples)

PANEL: K. Colby (USA), M. Nardi (Pisa), C.E. Willoughby (UK)

LIVE SURGERY STREAMING - **DMEK (live donor stripping)**

Pineta Grande - Surgical equipe: T. Bertoní (Castel Volturno),
A. Jura (Castel Volturno)

Surgeon: V. Maurino (UK/Castel Volturno)

Moderator from O.R.: R. Mencucci (Florence)

Surgical case presenter: L. Gífuní (Naples)

LECTURES

10 mín Understanding immunological responses to corneal and stem cells transplant

V. Perez (USA)

10 mín **GVHD**

V. Sarnicola (Grosseto), C. Sarnicola (Ferrara), E. Sarnicola (Siena)

10 mín **Ocular pemphigoid**

W.B. Lee (USA)

10 mín **Steven Johnson Syndrome**

R. Fogla (India)

10 mín **Clinical implications of corneal genetic diseases**

F. Simonelli (Naples)

15 mín **Clinical case presentation (Live evaluation)**

Case presenter: M. Sepe (Latina)

Discussion

17.00-19.00 OCULAR SURFACE and LIVE SURGERY

PRESIDENT: A. Mularoni (*San Marino*)

PANEL: A. Caporossi (*Rome*), A. Galan (*Padua*), O. Gallo (*Naples*),
P. Perri (*Ferrara*)

LIVE SURGERY STREAMING - DMEK (pre-stripped tissue)

Pineta Grande - Surgical équipe: T. Bertoni (*Castel Volturno*),
A. Jura (*Castel Volturno*)

Surgeon: J.L. Güell (*Spain*)

Moderator from O.R.: R. Mencucci (*Florence*)

Surgical case presenter: L. Gifuni (*Naples*)

THURSDAY, 23 JUNE

LECTURES

10 min Yield and viability of human limbal stem cells from fresh and stored tissue

S. Kaye (UK)

10 min Therapeutic criteria for ocular surface disorders

P. Aragona (Messina)

10 min The role of eyelids in ocular surface

E. Polito (Siena)

10 min Controversies in the management of ocular surface tumors

K. Colby (USA)

10 min Developing molecular therapies for inherited limbal stem cell failure

C.E. Willoughby (UK)

10 min Pterygium surgery: the wings of change

J. Suvira (India)

Discussion

19.00-19.45 CLINICAL CASES PRESENTED BY YOUNG ITALIAN OPHTHALMOLOGISTS (GOI)

PRESIDENT: *M. Nardi (Pisa)*

PANEL: *J.S. Mehta (Singapore), E. Polito (Siena)*

19.00 Dsaek and epithelial downgrowth treated with intracameral 5-fluorouracil
R. Leaci (Parma)



19.06 Acanthamoeba keratitis complicated by fungal infection
E. Bonacci (Verona)



19.12 Temporary keratoprosthesis in birdshot open globe trauma
M. Forlini (Parma)



19.18 Tough case in pediatric patient
S. Visentin (San Donà di Piave, VE)



19.24 Herpetic keratitis after CXL in corneal abscess refractory to medical treatment
M. Pulvirenti (Palermo), S. Zagari (Catania)



19.30 CXL-plus case report: improving corneal geometry in eccentric keratoconus by minimally invasive combined laser procedure
M. Rechichi (Catanzaro)



19.36 Discussion

08.30-09.20 INNOVATIONS

PRESIDENT: A. Montericchio (Trapani)

PANEL: B. Billi (Rome), L. Buzzonetti (Rome), V. Napoli (Battipaglia, SA),
F. Passani (Carrara)

08.30 In vivo confocal microscopy in the diagnosis and follow- up of fungal keratitis

E. Pedrotti, M. Passilongo, E. Bruni, S. Ficial, A. Fasolo, G. Marchini (Verona)

08.37 Dua layer microscopy analysis in pediatric patient

L. Buzzonetti (Rome), V. Napoli (Battipaglia, SA)

08.44 Intrastromal keratoplasty for pellucid marginal degeneration

M. Balidis (Greece)

08.51 One-step vs two-steps femto-lasik procedure to manage post penetrating keratoplasty astigmatism and refractive errors: 3 years follow-up

L. Mosca, S. Luceri, L. Guccione, O. Caporossi, M.E. Toro, A. Caporossi (Rome)

08.58 DALK in special cases

S. Coscarelli (Brazil)

09.05 Ocular surface lasting of cross-linked hyaluronic acid

G. Torroni (Perugia)

09.12 Discussion

09.20-10.40 LECTURES and LIVE SURGERY Part I

PRESIDENT: G. Alessio (Bari)

PANEL: P. Aragona (Messina), R. Barraquer (Spain), G. Cusati (Benevento)

LIVE SURGERY STREAMING

ONE DONOR TWO TRANSPLANTS: DMEK

Casa di Cura Villa del Sole

Surgeon: V. Sarnicola (Grosseto)

Moderator from O.R.: A. Mularoni (San Marino)

Surgical case presenter: L. Gifuni (Naples)

LECTURES

10 min One corneal donor for three recipients*C. Sarnicola (Ferrara), E. Sarnicola (Siena), V. Sarnicola (Grosseto)***10 min Advanced asoct imaging***J.S. Mehta (Singapore)***10 min Management of ocular surface diseases: the concept of ocular surface system***M. Rolando (Genoa)***Discussion****10.40-11.00 Break****11.00-12.15 LECTURES and LIVE SURGERY Part 2****PRESIDENT:** *G. Alessio (Bari)***PANEL:** *G. Greco (Siena), F. Montrone (Bari), V. Perez (USA),
A. Romani (Arezzo)***LIVE SURGERY STREAMING****ONE DONOR TWO TRANSPLANTS: DALK***Casa di Cura Villa del Sole***Surgeon:** *A. Galan (Padua)**Moderator from O.R.: A. Mularoni (San Marino)**Surgical case presenter: L. Gifuni (Naples)***10 min Raman effect and Achantamoeba infection***A. Del Prete, G. Cennamo (Naples)***10 min Is donor diabetes a concern with endothelial keratoplasty?***M.O. Price (USA)***10 min Glaucoma in keratoplasty: what is changed with lamellar techniques?***G. Marchini (Verona)***10 min Corneal Endothelium: new concepts***V. Sarnicola (Grosseto)***Discussion**

12.15-13.00 S.I.C.S.S.O. MEDAL LECTURES

PRESIDENT: V. Sarnicola (Grosseto)

BOARD: G. Alessio (Bari), G. Marchini (Verona), V. Maurino (UK/Castel Volturno),
R. Mencucci (Florence), A. Montericchio (Trapani),
A. Mularoni (San Marino)



CHOOSING THE BEST PROCEDURE FOR ENDOTHELIAL DYSFUNCTION

FRANCIS PRICE (USA)

FEMTO CIRCULAR KERATOTOMY (FEMTO CKT) FOR KERATOCONUS I AND II

JORG H. KRUMEICH (Germany)



13.00-14.30 Lunch Break

13.00-14.30

LUNCH SYMPOSIUM (Volta Room)

LA GESTIONE DELL'OCCHIO SECCO IN PRATICA:
CASI CLINICI

SPEAKER: R. Mencucci (Florence)



13.00-14.30

LUNCH SYMPOSIUM S.I.F.I. S.P.A. (Leonardo Da Vinci 3 Room)

INFECTIONS WORLD - STRESS THE EXPERTS

CHAIR: M. Rolando (Caserta)

SPEAKERS: L. Spadea (Rome), P. Aragona (Messina)



FRIDAY, 24 JUNE



13.00-14.30

WORKSHOP IVIS TECHNOLOGIES – su invito (Fermi Room)
FOCUS ON ECTASIC CORNEAL
REGULARIZATION AND CROSSLINKING



14.30-15.00

WORKSHOP COMPAGNIA ITALIANA
OFTALMOLOGICA (Volta Room)
IMAGING DEL SEGMENTO ANTERIORE

14.30 OCT SS-1000 CASIA TOMEY: esperienza della Banca degli occhi del Veneto

G. Salvalaio (Mestre, VE)

14.50 Microscopia endoteliale: nuovo EM-4000

F. Pellegrino (Nocera Inferiore, SA)

14.30-16.30 INFECTIONS and LIVE SURGERY

PRESIDENT: R. Mencucci (Florence)

PANEL: Al. Balestrazzi (Rome), E. Cantera (Rome), L. Cerulli (Rome),
F. Price (USA), M. Rolando (Genoa)

LIVE SURGERY STREAMING - DMEK (pre-stripped tissue)

Casa di Cura Villa del Sole

Surgeon: M. Terry (USA)

Moderator from O.R.: V. Orfeo (Naples)

Surgical case presenter: L. Gifuni (Naples)

LECTURES

- 10 mín Management of microbic corneal infections**
E. Tu (USA)
- 10 mín Herpes Simplex Virus update**
D. H. Scorsetti (Argentina)
- 10 mín Management of anterior segment herpes disease**
C. Rapuano (USA)
- 10 mín Management of Acanthamoeba corneal infections**
F. Sabatino (Rome)
- 10 mín Bioavailability and antimicrobial activity of the topic therapy:
how to choose the best treatment**
V. Sarnicola (Grosseto), C. Sarnicola (Ferrara), E. Sarnicola (Siena)
- 15 mín Clinical case presentation (Live evaluation)**
Case presenter: E. Sarnicola (Siena)
- Discussion**

16.30-18.00 DALK and LIVE SURGERY

PRESIDENT: *G. Marchini (Verona)*

PANEL: *J.H. Krumeich (Germany), E. Malbran (Argentina),
M. Motta (Sorrento), M. Nardi (Pisa)*

LIVE SURGERY STREAMING - DMEK (pre-stripped tissue)

Casa di Cura Villa del Sole

Surgeon: *A. Caporossi (Rome)*

Moderator from O.R.: V. Orfeo (Naples)

Surgical case presenter: L. Gifuni (Naples)

LECTURES

- 10 min dDALK and pdDALK: results and rules, layers and nomenclature**
V. Sarnicola (Grosseto), E. Sarnicola (Siena), C. Sarnicola (Ferrara)
- 10 min DALK indications: just keratoconus?**
R. Fogla (India)
- 10 min DALK for hydrops in keratoconus**
J.S. Mehta (Singapore)
- 10 min Pachy-bubble DALK technique, results and complications**
R.C. Ghanem (Brazil)
- 10 min DALK: ruptures management**
E. Sarnicola (Siena), C. Sarnicola (Ferrara), V. Sarnicola (Grosseto)
- Discussion**

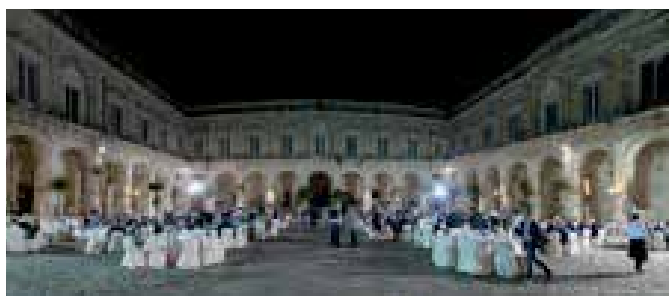
S.I.C.S.S.O. PARTY at Reggia di Caserta

FREE VISIT: Bus pick up time

1st ride 18.45

2nd and last ride 19.00

DINNER: 20.30



08.30-09.50 INNOVATIONS

PRESIDENT: *F. Romano (Caserta)*

PANEL: *An. Balestrazzi (Grosseto), C. Carbonara (Rome),
A. Mocellin (Lecce), S. Savastano (Frosinone)*

08.30 Sliding keratoplasty followed by transepithelial iontophoresis collagen cross-linking for pellucid marginal degeneration

L. Spadea, G. Maraone (Rome)

08.37 In vivo confocal microscopy during accelerated corneal cross linking for keratoconus: study at time zero

*M. Passilongo, E. Pedrotti, S. Ficial, E. Bruni, A. Fasolo,
G. Marchini (Verona)*



08.44 Endothelium flapped-in versus endothelium flapped-out for DMEK transplantation

V. Romano (UK), M. Parekh (Mestre), A. Ruzza (Mestre), S. Ahmad (UK), S. Ferrari (Mestre), S. Kaye (UK), D. Ponzin (Mestre)

08.51 Anterior corneal surface irregularity after DSEK for bullous keratopathy

L. Spadea, V. Santamaria (Rome)

08.58 Cannula assisted ab interno hydrounfolded technique in DMEK

*F. Sabatino (Rome), E. Sarnicola (Siena), C. Sarnicola (Ferrara),
V. Sarnicola (Grosseto)*

09.05 Functional results of a personal technique for DMEK

L. Mosca, A. Caporossi, L. Guccione, A. Villano (Rome)

09.12 Management of post keratoplasty astigmatism

S. Coscarelli (Brazil)

09.19 DMEK in challenging cases - after PK, aphakia and AC lenses

R.C. Ghanem (Brazil)

09.26 EK in iridocorneal endothelial syndrome

J.S. Mehta (Singapore)

09.33 Avellino corneal dystrophy test: clinical implication

P. Rosetta (Rozzano, MI)

09.40 Discussion

09.50-11.30 KERATOCONUS, CROSSLINKING and LIVE SURGERY

PRESIDENT: V. Sarnicola (Grosseto)

PANEL: W.B. Lee (USA), L. Menabuoni (Florence), F. Price (USA),
D.H. Scorsetti (Argentina), E. Tu (USA)

LIVE SURGERY STREAMING - DMEK (pre-stripped tissue)

Pineta Grande - Surgical équipe: T. Bertoni (Castel Volturno),
G. Grassi (Castel Volturno)

Surgeon: R. Fogla (India)

Moderator from O.R.: V. Maurino (UK/Castel Volturno)

Surgical case presenter: L. Gifuni (Naples)

LECTURES

10 min Crosslinking in keratoconus

C. Mazzotta (Siena)

10 min Intrastromal rings for keratoconus

R. Barraquer (Spain)

10 min Use of toric IOLS in keratoconus

R. Nuijts (The Netherlands)

10 min Custom transepithelial ectatic corneal regularization and CXL: clinic and topographic evaluation

G. Mulè (Trento)

10 min Management of late corneal ectasia following PK in keratoconus cases

E. Malbran (Argentina)

10 min Corneal imaging up to date

N. Rosa (Salerno)

10 min Corneal topography in keratoconus: case evaluation and therapeutic implications

A. Mularoni (San Marino)

Discussion

11.30-13.10 EK and LIVE SURGERY

PRESIDENT: R. Mencucci (Florence)

PANEL: G. Cusati (Benevento), R.C. Ghanem (Brazil),
M. Nordlund (USA), F. Price (USA), C. Rapuano (USA)

LIVE SURGERY STREAMING - DMEK (pre-stripped tissue)

Pineta Grande - Surgical equipe: T. Bertoni (Castel Volturno),
G. Grassi (Castel Volturno)

Surgeon: G. Alessio (Bari)

Moderator from O.R.: V. Maurino (UK/Castel Volturno)

Surgical case presenter: L. Gifuni (Naples)

LECTURES

- 10 min The dark side of DMEK: complications and how to avoid them**
M. Terry (USA)
- 10 min Rethinking fuchs dystrophy: corneal clearance without endothelial transplantation**
K. Colby (USA)
- 10 min DSEK vs PK: 10 year graft survival and endothelial cell loss**
M.O. Price (USA)
- 10 min A multicentre randomized clinical trial of conventional DSAEK vs ULTRATHIN DSAEK**
R. Nuijts (The Netherlands)
- 10 min Easy approach to DMEK surgery**
R. Fogla (India)
- 10 min DMEK tips and tricks**
J.L. Güell (Spain)
- Discussion**



13.10-13.30 BEST ORAL and BEST POSTER AWARDS

Award Commission: J.L. Güell (Spain), V. Maurino (UK /Castel Volturno),
V. Sarnicola (Grosseto)

Presentations under consideration for the Best Paper Award SICSSO 2016 are marked in the program with a cockade.

Le relazioni che concorrono all'assegnazione del Premio Miglior Abstract SICSSO 2016 sono segnalate in programma con l'immagine di una coccarda.



Poster presentation is scheduled on Saturday, 25 June, from 9:30 to 10:30.
Poster authors are kindly invited to be at their poster in order to answer to possible questions.

P1

CORNEAL IONTOPHORESIS: 12 MONTHS OF FOLLOW-UP

M.E. Latronico², A. Laborante¹, E. Mazzilli³, C. Longo⁴, E. Polito⁵

¹Hospital Casa Sollievo Della Sofferenza IRCCS Head and Neck Department Division Of Ophthalmology, San Giovanni Rotondo,

²Università Degli Studi Di Siena, Ospedale Santa Maria Le Scotte Ophthalmology Department, Siena



P2

A REPORT OF A RECENT ACANTHAMOEBA KERATITIS OUBREAK IN TUSCANY

A. Miele¹, E. Favuzza¹, O. Caporossi¹, A. Antonelli^{2,3}, A. Galano^{3,4},
N. Ciccone⁴, G.M. Rossolini^{2,3,4}, R. Mencucci¹

¹Eye clinic, Department of Surgery and Translational Medicine, University of Florence, Florence, ²Department of Experimental and Clinical Medicine, University of Florence, Florence, ³Department of Medical Biotechnologies, University of Siena, Siena, ⁴Clinical Microbiology and Virology Unit, Florence Careggi University Hospital, Florence



P3

COMPLETE VISUAL RESTORATION IN A CASE OF ASPERGILLUS FLAVUS ENDOPHTHALMITIS AFTER PENETRATING KERATOPLASTY COMBINED WITH CATARACT PHACOEMULSIFICATION

E. Tonti, R. Secondi, L. Spadea
Sapienza University, Rome



P4

CORNEAL REGULARIZATION IN OCULAR PEMPHIGOID TREATED WITH EXCIMER LASER AFTER T-PTK

M. Zagari¹, S. Zagari¹, M. Rechichi², M. Ferrise³

¹Centro Europeo Di Oftalmologia, Acicastello, ²Eye Center, Catanzaro,

³Università Magna Graecia Di Catanzaro, Catanzaro

P5

LONG TERM DESCEMENT'S MEMBRANE DETACHMENT AND SPONTANEOUS WOUND DEHISCENCE AFTER PENETRATING KERATOPLASTY IN ADVANCED KERATOCONUS

F. Aiello¹, F. Matarazzo², V. Maurino¹

¹Moorfields Eye Hospital, London, UK, ²Università Federico II, Naples

P6

CROSS-LINKING TREATMENT AND ICL IMPLANTATION IN PATIENTS WITH CENTRAL KERATOCONUS AND HIGH MYOPIA



G. Chimenti, M. Capozzoli, M. Fruschelli, E. Motolese

Università Degli Studi di Siena, Siena

P7

MANAGING OF A CASE OF LATE DESCOMET MEMBRANE BREAK IN DALK

P. Garimoldi, M. De Molfetta

Ospedale Galmarini ASST Sette Laghi, Tradate (VA)

P8

DALK ON HYDROPS OR DESCOMETOCELES

M. Balidis

Ophthalmica Microsurgical Day Clinic, Thessaloniki, Greece

LONG TERM DESCEMENT'S MEMBRANE DETACHMENT AND SPONTANEOUS WOUND DEHISCENCE AFTER PENETRATING KERATOPLASTY IN ADVANCED KERATOCONUS

F. Aiello¹, F. Matarazzo², V. Maurino¹

¹*Moorfields Eye Hospital, London, UK*, ²*Università Federico II, Naples*

Purpose: To report a delayed-onset spontaneous Descemet membrane (DM) detachment and wound dehiscence following penetrating keratoplasty (PKP) in keratoconic eye.

Design: observational case report.

Methods: We report a case of misdiagnosed spontaneous DM detachment treated as corneal graft rejection in patient that underwent a PKP 19 years before for advanced keratoconus. Anterior segment optical coherence tomography (OCT) confirmed diagnosis of DM detachment that was treated conservatively with steroids and hyperosmotic drops with subsequent resolution. Two years later a second episode of DM detachment occurred along with spontaneous graft wound dehiscence leading to choroidal detachment.

Results: Choroidal detachment was treated conservatively and after resolution anterior chamber air rebubbling has been rescued. After 48 hours of anatomical success a DM redetachment was noted and redo PKP was planned.

Conclusion: Spontaneous DM detachment after long-standing PKP in keratoconus eye can occur. This can lead to corneal edema and consequent graft/host dehiscence even years after surgery. Clinician should be aware avoiding misdiagnosis with graft rejection, Anterior segment OCT can help to confirm the diagnosis; medical treatment can work in first instance but surgical approach can be required.


DIFFERENT CHALLENGING STRATEGIES FOR TREATMENT OF OCULAR GVHD

E.R. Antoniazzi, S. Pezzotta, P.E. Bianchi

IRCCS Policlinico San Matteo Foundation - S.C. Oculistica, Pavia

Ocular chronic graft-versus-host-disease (oGVHD) affects about 40-60% of patients in chronic setting after allogeneic hematopoietic cell transplantation (HSCT). oGVHD has protean clinical manifestations, affecting multiple parts of the eye, including conjunctiva, lacrimal gland, cornea, the lid and the vitreous. The most frequent ocular manifestation of oGVHD is Dry Eye Syndrome (DES), observed in 69-77% of patients with chronic systemic GVHD.

While immunosuppressive therapy is the primary treatment of chronic GVHD,



ocular symptoms require measures to improve ocular lubrication, decrease inflammation and maintain mucosal integrity. For this reason oGVHD requires different therapeutic strategies to reduce ocular inflammation and corneal lesions. An individually adapted multimodal stage-related (that includes artificial tears, corticosteroids, CsA, autologous serum, scleral lenses, punctum plugs and platelet lysate drops) and interdisciplinary therapy in cooperation with hematologists is mandatory for the treatment of these patients. We report our experience about oGVHD patients with a multidisciplinary and multilevel approach.

A SINGLE-CENTER PHASE II STUDY OF TOPICAL APPLICATION OF PLATELET-DERIVED EYE DROPS FOR PATIENTS WITH OCULAR CHRONIC GRAFT-VERSUS-HOST DISEASE

M. Astori¹, D. Dolcino¹, L. Mazzucco², R. Guaschino², F. Zallio³, M. Pini³, F. Monaco³, M. Ladetto³

¹*Ophthalmologic Department Ss. Antonio e Biagio Hospital, Alessandria,*

²*Transfusion e Regeneration Medicine, Alessandria,*

³*Hematology Department, Alessandria*

Ocular involvement of chronic graft-versus-host disease (cGVHD) is a severe condition that occurs in up to 60% of patients following allogeneic hematopoietic stem cell transplant (HSCT). We conducted a single-center, phase II study, to assess efficacy and safety, using eye drops made from reconstituted, lysed, platelet concentrate. Twenty-six patients with ocular cGVHD were eligible for the study; all but two completed their scheduled one-year treatment, and complied with the hematologic and ophthalmic regimen. At their first assessment interviews, after 30 days of treatment, 91% of patients reported an improvement in their symptoms (S), and for 32%, substantive objective differences were measured (T). Remission of corneal damage was seen for 86% of our cohort, and improved NIH scores for 73%, of which 8% achieved the best score of 0 (i.e. non-dry eye). Similar results were seen at later time points. Comparing outcomes for our patient cohort, to those determined retrospectively for patients in our institutional database, revealed a 5-year overall survival (OS) of 65%. This OS is comparable to patients with limited cGVHD (75%), and is superior to that of patients with non-ocular extensive GVHD, or without cGVHD (38% and 48% respectively) ($P = 0.006$). Our results suggest that platelet derived eye drops are a safe, practical, and well-tolerated therapeutic option, that offers substantial benefits for most patients affected by ocular cGVHD at onset. The favorable OS of our patient cohort, suggests that this topical therapy, rather than systemic immunosuppression, may be the treatment of choice.



DALK ON HYDROPS OR DESCMETOCELES

M. Balidis

Ophthalmica Microsurgical Day Clinic, Thessaloniki, Greece

A retrospective review of 7 cases with descemetocoele or small Descemet's perforation (less than 1mm). Deep Anterior lamellar keratoplasty performed in all cases. We use Melles dissectors, air and viscoelastic to perform deep stromal separation, avoiding expansion of the DM hole. Stromal oedema, Visual acuity, complications and rejection rates will be presented.

INTRASTROMAL KERATOPLASTY FOR PELLUCID MARGINAL DEGENERATION

M. Balidis

Ophthalmica Microsurgical Day Clinic, Thessaloniki, Greece

We present an intrastromal lamellar keratoplasty technique for pellucid marginal degeneration (PMD). A donor stromal disc (epithelium and endothelium removed) of 8.00mm is cross linked using the standard protocol. Then is ablated with excimer laser (standard myopic profile of 6.0 mm treatment zone) to match the recipient thickness by progressively thinning the center of the disc. Then we proceed with an intrastromal pocket created with Melles dissectors along the marked margins of the thinned inferior cornea. A crescent graft of similar size is trephined from the donor disc. The donor crescentic stroma is then inserted into the stromal pocket. Results and tomographies and OCT will be presented.

CROSS-LINKING TREATMENT AND ICL IMPLANTATION IN PATIENTS WITH CENTRAL KERATOCONUS AND HIGH MYOPIA


G. Chimenti, M. Capozzoli, M. Fruschelli, E. Motolese

Università Degli Studi Di Siena, Siena

A 39 year-old woman with high myopia and keratoconus underwent posterior chamber toric implantable Collamer lens (Visian ICL: STAAR Surgical) implantation 7 months after corneal collagen cross-linking with riboflavin and ultraviolet radiation A.

Cross-linking has provided to the patient stability of keratoconus, the ICL implantation made independent patient by spectacles and contact lenses. Subsequently to provide the patient with a homogeneous quality of life has been implanted with the ICL in the contralateral eye.

No intraoperative or postoperative complications were observed. One month postoperatively, corrected distance visual acuity improved from 40/100 with



spherical and cylindrical correction to 20/25 without correction. Combined cross-linking treatment and posterior chamber toric phakic Collamer lens implantation in a two-step procedure seems to be an effective method for correcting high refractive defects in stable keratoconus.

Despite the encouraging results, a most numerous cases is necessary to evaluate the outcomes of this approach.

PTK FOR FISH EYE DISEASE CORNEAL DYSTROPHY

F. Franco, A. Miele, S. Frosini

AOU-Careggi - Ottica Fisiopatologica, Florence

Purpose: to describe PTK clinical efficacy in a case of bilateral Fish Eye Disease Corneal Dystrophy.

Methods: a 45 years old patient underwent to slit lamp examination, visual acuity measurement, OCT Visante, anterior segment photography, Scheimpflug camera evaluation.

Results: the patient reports bilateral visual loss, ocular surface discomfort. A corneal dystrophy was observed in both eye. The patient was evaluated and a PTK in both eyes was performed.

Conclusion: the PTK resulted in improving the transparency of the central cornea surface, improving the visual acuity and reducing the ocular discomfort.

MANAGING OF A CASE OF LATE DESCMET MEMBRANE BREAK IN DALK

P. Garimoldi, M. De Molfetta


Ospedale Galmarini ASST Sette Laghi, Tradate (VA)

Purpose: To suggest how to manage late Descemet membrane in DALK.

Methods: An eye with herpetic leucoma was treated with big bubble DALK. DALK was successfully performed on a 8 mm diameter area. After having placed the donor graft, which had been previously removed the endothelium, an attempt to remove an air bubble at the interface produced a rupture of Descemet membrane with a collapse of the anterior chamber. The donor cornea was sutured with single sutures and air bubble was injected to get the adhesion of Descemet membrane.

Examination of the anterior chamber with OCT Visante (Zeiss) to evaluate the position of Descemet were performed in follow up.

Results: OCT Visante showed corneal edema and detachment of Descemet membrane which appeared interrupted and enrolled.



Flattening of Descemet was obtained using a surgical irrigation cannula. An air bubble was injected into the anterior chamber to stick Descemet to the donor cornea. A new OCT examination showed cornea edema. Descemet appeared flattened without visible interruption but separated from the donor graft. An iridectomy and air bubble over filling was performed. OCT examination showed a complete adhesion of Descemet membrane to the donor graft and reduction of cornea edema that kept reducing in the upcoming exams.

Conclusions: In case of a break of Descemet membrane that happens after that the removal of the anterior cornea tissue is completed, a surgical flattening and adhesion of Descemet to the donor cornea must be attempted before thinking to perform a penetrating keratoplasty.

CORNEAL IONTOPHORESIS: 12 MONTHS OF FOLLOW-UP

M.E. Latronico², A. Laborante¹, E. Mazzilli³, C. Longo⁴, E. Polito⁵

¹*Hospital Casa Sollievo Della Sofferenza Irccs Head And Neck Department Division Of Ophthalmology, San Giovanni Rotondo,*

²*Università Degli Studi Di Siena Ospedale Santa Maria Le Scotte Ophthalmology Department, Siena*


Purpose: To evaluate the effect induced by UVA radiation with corneal iontophoresis and cross-linking : 12 months follow-up.

Material and Methods: From December 2014 to December 2015 we saw 21 eyes of 18 patients, aged between 19-38 years (3 women and 15 men) keratoconus stage 1-2. Vision evaluation was carried out with ETDRS scale and Topography and Pachymetry. To evaluate line of demarcation with the confocal microscope and the pain with the Faces Pain Scale. We also evaluated the integrity of the corneal endothelium with the endothelial count.

Result: At 6 months there was a stabilization of vision and topography, with a slight improvement at 1 year of vision of 1 line and of the Km of 0.5 diopters. In vivo microscopic examination with the confocal showed that the line of demarcation was not particularly evident, it was irregular and when present was more evident at 150-200 μ depth.

There were also superficial epithelial alterations present and only slight involvement of the subepithelial nervous plexus, there were no alterations of the endothelium. We have to stress the usefulness of Corneal optical coherence tomography (OCT) also pre and post iontophoretic treatment.

Conclusions: Further, larger studies and longer follow-ups are needed, recent studies have shown the absorption of riboflavin with iontophoresis is 50% with



respect to the classic technique, the percentage of riboflavin in the anterior 2/3 of the corneal stroma would be, however, efficacious to provide good results.
Non Financial Interest.

NEW “FOUR HANDS” CORNEAL NEUROTIZATION TECHNIQUE IN THE TREATMENT OF IATROGENIC PARALYSIS OF THE FACIAL NERVE WITH INVOLVEMENT OF THE OPHTHALMIC NERVE: A CASE REPORT

C. Menicacci, P. Gennaro, Fl. Menicacci, S.A. Bagaglia, F. Menicacci

Siena

We present a new technique for corneal neurotization as completion of a resuscitation of the facial complex with lesion of the facial nerve and of the third branch of trigeminal nerve caused by the surgical treatment of a neurinoma of the VIII cranial nerve.

59 year-old patient suffering from iatrogenic facial paralysis and lesion of ophthalmic branch of the trigeminal nerve arisen after surgery to remove a VIII c.n. neurinoma. The patient had a complete facial palsy with lagophthalmos, corneal exposure and neurotrophic keratitis. Through the collaboration between maxillofacial and ophthalmic surgeon corneal neurotization was performed using the infra-orbital ipsilateral nerve (branch of the second branch of the trigeminal). Masseteric nerve was used to reactivate the motor facial nerve to provide a new stimulus to the motor part of the facial nerve injured.

The patient was evaluated by complete ophthalmoscopic examination, cheratoesthesiometry at baseline (pre intervention), at 3 months, 6 months and 1 year. It was also performed confocal microscopy for the evaluation of the sub-basal nervous plexus preoperative and at 1 year postoperative.

At 6 months after surgery, the patient has a good recovery of facial paralysis with good static and dynamic facial symmetry; slight increase of corneal sensitivity and initial good eyelid competence. At 1 year paralysis recovery was better, as well as the corneal sensitivity. Confocal microscopy showed an increase in the number and the caliber of the nerve fibers comparing it to pre-operative examination and the other eye.

This technique is still under development and the number of cases and long term results in literature are just a few. In our case, subjective results, static and dynamic symmetric improvement and the results obtained with confocal microscopy are desirable for future development of this pioneering technique.



A REPORT OF A RECENT ACANTHAMOEBA KERATITIS OUBREAK IN TUSCANY

A. Miele¹, E. Favuzza¹, O. Caporossi¹, A. Antonelli^{2,3}, A. Galano^{3,4}, N. Ciccone⁴, G.M. Rossolini^{2,3,4}, R. Mencucci¹

¹*Eye clinic, Department of Surgery and Translational Medicine, University of Florence, Florence,* ²*Department of Experimental and Clinical Medicine, University of Florence, Florence,* ³*Department of Medical Biotechnologies, University of Siena, Siena,* ⁴*Clinical Microbiology and Virology Unit, Florence Careggi University Hospital, Florence*

Purpose: To report for the first time 7 cases of contact-lens related Acanthamoeba keratitis diagnosed between January 2014 and August 2015 in Tuscany, Italy, confirmed by molecular analysis.

Methods: Seven patients affected by severe and refractory to antibiotic therapy contact-lens related keratitis were referred to the Eye Clinic of the University of Florence, Italy, between January 2014 and August 2015. Acanthamoeba infection was clinically suspected, and corneal scrapings were performed and sent to the Careggi hospital microbiology laboratory for microbiological analysis. Acanthamoeba DNA detection and genotypization were carried out using a novel real time PCR, and simultaneously samples were cultured on non-nutrient agar plates. Contact lenses or lens cases, if available, were also analyzed.

Results: Real time PCR allowed Acanthamoeba DNA detection in all samples in about 180 minutes. The T4 genotype was the most common (6 cases), whereas one case had T3 genotype. Amoebicidal therapy was promptly started and continued for at least 6 months. Acanthamoeba cysts were also detected by in vivo confocal microscopy. All patients were resident in Tuscany, Italy, 4 of them in the province of Massa Carrara.


Discussion: We described for the first time 7 cases of Acanthamoeba keratitis that occurred in Tuscany in a 18-month period. A novel real time PCR allowed fast detection and confirmation of Acanthamoeba infection and a prompt specific treatment.

FUNCTIONAL RESULTS OF A PERSONAL TECNQUE FOR DMEK

L. Mosca, A. Caporossi, L. Guccione, A. Villano

Catholic University of Sacro Cuore - A. Gemelli Polyclinic Foundation, Rome

Objective: To evaluate the functional of a personal surgical tecnique of DMEK with dedicate surgical instrumentation in term of BSCVA, endothelial cell loss, rejection rate, and Descemet detachment.



Methods: 8 eyes of 8 patients affected by FECD (5 eyes) or Bullous pseudophakic endothelial keratopathy (3 eyes) have been submitted to a personal technique of DMEK. Functional parameters were: mean BSCVA, mean ECD, graft rejection rate, and graft detachment rate during follow-up at 3, 6 and 12 months.

Results: Mean preoperative BSCVA was $3,75 \pm 1.04$ SD and increased to 8.20 at 3 months and $9,25 \pm 0,89$ SD at 6 months postoperatively.

Mean preoperative ECD was $2525 \text{ cell/mm}^2 \pm 103,51$ SD, and decreased to $2020,38 \text{ cell/mm}^2 \pm 169,55$ SD at 6 months follow-up (rate of postop ECD loss of 20,01%).

No case of graft rejection during follow-up. A partial graft detachment occurred in 7 of 8 eyes (88,8%) from 2 to 7 days postoperatively, all submitted to successful rebubbling technique.

Conclusions: Even with a high rate of rebubbling, this technique of DMEK with personalized instrumentation showed good results in term of postoperative BSCVA, ECD loss and graft rejection rate.

None of the authors have a financial interest in any product mentioned.

ONE-STEP VS TWO-STEPS FEMTO-LASIK PROCEDURE TO MANAGE POST-PENETRATING KERATOPLASTY ASTIGMATISM AND REFRACTIVE ERRORS: 3 YEARS FOLLOW-UP


L. Mosca, S. Luceri, L. Guccione, O. Caporossi, M.E. Toro, A. Caporossi

Cornea and Refractive Surgery Service, Ophthalmic Department, Catholic University of "Sacro Cuore", Rome

Purpose: To investigate visual and refractive outcomes of post-penetrating keratoplasty astigmatism and refractive errors with femtosecond-assisted LASIK performed in 1 step (lamellar cut and excimer ablation at the same time) or 2 steps (first lamellar cut and then delayed excimer ablation).

Methods: In this retrospective non randomized comparative study, 27 eyes of 26 patients (15 male, 11 female; mean age: 41 yrs ± 13.6 SD, range: 23 to 69 years.) underwent to LASIK procedure assisted by a femtosecond laser (Femto-LASIK) to correct high post-PKP refractive errors, at least two years after complete suture removal. Group 1 (one-step Femto-LASIK) included 14 eyes and Group 2 (two-step Femto-LASIK), 13 eyes. The follow-up was 3 years.

Results: the mean refractive spherical equivalent (MRSE) improved from $3.97\text{D} \pm 2.34\text{SD}$ to $0.91\text{D} \pm 1.65\text{SD}$ in Group 1 and from $5.22\text{D} \pm 2.47\text{SD}$ to $1.46\text{D} \pm 1.43\text{SD}$ in Group 2. A statistical significant improvement in refractive cylinder was obtained in both groups, but it was a little more evident in Group



2: this finding was supported by the reduction in topographic keratometry. Best spectacle-corrected visual acuity improved in both groups (BSCVA Group 1: from 1.42 logMAR \pm 0.56SD to 0.07 logMAR \pm 0.25SD; BSCVA Group 2: 1.28 logMAR \pm 0.63SD to 0.05 logMAR \pm 0.27SD) at the end of the follow-up.

Conclusion: Femtolaser-assisted LASIK, performed in one or two steps, is a reasonably safe and predictable procedure in reducing high refractive errors in post-PKP corneas, with acceptable stability over time. Visual and refractive outcomes were found to be a little better in the two-step technique.

None of the authors have a financial interest in any product mentioned.

CUSTOM TRANSEPITHELIAL ECTATIC CORNEAL REGULARIZATION AND CXL: CLINIC AND TOPOGRAPHIC EVALUATION

G. Mulè, C. Mazzola

¹iVis Centre Refractive Laser, San Camillo Hospital, Trento

Purpose: We report our experience with transepithelial excimer corneal regularization plus CXL in patients affected by ectatic corneal disorders.

Methods: CXL plus procedure (Transepithelial excimer corneal regularization plus corneal cross-linking) was applied in a group of 14 patients affected by keratoconus or pellucid marginal degeneration and with LAC intolerance and low BCVA with spectacles.


Transepithelial customized corneal ablation was performed using iVis refractive platform (Precisio Topographer, Cipta software and Ires 1000Kz excimer laser); at the same time ,after refractive procedure, CXL was performed using 0.1 % Riboflavin solution and Peschke UVA lamp 9mW.

At the final follow-up time UCVA, BCVA, altitudinal corneal topography and corneal HOA(high order aberrations) were evaluated.

Results: The final shape of corneal surface allows a good improvement of UCVA, BCVA and a reduction of topographic irregularities was obtained.

Conclusion: In a CXL plus procedure the association of CXL with excimer transepithelial corneal regularization can be efficacy in terms of UCVA, BCVA and quality of vision in selected patients affected by ecstatic disorders.

Purpose: To compare the stability of the tear film after instillation of eye drops containing hyaluronic acid (HA) or cross-linked hyaluronic acid-based (CLHA) in patients with Sjogren Syndrome Dry Eye related (SSDE).



MANAGEMENT OF PERSISTENT EPITHELIAL DEFECT, AFTER CORNEAL CROSS-LINKING (CXL) PLUS PROCEDURE, USING A NEW MATRIX THERAPY AGENT (RGTA): A CASE REPORT

G. Mulè¹, C. Mazzola¹, M. Mazzola²

¹iVis Centre Trento, San Camillo Hospital, Trento, ²University of Brescia-Department of Varese, Varese

Purpose: we report our experience with the use of the matrix regenerating agent (RGTA) Cacicol® in the management of persistent epithelial defect after Corneal Cross-linking (CXL) plus procedure (transepithelial excimer corneal regularization plus UVA cross linking) in a case of pellucid marginal degeneration

Methods: CXL plus procedure (Transepithelial excimer corneal regularization plus corneal cross-linking) was applied in a healthy 46y female affected by pellucid marginal degeneration (PMD) with LAC intolerance and low BCVA with spectacles.

Transepithelial customized corneal ablation was performed using iVis refractive platform (Precisio Topographer, Cipta software and Ires 1000Kz excimer laser); at the same time, after refractive procedure, CXL was performed using 0.1 % Riboflavin solution and Peschke UVA lamp 9mW.

A persistent epithelial defect (PED) was diagnosed after 7 day and therapy with a new solution of poly-carboxymethylglucose sulfate (Cacicol®) was used.

Results: therapy with Cacicol® showed efficacy in the corneal healing of the PED, with a resolution after 7 days of therapy (regimen 1 drops every 48 hours) without corneal scarring or haze (follow-up 6 months). The final quality of the corneal surface allows a good improvement of UCVA, BCVA and a reduction of topographic irregularities was obtained.

Conclusions: the use of Cacicol® can be useful and safe in case of PED after corneal surface surgery.

CXL plus procedure, even if in a complicated postoperative case, can be efficacy in terms of UCVA, BCVA and quality of vision in selected patients.


IN VIVO CONFOCAL MICROSCOPY DURING ACCELERATED CORNEAL CROSS LINKING FOR KERATOCONUS: STUDY AT TIME ZERO

M. Passilongo, E. Pedrotti, S. Ficial, E. Bruni, A. Fasolo, G. Marchini

Eye Clinic, University of Verona, Verona

Purpose: To analyze the modifications of the corneal stroma during the stages of the accelerated cross-linking with riboflavin (ACXL).

Methods: 7 eyes of 7 patient with keratoconus underwent to ACXL. In vivo



confocal microscopy (IVCM), corneal pachimetry and corneal topography evaluations were performed before treatment, at 1 week, and at 1 month. We also evaluated corneal stroma by IVCM after disepithelialization, riboflavin corneal imbibition, and immediately after corneal UV irradiation.

Results: We observed that the extent of keratinocyte death following corneal disepithelialization is not further affected by riboflavin. Moreover, we found that immediately after UV irradiation, the keratinocyte death arrived at 100 microns depth in corneal stroma, while it was 300 microns at 1 week observation. The IVCM evaluation at 1 week showed deep stromal striae formation near the Descemet's membrane in advanced keratoconus, which was not detected before treatment.

Conclusion: ACXL affects corneal keratinocytes viability, and this phenomenon is minimally detectable during and immediately after the treatment, while it requires a few days to show completely. Keratinocytes mortality seems to depend on the stage of keratoconus.

IN VIVO CONFOCAL MICROSCOPY IN THE DIAGNOSIS AND FOLLOW-UP OF FUNGAL KERATITIS

E. Pedrotti¹, M. Passilongo¹, E. Bruni¹, S. Ficial¹, A. Fasolo¹, G. Marchini¹

¹*Eye Clinic, University of Verona, Verona*

Purpose: To evaluate the usefulness of in vivo confocal microscopy (IVCM) for diagnosis and management of fungal keratitis.

Methods: 31 eyes of 31 patients with suspect of fungal keratitis were evaluated from July 2013 to December 2015. About 20 scans of the infection site were taken for each eye. We used IVCM also to monitor the progression of the infection and to evaluate therapy.

Results: We detected fungal infection in 12 eyes at IVCM evaluation, all confirmed by laboratory diagnosis on corneal scrapings. We identified the presence of pseudo-hyphae of *Candida* in 4 cases, and of non-specific filamentous fungi in the remaining 8 cases, while we correctly predicted the species in 3 cases. Once the suspected causative agent was identified by IVCM, pending microbiological and drug susceptibility testing, we start the most appropriate therapy. In 3 cases IVCM allowed to detect the depth of stromal impairment and so to decide for cross linking in case of failure of topical therapy.

Conclusion: IVCM can be applied to detect corneal fungal infections and allows anticipating the identification of the species of fungi, in some cases. This technique can also be of benefit in the monitoring of the course of the infection and helps the physician to manage therapy.

ENDOTHELIUM FLAPPED-IN VERSUS ENDOTHELIUM FLAPPED-OUT FOR DMEK TRANSPLANTATION

V. Romano¹, M. Parekh², A. Ruzza², S. Ahmad¹, S. Ferrari², S. Kaye¹, D. Ponzin²

¹Royal Liverpool University Hospital, Liverpool, UK, ²International Center for Ocular Physiopathology, The Veneto Eye Bank Foundation, Venice

Purpose: To evaluate the difference between endothelium flap-in and endothelium flap-out using injection for DMEK.

Participants: Eighteen human donor corneas with endothelial cell density of 1500-2200 cells/mm².

Intervention: A DMEK stripping method was performed and the graft (9.5mm) was re-stored on the corneal base with a hinge and preserved in the de-swelling medium before the study. The grafts were manually detached from the hinge and 1) the grafts were manually tri-folded with endothelium flapped inside (n=9) and 2) the grafts were allowed to roll naturally under PBS with endothelium outwards (n=9). The grafts having the endothelium flapped-in (Endo-in) [n=9] were pulled in a cartridge and delivered using the injection method whereas those with endothelium flapped-out (Endo-out) [n=9] were aspirated using a modified Jones tube.

Main Outcome Measures: Endothelial cell density, mortality, uncovered areas, time of preparation and unfolding.

Results: Endothelial cell loss post implanting the graft was 10.53% with Endo-in as compared to 7.56% with Endo-out with no statistical significance ($p>0.05$). Time to prepare and unfold the tissue was 4.43 (± 3.43) and 0.82 (± 1.04) minutes for Endo-in as compared to 1.68 (± 0.57) and 4.92 (± 4.21) minutes for Endo-out. Statistical significance for preparation ($p=0.0433$) and unfolding ($p=0.0194$) were observed.

Conclusions: Time to unfold the tissue showed statistically significant results with minimal manipulations for Endo-in as compared to Endo-out. Time required to prepare the tissues for Endo-out is much less and therefore due to the compensation of either parameters the endothelial cell loss was not observed significantly in either cases.



CANNULA ASSISTED AB INTERNO HYDROUNFOLDING TECHNIQUE IN DMEK

F. Sabatino (Rome), *E. Sarnicola* (Siena), *C. Sarnicola* (Ferrara), *V. Sarnicola* (Grosseto)

Purpose: To describe a modification of Descemet membrane endothelial keratoplasty (DMEK) in which side port oriented cannulas are used for unfolding the DMEK graft.

Method: A 55-year-old man underwent DMEK in his left eye because of Fuchs endothelial dystrophy. Tap techniques failed to unfold the donor since the recipient anterior chamber was inadequately deep in respect to the large-sized DMEK graft used. Side port oriented cannulas were adopted. The right port Sarnicola DMEK cannula was introduced through a lateral paracentesis and used to unfold the right curl of the graft. Similarly, the left port Sarnicola DMEK cannula was used for the left curl. An air bubble was injected underneath the transplant through the port up Sarnicola DMEK cannula. Best-corrected visual acuity (BCVA) and endothelial cell count were evaluated preoperatively and at 6 months postoperatively.

Results: Fast and easy DMEK graft unfolding and attachment was achieved with the usage of port oriented cannulas. Best-corrected visual acuity significantly improved from 7/10 to 10/10 at 10 days postoperatively ($P<.01$) and remained stable thereafter. Endothelial cell count changed from 2705 to 2043 at 6 months postoperatively ($P<.01$). Neither graft failure nor episodes of rejection occurred postoperatively.

Conclusions: Side port oriented cannulas are a useful and effective tool to unfold the donor graft during DMEK when large DMEK graft are used or when AC depth is inadequate. Port up cannula reduces the risk of graft dislocation while injecting air at the of the surgery.



ANTERIOR CORNEAL SURFACE IRREGULARITY AFTER DSEK FOR BULLOUS KERATOPATHY

L. Spadea, V. Santamaria

Università degli Studi di Roma Sapienza, Dipartimento di Scienze Medico-Chirurgiche e Biotecnologie, Rome

Purpose: To evaluate irregularity of the anterior cornea before and after Descemet stripping endothelial keratoplasty (DSEK) for bullous keratopathy and its effect on visual acuity.

Methods: Corneal data were acquired using a topographic unit before and up to 12 months after DSEK. Anterior corneal elevation data were decomposed into a set of Zernike polynomials up to the 8th order within a 6.0mm-diameter region. Total higher-order aberrations (HOAs) and root mean square (RMS) from the 3rd to 8th order were calculated. The effects of anterior surface irregularity on visual acuity were evaluated.

Results: This clinical study comprised 20 consecutive eyes of 20 bullous keratopathy patients. The mean corrected distance visual acuity (CDVA) was 1.00 logMAR \pm 0.12 (SD) preoperatively, and 0.24 \pm 0.16 logMAR 12 months postoperatively. Before DSEK, corneas with bullous keratopathy had higher total HOAs compared with those in controls ($p < 0.05$). There were no significant differences in anterior surface HOAs between preoperatively and 12 months ($p > 0.05$).

Conclusions: Postoperative CDVA correlated with irregularity of the anterior surface. Anterior corneal HOAs are higher in bullous keratopathy patients than in controls, and remain higher through 12 months after DSEK. In addition to corneal transparency, regularity of the anterior surface is an important factor in visual acuity after DSEK.


SLIDING KERATOPLASTY FOLLOWED BY TRANSEPITHELIAL IONTOPHORESIS COLLAGEN CROSS-LINKING FOR PELLUCID MARGINAL DEGENERATION

L. Spadea, G. Maraone

Università degli Studi di Roma Sapienza, Dipartimento di Scienze Medico-Chirurgiche e Biotecnologie, Rome

Purpose: To describe the changes in visual acuity and in topographic analysis in a patient affected by pellucid marginal degeneration (PMD) submitted in one eye to sliding keratoplasty and three months later to transepithelial iontophoresis collagen cross-linking (I-CXL).

Methods: A 59-years old woman with bilateral PMD, more advanced in the



left eye, contact lens intolerant, was treated by sliding keratoplasty before and 3 months later to transepithelial iontophoresis collagen cross-linking in left eye. Results: After one year of follow-up the corrected visual acuity increase from 20/200 to 20/40, and the videokeratographic patterns significantly improved. Conclusions: Sliding keratoplasty combined with I-CXL treatment were shown to be safe and effective in the treatment of advanced PMD. The patient described an improved and comfortable quality of vision and described herself as being satisfied with the outcome.

ANGIOGRAPHIC AND IN-VIVO CONFOCAL MICROSCOPIC CHARACTERIZATION OF GIANT PAPILLAE IN CHRONIC ALLERGIC KERATOCONJUNCTIVITIS - A PILOT STUDY


B. Steger¹, V. Romano², S. Kaye²

¹Department of Ophthalmology, Medical University of Innsbruck, Innsbruck, Austria, ²St. Paul's Eye Unit, Royal Liverpool University Hospital, Liverpool, UK

Background: giant papillary conjunctivitis (GPC) is a manifestation of chronic allergic eye disease and associated with sight-threatening complications. Precise monitoring is crucial, but objective disease activity grading is limited by a high inter-observer variability in biomicroscopic assessment. Combined in-vivo confocal microscopic (IVCM) and angiographic assessment may provide useful parameters to objectively quantify the activity of GPC disease activity.

Methods: 8 patients with GPC in atopic or vernal keratoconjunctivitis were included in a single-center cross-sectional study. Ocular surface inflammation was graded clinically as active or inactive depending on conjunctival injection and ocular surface staining scores. Color photography, IVCM, fluorescein and indocyanine green angiography (FA and ICGA) of the upper tarsal conjunctiva were performed.

Results: there were 3 patients with clinically inactive and 5 patients with clinically active disease. On IVCM, tarsal conjunctival epithelial thickness ($87,4 \pm 12,6$ vs. $42,4 \pm 4,8$ μm ; $p = 0,0002$) and the density of intraepithelial inflammatory cells ($2571 \pm 995,5$ vs. $1181 \pm 270,8$ cells/mm²; $p = 0,031$) were increased in active disease. The interpapillary space was filled with mucus and inflammatory cells ($902 \pm 464,4$ vs. $110 \pm 31,0$ cells/mm²; $p = 0,019$). On FA, the time to dye leakage was shorter in active disease. On ICGA, dye leakage was noted only in active disease. Transepithelial secretion of fluorescein dye was noted in active disease. Conclusion: IVCM and angiography allow the combined assessment of cellular and vascular components of conjunctival inflammation, potentially offering an objective measure of GPC disease activity in chronic allergic eye disease.



COMPLETE VISUAL RESTORATION IN A CASE OF ASPERGILLUS FLAVUS ENDOPTHALMITIS AFTER PENETRATING KERATOPLASTY COMBINED WITH CATARACT PHACOEMULSIFICATION

E. Tonti, L. Spadea, R. Secondi

Sapienza University, Rome

To report the management of a case of endophthalmitis leaded by *Aspergillus flavus* following penetrating keratoplasty (PKP) and combined cataract extraction.

The patient underwent surgery for corneal decompensation of a previous PKP for keratoconus.

Corneal clinical aspects were evaluated by slit-lamp examination. Ocular ultrasonography was performed to evaluate the anterior chamber and vitreous cavity. The cornea was scraped. The corneal-scleral donor rim and media were cultured. The diagnosis of *A. flavus* infection was made.

The patient received fortified antifungal drops (voriconazole 1 % solution) plus systemic voriconazole 400 mg/die. The graft was replaced with a new corneal button after washing the anterior chamber with a solution of voriconazole 1 %. Postoperatively, systemic voriconazole 400 mg/die was prolonged for 1 month and topical therapy with moxifloxacin hydrochloride 0.5 %, tobramycin 0.3 %/and 0.1 % dexamethasone and homatropine were administered and gradually tapered.

At the end of follow-up, CDVA was 20/20 and slit-lamp examination showed a graft with no signs of infection or rejection.


This case shows the successful management with a complete visual function restoration of a severe *A. flavus* endophthalmitis after PKP. Moreover, this report emphasizes the particular clinical aspects of a fungal infection after PKP and the different possible sources of infection.

OCULAR SURFACE LASTING OF CROSS-LINKED HYALURONIC ACID

G. Torroni

Perugia

Methods: 40 subjects were included in this study and were divided into two groups: the first group (control group) consisted of 20 healthy volunteers; the second group (study group) was constituted of 20 suffering from SSDE; before and 5, 30 and 60 minutes after instillation of eye drops were registered the surface regularity index (SRI) and surface asymmetry index (SAI).



Results: SRI and SAI index, in the control group, did not shown statistically significant difference after 5, 30 and 60 minutes from instillation, while there was a statistically significant difference after 30 and 60 minutes from instillation between the two groups.

Conclusion: Our study showed a better efficacy of CLHA compared to HA in maintaining the stability of the tear film in patient suffering of SSDE.

CORNEAL REGULARIZATION IN OCULAR PEMPHIGOID TREATED WITH EXCIMER LASER AFTER T-PTK

M. Zagari¹, S. Zagari¹, M. Rechichi², M. Ferrise³

¹*Centro Europeo Di Oftalmologia, Acicastello*, ²*Eye Center, Catanzaro*, ³*Università Magna Graecia Di Catanzaro, Catanzaro*

Aim: To evaluate the functional and morphological outcomes of customized PTK for the regularization of a corneal surface already treated with Trans-PTK (t-PTK) in a patient with diagnosis of bilateral ocular pemphigoid.

Patient and method: We report the clinical case of a 65 years old woman with diagnosis of bilateral ocular pemphigoid well controlled with medical therapy (weekly i.m. methotrexate 10 mg/1.33 ml and topical therapy with loteprednol 1 drop per day). At baseline evaluation BCVA was 2/50 in the left eye with an history of bilateral visual acuity worsening in the last two years after a treatment with t-PTK. The anterior segment ocular examination showed ocular pemphigoid characteristics associated with an irregular corneal profile and areas of epithelial hypertrophy and cataract. She had a previous history of corneal ulcers. We decided to treat the left eye with a customized PTK and we evaluated the patient with clinical examination, corneal topography and anterior SD-OCT at baseline and then every month for 6 months. Corneal topography was not performed at baseline due to corneal opacities.

Results: At the 6 month follow-up examination we observed functional improvement (left eye BCVA was 30/50) and a regular corneal surface associated with morphological stability of both corneal stroma and epithelium. These results were confirmed by corneal topography and anterior SD-OCT.

Conclusions: Customized PTK appears to be a safe and effective procedure; it demonstrates stability as long as the patient is treated with appropriate medical therapy. Larger studies and further validations on this topic are needed.

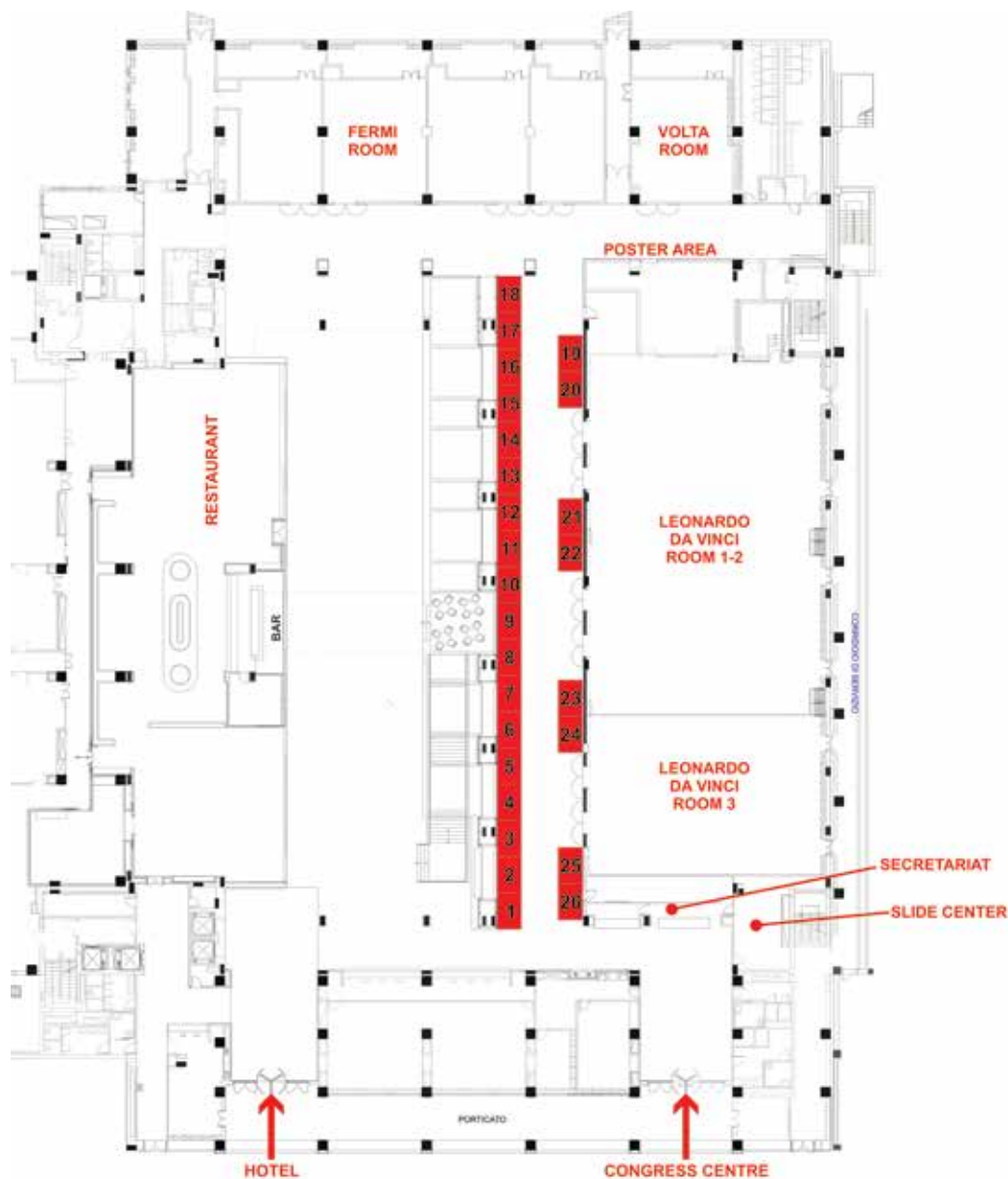
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