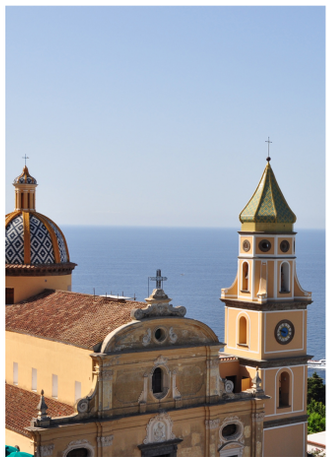

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ABSTRACT POSTER "IV INTERNATIONAL COURSE OF ORBITOPLASTIC SURGERY IN AMALFI COAST" 2016

NEUROFTALMOLOGIA

OFTALMOPLASTÌA

ESTÈTIQUE

SURGERY

ABSTRACT POSTER "IV INTERNATIONAL COURSE OF ORBITOPLASTIC SURGERY IN AMALFI COAST"

Edited by
Luigi Colangelo

OCTOBER 7 - 8 th 2016
PRAIANO - SALERNO - ITALY

IV INTERNATIONAL COURSE OF ORBITOPLASTIC SURGERY

OCTOBER 7-8 th 2016 PRAIANO SALERNO - ITALY

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PREFACE

We are delighted to introduce this booklet of The IV International Course on Orbitoplastic and Neurophthalmology in Amalfi Coast, organized by Luigi Colangelo MD, our previous pupil in Chieti and Buenos Aires.
Flavio Gioa from Amalfi is attributed to define the magnetic compass finding the magnetic North and the Polaris in the Ursa minor constellation, whilst more or less in the same middle-age Vikings use the 'Iceland sunstone' [a calcite mineral, like the same that allowed trilobites develop the first simplest eye in the deep sea on Cambrian era] to find the sun behind the clouds, depolarizing light. The Schola Medica Salernitana, considered one of the oldest in modern civilization, togheter with Bologna and Paris, was empowered to release the licentia docendi that enabled the holder to teach ubique locorum ac per universum terrarum orbem. The aim was an holistic medicine in reference with the classical Galenic – Hippocratic tradition: the human body considered in its entirety as a microcosm within the macrocosm of nature, a tetradic holistic allopathic doctrine where contrariis contraria curantur. Astonishing for this age, the inner role of women who exercised their medical profession and wrote medicine treaties, as reported here inside.
The Amalfi coast is an unique landscape, loved by roman emperors, poets, musicians, dancers, artist from all over the world, where around the idea to confidentially share scientific experiences in a friendship atmosphere, he was able to connect surgeon and researchers from all over the world, deeply involved in these Ophthalmic sub-Specialities.
Everyone of these loves the Luigi Colangelo friendship, honouring his own study journey in Italy, Argentina, North America, Spain, North Europe and Portugal.
To reach the third biennial edition exposing the printed poster abstracts recollection to the scientific community, means the opportunity to maintain the memory of the exchanged knowledge togheter with Dermatologist and Plastic, Aesthetic, ENT and Maxillofacial Surgeons from one side and Neurophthalmologist and basic Researchers on the other, offering the opportunity to be quoted by the ISBN, as a respectful attitude to their studies, selected by the peer Scientific Committee.
The meeting was successful, as ever for his previous ones in the Amalfi coast. Luigi and the entire staff maded a great personal effort to offer everyone the warmest taste of italian hospitality. The biennial invited lecture dedicated to his father Francesco Colangelo MD, gynaecologist and Maiori longstanding mayor, is the cherry on the cake as unforgettable flavour of this meeting. Pulchritudo animi bonum vinculum est inter homines.

Pier Enrico Gallenga
FEBO
G. D'Annunzio University Chieti
ITALY

Daniel Weil
Jefe de la Sección de Orbita y Plástica Ocular del Servicio de Oftalmología. Hospital de Clínicas "José de San Martín" de la Universidad de Buenos Aires
ARGENTINA

‘FRANCESCO COLANGELO’
AWARD LECTURE

As usual, this year too, I’ve organized an Award Lecture dedicated to my father, who from 1957 to 1997 practiced the medical profession on the Amalfi Coast with great passion.

2007

EYE & POSTURE

PIER ENRICO GALLENGA was born in Parma by Riccardo, ophthalmology professor, who held the chair of his grandfather Camillo, already Rector of the University.
He is author of more than 300 publications, 3 monographs and has a lot of participation to international congresses.
More than 30.000 operations realized in the structures of Chieti University where, from 1979, he manages the ophthalmological operating unit and the Ophthalmological Institute.
Deputy president of SOI 2003-2004 Chairman Ethics committee SOI from 2005
Medal of Strampelli lecture SOI 2005.
From 1995 he has founded and chairs the National Federation of Ethics Committees

2009

SOME CONSIDERATION ON THE COMPARATIVE ANATOMY OF THE ORBIT

DANIEL WEIL was born in Buenos Aires; he is teachers seconded as well as founder and director of the Orbital surgery section of the Department of Ophthalmology at the University of Buenos Aires. He is also teacher at the Sociedad Argentina de Oftalmologia, at the American Association of Ophthalmology, at Universidad del Salvador, at Maimonides University and at the Argentinian Catholic University.
He’s honorary member of SOI and of the Brazilian Society of Ocular Plastic.
Past president of the Sociedad Argentina de Plastica Ocular as well as of the Sociedad Argentine de Oftalmologia.
He’s member of the American Society of Ophthalmology and of the American Academy of Ophthalmology.

2013

ORBITAL SURGERY: INDICATIONS & OPPORTUNITIES

LELIO BALDESCHI: MD Phd is ”Chef de Clinique” and Clinical Professor in the Department of Ophthalmology, Catholic University of Louvain, at the Saint Luc Hospital of Bruxelles.
His main field of interest is orbital and adnexal diseases. ln such a field he trained residents in ophthalmology, nineteen international fellows, and had the opportunity to publish and lecturing at a wide variety of international congresses, and courses.
He is member of SOI, ESOPRS, has been elected as honorary member of the APSOPRS, serves in the steering committee of the E UGOGO, is for the second time President of SICOP; he’s the Secretary and the Elected
President of the ISD&DE.

2016

ANATOMY AND PHISIOPATHOLOGY OF LACRIMAL DUCTS

FAUSTO TRIVELLA: He was born in in Pisa in June 1957 , graduated in Medicine and Surgery in Pisa with honors,and specialized in Firenze in Ophthalmology with honors .
During his post graduate work, he specializes in Eyelid orbit surgery as assistant in training in the Section of Craniofacial Surgery of Dr .Tessier at Hospital Foch of Paris, where he stayed for three years becoming a pupil of Doctor Krastinova with which he work also at Clinique Chateau de la Maye in Versailles.
Assistant at the Teaching hospital of Ophthalomolgy in Florence, where he manage the Unit of Eyelid orbit surgery.
Then he was moved to the Department of Ophthalmic surgery in Pisa where he manage the Unit of Oculoplastic surgery.
Since 7 years he is head physician of Department of Ophthalmology of Lucca Hospital
Since 20 years, he is consultant for neurosurgery and pediatric ophthalmology of Children hospital Meyer in Florence
Winner of different prizes, among them SICOP award, the society of which he is also founder.
Now he lives in Pisa and is engaged with Susanna with which he has had two children: Alessandro and Antonio.

EVALUATION OF THE RADIAL PERIPAPILLARY CAPILLARY NETWORK IN CONGENITAL OPTIC DISC ANOMALIES WITH OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY.

Gilda Cennamo MD, Claudia Rossi MD, Pasquale Ruggiero MD and Giovanni Cennamo.

Eye Clinic, Department of Neurosciences, Reproductive Sciences and Dentistry, University of Naples Federico II, Naples, Italy

Goal

To evaluate the radial peripapillary capillary network with optical coherence tomography angiography (angio-OCT) in Morning Glory Syndrome (MGS), optic disc colobomas and optic disc pits.

Materials and methods

Fifteen eyes of 15 patients with congenital optic disc anomalies were enrolled in this study. All patients underwent optical coherence tomography angiography (angio-OCT). The scans were centered on optic discs.

Results

The mean age at presentation was 33 years (range, 19–50 years). Congenital optic disc anomalies were identified in all 15 eyes. Three eyes had the characteristic funduscopic signs of MGS, and angio-OCT scans of the peripapillary retina revealed a dense microvascular network. Optic disc colobomas were identified in 5 eyes, and the characteristic fundoscopic signs of optic pits in 7 eyes. Angio-OCT showed the absence of radial peripapillary microvascular network in thes 12 eyes.

Conclusions

Angio-OCT is a safe and rapid imaging technique that could shed light on the pathogenesis of rare diseases of the optic disc. In fact, our finding that angio-OCT scans confirmed the presence of a peripapillary microvascular network only in MGS cases, supports the hypothesis that a primary neuroectodermal abnormality and a secondary mesenchymal abnormality leads to MGS.

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LEBER HEREDITARY OPTIC NEUROPATHY: A CASE REPORT.

Gianluca Baldi, Giovanni Leo, Maurizio Cioffi, Luca Barile, Assunta Rosaria Cascone, Alfonso D'Alesssandro.

- Presidio Ospedaliero "Umberto I", Nocera Inferiore

Goal

To describe a case of Leber optic neuropathy in a young patient.

Materials and methods

Case report

Results

A 40-year-old boy presented with painless vision loss in both eyes. On clinical examination, his visual acuity was 2/10 in OD and counting fingers at 40 cm OS. Both pupils reacted normally to light. The findings on slit-lamp examination were all unremarkable. On the other hand, funduscopy after pupillary dilation showed atrophic papillas in both eyes. Genetic analysis demonstrated a point mutation of the mitochondrial gene ND4 (m11778G>A). He had no visual recovery after treatment with oral coenzyme Q10, vitamin B1, and citicoline.

Conclusions

Leber hereditary optic neuropathy is one of the most common inherited optic neuropathies causing bilateral central vision loss. Molecular examination of mtDNA mutation can confirm the diagnosis of Leber neuropathy in clinically controversial patients.

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FIRST ITALIAN FAMILY WITH AUTOSOMAL RECESSIVE RETINAL DYSTROPHY CAUSED BY MERTK MUTATION (RP38).

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4. Dept Neurosciences, section Ophthalmology, Marche Polytechnic University, Ancona

5. Dept of Life, Health & Environmental Sciences, University of L'Aquila, L'Aquila, Italy

Goal

To describe the genetic and ocular findings in an Italian 12-year-old girl showing cone-rod "pisciform-like" macular dystrophy and to broaden the molecular spectrum of *MERTK* gene

.

Materials and Methods

A complete ophthalmological examination was carried out, implemented with: OCT, autofluorescence, FA, ICGA, electrophysiology (flicker- and pattern-ERG-, PEV), contrast sensitivity, chromatic sense, visual field (120p, 30/2), orthoptic evaluation. The patient was followed in different ophthalmological centers starting from age 4 and the final differential diagnosis between Stargardt disease and cone-rode dystrophy was pointed out at age of 12 and then collaboratively investigated by geneticist.

A panel of nearly 100 retinal dystrophy disease-causative genes was analyzed by next-generation sequencing techniques for diagnostic purposes. After a putative mutation was identified, Sanger sequencing confirmation of the distinct genomic fragment as well as segregation analysis in the family were performed. The pathogenic role of the mutation was predicted by *in silico* models.

Results

The patient underwent craniotomy at age seven months for meningocele. Visual impairment was firstly noticed at age 6 years and progressively increase until stabilization at 2/10 bilaterally. Severe dysfunction of both photoreceptor systems involved the macula at an early stage. Other findings include: nictalopia, photoaversion, dyscromatopsia, visual field centrocecal mixed scotoma to the mid periphery, ERG b wave reduced in RE and absent in LE, reduced macular thickness (168 m) with RPE drusen-like changes and photoreceptors thinning with high

reflectance bodies below the outer limiting membrane, without CME, discrete dot-like autofluorescent deposits hypofluorescent on ICGA (hallmark of MERTK-specific retinal dystrophies). A nucleotide change affecting an obligatory splice site of intron 10 of the *MERTK* gene (c.1604+5G>A) was depicted at the homozygote state in the proband, while her parents were heterozygote carriers.

Conclusions

We report a novel homozygous splicing mutation in the *MERTK* gene (OMIM*604705) and emphasize distinct ophthalmologic features of this rare cause of autosomal recessive retinal dystrophy (overall around 1%). In the era of personalized medicine, a multidisciplinary approach is warranted to reach a precise diagnosis of retinal dystrophy and plan gene-based pharmacological trials.

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LaVail MM, Vollrath D, Erger K, Wang W, Conlon T, Zhang K, Hauswirth W, Alkuraya FS. Treatment of retinitis pigmentosa due to MERTK mutations by ocular subretinal injection of adeno-associated virus gene vector: results of a phase I trial. Hum Genet. 2016 Mar;135(3):327-43.

IMPROVING VA USING GABOR PATCH TECHNOLOGY IN STARGARDT DISEASE: A RETROSPECTIVE STUDY

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Goal

To find the efficacy of a non-invasive, patient-specific treatment based on visual stimulation and facilitation of neural connections responsible for vision treatment in enhancing Best Corrected Visual Acuity (BCVA) in patients with Stargardt disease. As already demonstrated in other applications such as adult amblyopia, the technology involves the use of an internet-based computer generated visual training exercise regime using sets of patient-specific stimuli based on Gabor patches, to improve contrast sensitivity and, therefore, visual acuity.

Materials and Methods

5 Stargardt patients (10 eyes) verified at Ophthalmoscopy/ERG/ FA/ICG/OCT/Ishihara tables, 3 male, 2 female, mean aged 35 (+- 11.11 y,c), caucasians, were selected and informed according to the Helsinki declaration; exclusion criteria were age (<18 > 50ny. o.), other ocular disease impairing the visual axis, neurological disease or mental impairment. Inclusion criteria: BCVA in both eyes stable in the last 6 month. Gabor patch technology involves the use of an internet-based computer generated visual training exercise regime using sets of patient-specific stimuli based on Gabor patches, to sharpen contrast sensitivity and visual acuity. The fundamental stimulation-control technique is called "Lateral Masking", where collinearly oriented flanking Gabors are displayed in addition to the target Gabor image. This NeuroVision Treatment System is a software-based, interactive system tailored and continuously adaptive to the individual visual abilities. In the first stage, the subject is exposed to a set of visual perception tasks, aimed to analyze and identify each subject's neural inefficiencies or deficiencies. Based on this analysis, a treatment plan is initialized, and subject's V1 cortical area receives patients-specific stimuli in a controlled environment.

Results

Mean BCVA, for the 10 eyes, has raised from 0.81 (+- 0.17) logMar to 0.49 (+-0.07) logMar. Mean ETDRS'chart lines improvement has been 3.18 +-2.05.
One subject has quit the treatment for pregnancy.

Conclusions

Results suggest that Gabor patch treatment improves BCVA in Stargard patients. This improvement appears to be retained for at least 12 months after treatment, compatibily with the disease itself progression.

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EXENTERATION OF ORBIT IN A TERTIARY EYE HOSPITAL - INDICATION AND OUTCOMES

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[5] HOSPITAL NUESTRA SEÑORA DE FÁTIMA. VIGO, SPAIN

Goal
To present indications, type of surgery and outcomes of orbital exenteration (OE) at a tertiary eye hospital in 20 years.

Materials and methods
This was a retrospective review of health records involving all patients who underwent to OE between 1994 and 2014 at KKESH. Demographic data, ocular status prior to surgery, details of exenteration, histopathological diagnosis, adjunctive treatment, follow-up examination findings, recurrences, complications and their management were noted.

Results
Orbital exenteration was performed on 60 orbits of 60 patients. Median age 68.8 25% quartile 57.5 minimum 2 years Maximum 96. The indications for OE were malignancies in 59(98.3%) cases. The commonest malignancies noted in this series were SCC (60%, 36/60) and BCC eyelids with an orbital involvement (15%, 9/60). A total OE was required for 17 patients, a subtotal for further 41 and two patients had extended OE.

Conclusions
OE is usually indicated to treat malignant tumors and SCC was the single most common neoplasm responsible for OE at KKESH.

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EXPANSIVE HYDROGEL PELLETS IN THE TREATMENT OF POST ENUCLEATION/EVSCERATION SOCKET SYNDROME

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Goal

To evaluate the post-operative result after orbital injection of expansive hydrogels pellets, in the treatment of enophthalmos secondary to PESS.

Materials and methods

This study was carried out between January 2010 and September 2015, in the Universitary Hospital Dupuytren Limoges – France. Twenty surgeries were performed in 16 patients (20 procedures). Intra-orbital injection of the hydrogel pellets was performed under general anesthesia, behind the hydroxyapatite orbital implant, through small conjonctival incisions (1.5 mm). The volume of a single hydrogel pellet volume is 0.024 ml, and it increases tenfold after intra-orbital rehydratation, after 24 to 48 hours.

Results

The average enophthalmos rose from 13.35 +/- 3.69 (6-19) mm pre-injection to 14.98+/-3.69 (7-20) post-injection. The average number of injected pellets was 7.45 +/- 2.76 (3-15) per procedure. Three sockets (18.75%) needed a second surgery, with the same procedure. Esthetic result after fitting a new prosthetic device was satisfactory in 100% of the cases. Half of the patients felt a post operative pain, successfully treated by analgesic. One of our patient presented a sub-cutaneous implant migration, although not requiring surgical correction.

Conclusions

This procedure appears sure, safe, quick, without risk of any serious complication, and leading to good résults. It can be performed on ambulatory surgery. The expected post-operative increase of enophthalmos is 1 to 3 mm. Up to 10 or 11 pellets can be injected but more may lead to severe post-operative pain. Long term results seem to stable over time but a longer follow-up is necessary to evaluate the risk of late implant migration or extrusion.

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LEBER HEREDITARY OPTIC NEUROPATHY: A CASE REPORT.

Gianluca Baldi, Giovanni Leo, Maurizio Cioffi, Luca Barile, Assunta Rosaria Cascone, Alfonso D'Alesssandro.

- Presidio Ospedaliero "Umberto I", Nocera Inferiore

Goal

To describe a case of Leber optic neuropathy in a young patient.

Materials and methods

Case report

Results

A 40-year-old boy presented with painless vision loss in both eyes. On clinical examination, his visual acuity was 2/10 in OD and counting fingers at 40 cm OS. Both pupils reacted normally to light. The findings on slit-lamp examination were all unremarkable. On the other hand, funduscopy after pupillary dilation showed atrophic papillas in both eyes. Genetic analysis demonstrated a point mutation of the mitochondrial gene ND4 (m11778G>A). He had no visual recovery after treatment with oral coenzyme Q10, vitamin B1, and citicoline.

Conclusions

Leber hereditary optic neuropathy is one of the most common inherited optic neuropathies causing bilateral central vision loss. Molecular examination of mtDNA mutation can confirm the diagnosis of Leber neuropathy in clinically controversial patients.

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FIRST ITALIAN FAMILY WITH AUTOSOMAL RECESSIVE RETINAL DYSTROPHY CAUSED BY MERTK MUTATION (RP38).

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Goal

To describe the genetic and ocular findings in an Italian 12-year-old girl showing cone-rod "pisciform-like" macular dystrophy and to broaden the molecular spectrum of *MERTK* gene

.

Materials and Methods

A complete ophthalmological examination was carried out, implemented with: OCT, autofluorescence, FA, ICGA, electrophysiology (flicker- and pattern-ERG-, PEV), contrast sensitivity, chromatic sense, visual field (120p, 30/2), orthoptic evaluation. The patient was followed in different ophthalmological centers starting from age 4 and the final differential diagnosis between Stargardt disease and cone-rode dystrophy was pointed out at age of 12 and then collaboratively investigated by geneticist.

A panel of nearly 100 retinal dystrophy disease-causative genes was analyzed by next-generation sequencing techniques for diagnostic purposes. After a putative mutation was identified, Sanger sequencing confirmation of the distinct genomic fragment as well as segregation analysis in the family were performed. The pathogenic role of the mutation was predicted by *in silico* models.

Results

The patient underwent craniotomy at age seven months for meningocele. Visual impairment was firstly noticed at age 6 years and progressively increase until stabilization at 2/10 bilaterally. Severe dysfunction of both photoreceptor systems involved the macula at an early stage. Other findings include: nictalopia, photoaversion, dyscromatopsia, visual field centrocecal mixed scotoma to the mid periphery, ERG b wave reduced in RE and absent in LE, reduced macular thickness (168 m) with RPE drusen-like changes and photoreceptors thinning with high

reflectance bodies below the outer limiting membrane, without CME, discrete dot-like autofluorescent deposits hypofluorescent on ICGA (hallmark of MERTK-specific retinal dystrophies). A nucleotide change affecting an obligatory splice site of intron 10 of the *MERTK* gene (c.1604+5G>A) was depicted at the homozygote state in the proband, while her parents were heterozygote carriers.

Conclusions

We report a novel homozygous splicing mutation in the *MERTK* gene (OMIM*604705) and emphasize distinct ophthalmologic features of this rare cause of autosomal recessive retinal dystrophy (overall around 1%). In the era of personalized medicine, a multidisciplinary approach is warranted to reach a precise diagnosis of retinal dystrophy and plan gene-based pharmacological trials.

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IMPROVING VA USING GABOR PATCH TECHNOLOGY IN STARGARDT DISEASE: A RETROSPECTIVE STUDY

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Goal

To find the efficacy of a non-invasive, patient-specific treatment based on visual stimulation and facilitation of neural connections responsible for vision treatment in enhancing Best Corrected Visual Acuity (BCVA) in patients with Stargardt disease. As already demonstrated in other applications such as adult amblyopia, the technology involves the use of an internet-based computer generated visual training exercise regime using sets of patient-specific stimuli based on Gabor patches, to improve contrast sensitivity and, therefore, visual acuity.

Materials and Methods

5 Stargardt patients (10 eyes) verified at Ophthalmoscopy/ERG/ FA/ICG/OCT/Ishihara tables, 3 male, 2 female, mean aged 35 (+- 11.11 y,c), caucasians, were selected and informed according to the Helsinki declaration; exclusion criteria were age (<18 > 50ny. o.), other ocular disease impairing the visual axis, neurological disease or mental impairment. Inclusion criteria: BCVA in both eyes stable in the last 6 month. Gabor patch technology involves the use of an internet-based computer generated visual training exercise regime using sets of patient-specific stimuli based on Gabor patches, to sharpen contrast sensitivity and visual acuity. The fundamental stimulation-control technique is called "Lateral Masking", where collinearly oriented flanking Gabors are displayed in addition to the target Gabor image. This NeuroVision Treatment System is a software-based, interactive system tailored and continuously adaptive to the individual visual abilities. In the first stage, the subject is exposed to a set of visual perception tasks, aimed to analyze and identify each subject's neural inefficiencies or deficiencies. Based on this analysis, a treatment plan is initialized, and subject's V1 cortical area receives patients-specific stimuli in a controlled environment.

Results

Mean BCVA, for the 10 eyes, has raised from 0.81 (+- 0.17) logMar to 0.49 (+-0.07) logMar. Mean ETDRS'chart lines improvement has been 3.18 +-2.05.
One subject has quit the treatment for pregnancy.

Conclusions

Results suggest that Gabor patch treatment improves BCVA in Stargard patients. This improvement appears to be retained for at least 12 months after treatment, compatibily with the disease itself progression.

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EXENTERATION OF ORBIT IN A TERTIARY EYE HOSPITAL - INDICATION AND OUTCOMES

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Goal
To present indications, type of surgery and outcomes of orbital exenteration (OE) at a tertiary eye hospital in 20 years.

Materials and methods
This was a retrospective review of health records involving all patients who underwent to OE between 1994 and 2014 at KKESH. Demographic data, ocular status prior to surgery, details of exenteration, histopathological diagnosis, adjunctive treatment, follow-up examination findings, recurrences, complications and their management were noted.

Results
Orbital exenteration was performed on 60 orbits of 60 patients. Median age 68.8 25% quartile 57.5 minimum 2 years Maximum 96. The indications for OE were malignancies in 59(98.3%) cases. The commonest malignancies noted in this series were SCC (60%, 36/60) and BCC eyelids with an orbital involvement (15%, 9/60). A total OE was required for 17 patients, a subtotal for further 41 and two patients had extended OE.

Conclusions
OE is usually indicated to treat malignant tumors and SCC was the single most common neoplasm responsible for OE at KKESH.

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EXPANSIVE HYDROGEL PELLETS IN THE TREATMENT OF POST ENUCLEATION/EVSCERATION SOCKET SYNDROME

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Goal

To evaluate the post-operative result after orbital injection of expansive hydrogels pellets, in the treatment of enophthalmos secondary to PESS.

Materials and methods

This study was carried out between January 2010 and September 2015, in the Universitary Hospital Dupuytren Limoges – France. Twenty surgeries were performed in 16 patients (20 procedures). Intra-orbital injection of the hydrogel pellets was performed under general anesthesia, behind the hydroxyapatite orbital implant, through small conjonctival incisions (1.5 mm). The volume of a single hydrogel pellet volume is 0.024 ml, and it increases tenfold after intra-orbital rehydratation, after 24 to 48 hours.

Results

The average enophthalmos rose from 13.35 +/- 3.69 (6-19) mm pre-injection to 14.98+/-3.69 (7-20) post-injection. The average number of injected pellets was 7.45 +/- 2.76 (3-15) per procedure. Three sockets (18.75%) needed a second surgery, with the same procedure. Esthetic result after fitting a new prosthetic device was satisfactory in 100% of the cases. Half of the patients felt a post operative pain, successfully treated by analgesic. One of our patient presented a sub-cutaneous implant migration, although not requiring surgical correction.

Conclusions

This procedure appears sure, safe, quick, without risk of any serious complication, and leading to good résults. It can be performed on ambulatory surgery. The expected post-operative increase of enophthalmos is 1 to 3 mm. Up to 10 or 11 pellets can be injected but more may lead to severe post-operative pain. Long term results seem to stable over time but a longer follow-up is necessary to evaluate the risk of late implant migration or extrusion.

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OUR EXPERIENCE WITH AN AUTOMATED PHOTO-OPHTHALMIC DEVICE FOR MEASURINING MRD

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Goal

To provide comments and observations on a new automated method of measuring MRD.

Materials and methods

The photo-ophthalmic device described in this presentation is used routinely in the author's practice to measure external eye data. This data is included when referring patients to oculoplastic surgeons for ptosis or lid retraction evaluation.

Results

An example of a patient with lid retraction is presented to describe the data obtained with the device.

Conclusions

Our experience is that the device measures MRD 1 & MRD 2 in patients with partial ptosis or lid retraction providing objective documentation. An independent jpeg photo with a grid scale provides an additional measuring scheme when ptosis obscures the Purkinje image.

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SURGICAL MANAGEMENT OF RESIDUAL BROW SUSPENSION PTOSIS AND SEVERE LAGOPHTALMOS

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Goal

Surgical approach of residual ptosis with severe lagophtalmos and corneal scar previously operated 10 years before with frontalis sling is described. We emphasize careful preop case examination of levator function, sling suspension action with superior eyelid entropion, corneal exposure and scarring and looking for uncorrected congenital ectropion often associated with congenital ptosis**.**

Materials and methods

Bilateral procedure was performed under general anesthesia. We repositioned the autogenous fascia lata sling and adjusted the superior eyelid position in order to obtain the best symmetrical eyelid contour.Tarsal incisions helped evert the superior eyelid. To correct lagophtalmos, we performed retractors resection and reinsertion by conjunctival approach. Same approach was used for a malar lift and canthopexy in a conjugated effort to correct the lagophtalmy and the aspect of " droppy face " of this young patient

Results

Both anatomically and functionally results were satisfactory with patient very happy with the esthetic results.Lagophtalmos was corrected and the eyelid contour was judged as Appropiate.

Conclusions

Congenital ptosis surgical correction can sometimes be very tricky because of general anesthesia and the impredictible results of frontalis sling technique. Careful preop examination looking for any congenital ectropion has to be done in order to correct both ptosis and ectropion otherwise eyelid elevation could complicate with lagophtalmos. If possible, associating a malar lift would help restore the eyelid closure and function.

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ORBITAL AND ADNEXA INVOLVEMENT IN ANGIOLYMPHOID HYPERPLASIA WITH EOSINOPHILIA

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Goal

Angiolymphoid Hyperplasia with Eosinophilia (ALHE) is an unusual benign disorder and a very rare condition in the orbit and ocular adnexa. We are presenting demographic data from 7 cases of ALHE with computed tomography (CT), magnetic resonance (MR) images and typical histopathological confirmation.

Case series

The patients were attended between 2000 to 2015, at King Khaled Eye Specialist Hospital, Saudi Arabia and School of Medicine of Ribeirão Preto, Brazil. None of these patients developed systemic lymphoma during the follow-up. All except one case had good resolution with treatment.

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ORBITAL TUMOR IN CHILDHOOD, UN UNSPECTED PRESENTATION

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Goal

To analize an unusual form of presentation from vascular malformation as an orbital tumor.

Materials and methods

We present a case of a child of 1 year and 5 months old who consult for proptosis of 4 months ago. Personal history denied. It is noted an unpain proptosis, with EOM conserved, with no alterations on slit lamp and with normal fundus exam. Orbital CT reveals a difuse infiltration of the intra and extraconal fat, without precise limits. We decide to program an incisional biopsy.

Results

We start the biopsy entering to the orbit through the palpebral sulcus and take samples of the injury. Pathology informs a tumor with numerous vessels of thin walls and flats endothelium. Inmunohistochemical reveals GLUT-1 negative, CD-34 positive and ALFA ACTINE OF SMOOTH MUSCLE positive, which confirm venous malformation. ISSVA classification 2014 (Vascular anomalies). They are slow-growing benign lesions , characterized by thin-walled sinusoids containing blood or hematic collections without apparent venous flow. They present from birth but there are visible weeks or months later. the incidence is 1.5 % , 2/3 are venous. This malformations have low flow.

Conclusions

Vascular malformations have varied presentations. The study of pathology as well immunohistochemical are fundamental to classify these diseases for proper treatment and monitoring them. At this moment, several treatments are known, like corticosteroids, propranolol, interferon, vincristine or timolo, being the orbital presentation very responders to therapy with corticosteroids.

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SPONTANEOUS PREOPERATIVE RUPTURE OF DERMOID CYSTS: CLINICOPATHOLOGICAL AND RADIOLOGICAL FEATURES

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Goal

To evaluate the association of clinical signs of inflammation, computed tomography (CT) findings and histological features to determine if pre-rupture of orbital dermoid cysts can influence outcomes

Materials and methods

A retrospective chart review was performed of patients with orbital dermoid cyst managed between 1989 to 2014. Data were collected on clinical features, CT scan and histology postoperatively to confirm signs of pre-rupture of the cyst. The associations were tested with Odd's ratio and 95% confidence interval (CI). Receiver operating characteristic (ROC) and the area under the curve was calculated to determine an association between cyst size and pre-rupture. $P<0.05$ was statistically significant.

Results

Forty-two patients with dermoids were evaluated. The median age was 5 years. There were 23 (54.8%) patients with cysts located temporally and 19 (45.2%) with medial cysts. Thirty-six (85.7%) patients had a superficial cyst. Pre-rupture occurred in 61.9% of patients, with median age of 5.5 years old. Median age of patients in whom pre-rupture did not occur was 3 years old. Pre-rupture occurred more frequently in larger (median=16 mm) and medially located cysts. Bone scalloping was more frequent in pre-rupture cases (65.4%). Fat was the most common content for all cases, but, there was a greater association between liquid and pre-rupture ($P=0.08$). The sensitivity of CT in predicting pre-surgical rupture was 50% and specificity was 75%. The size of the dermoid allowed accurate determination of pre-rupture in 72.5% of the cases. Histology confirmed pre-rupture in 61.9% of the cysts. Outcomes were not affected by intraoperative cyst rupture.

Conclusions

There was a positive association between bony remodeling and histological pre-rupture. The age of the patient and size of the dermoid were related to signs of pre-rupture. Early surgical removal of dermoids is required to avoid pre-rupture. There was no relationship between pre-rupture and intraoperative complications

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ENDOSCOPIC PRIMARY DACRYOCYSTORHINOSTOMY: ARE SILICONE TUBES NEEDED?

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Goal

The first dacryocystorhinostomy (DCR) was described by Caldwell in 1893 but only 100 years later with the development of modern nasal endoscopes the endoscopic DCR has become popular and it's considered the gold standard treatment for patients with obstruction of the lacrimal system on the level of the sac or below it.
The most common reasons for failure in endoscopic DCR are adhesions and restenosis. Bicanalicular insetion of a silicone tube into the lacrimal duct is the most common procedure to prevent the closure of the rhinostomy. However, the silicone tube itself may cause tissue granulation predisposing the site to infection and adhesions.
The objective of this study is to assess different outcomes between endoscopic dacryocystorhinostomy (En-DCR) with and without silicone intubation.

Methods and materials

We retrospectively analyzed 40 patients (46 procedures), suffering from chronic epiphora for primary acquired nasolacrimal duct obstruction, treated between January 2013 and June 2015 with En-DCR and divided into two groups depending on silicone stent intubation.
The surgical outcomes were evaluated using Munk's score criteria. Functional success was defined as absence of epiphora, no further episodes of dacryocystitis, and a patent ostium after saline irrigation.
The surgery was performed under general anesthesia in all cases.
Step 1. Mucosal incision (Fig. 1) - The mucosal incisions were made with scalpel scythed. The incision was started approximately 5-6 mm above the insertion of the middle turbinate and carried anteriorly for approximately 8mm.
Step 2. Flap elevation - A suction elevator was used to raise the mucosa from the underlying bone along the maxillary line posteriorly to the thin lacrimal bone.
Step 3. Bone removal - The thin lacrimal bone was dissected free of the posterior aspect of the lacrimal sac. The thick bone of the frontal process of the maxilla was initially removed using a Kerrison rongeur and then continue with an angled diamond burr.
Step 4. Removal of the lacrimal sac mucosa - After the medial wall of the lacrimal sac has been exposed, sac was tented by the lacrimal probe (Fig. 2). The medial wall was incised vertically (Fig. 3) and angled Blakesley forceps were used to remove the redundant tissue along the incised sac edges.
Step 5. Intubation (Fig. 4) – In 20 procedures lacrimal probes threaded with Silastic tubes are passed through the canaliculi, directed out of the nasal cavity, and tied.

Results

20 En-DCR with stent and 26 En-DCR without stent were performed. The period of the insertion of silicone tube was from 3 months to 6 months, and average 4.1 ± 1.2 months. The follow-up observation period was from 11 months to 48 months, and average 26.2 ± 5.4 months.

Success rate were, respectively, 90% in the stent group and 88.5 % in the non-stent group with no statistical differences (Student's test). The ostial size reduction has been reported in higher percentage in the stent group, mainly due to peristomal granuloma and scar tissue formation.

Discussion

En-DCR without silicone stent intubation should be the first choice of procedure, stent intubation should be reserved in selected cases with poor local conditions pre and intra-operatively assessed (tight space, too intraoperative trauma). The benefits of non-intubation are less patient discomfort, reduced surgical time and costs, simpler follow-up regimen and less intubation-associated complications (granuloma, scar tissue, etc.).

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RESULTS OF PROBING UNDER ENDOSCOPIC GUIDANCE IN CHILDREN FOURTY-EIGHT MONTHS AND OLDER

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Goal

This study evaluates the success rates of endoscopy assisted probing or conventional probing in children ≥48 months old.

Materials and methods

This retrospective study included children 48 months or older with CNLDO who underwent endoscopic assisted probing or conventional probing between January 2011 to August 2015 at a tertiary eye care hospital in central Saudi Arabia. Probing was considered successful when symptoms disappeared (subjective success) and dye disappearance test was normal (objective success). Demographic data, clinical features, intraoperative and postoperative variables were correlated to the success rate.

Results

One hundred and twelve children with CNLDO undergoing endoscopic assisted (37 patients) or conventional (75 patients) probing were included. The objective and subjective success rates of endoscopic assisted and conventional probing was 94.6% (95% CI 89.5- 99.7) and 58.7% (95% CI 47.6 – 69.8) respectively. The success rate was higher in the endoscopic group and the difference favored the endoscopic procedure in older children.

Conclusions

Endoscopic assisted probing had significantly higher success rates than conventional probing in children 48 months or older. Endoscopic assisted probing can achieve good outcomes to treat CNLDO even in children over 48 months old.

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TEMPORARY MEDIAL UPPER EYELID LAGOPHTHALMOS AFTER EXTERNAL DACRYOCYSTORHINOSTOMY

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Goal
Report of three cases of medial upper eyelid lagophthalmos as complication of external dacryocystorhinostomy.

Materials and methods
Shortly after dacryocystorhinostomy (side of the nose skin incision), three patients (28 ± 4 years; mean ± standard deviation), out of ten consecutive ones, presented with an ipsilateral lagophthalmos of 4 ± 1 mm by voluntary eyelid closure and 6 ± 1 mm by spontaneous blink. The lagophthalmos appeared to primarily result of a medial upper eyelid paresis. Patient 1 complained bitterly of dry eye symptoms and of her lagophthalmos. Patient 2 had mild symptoms but got very concerned after peers made her aware of an asymmetric blink. Patient 3 was asymptomatic and did not notice anything particular.

Results
Lagophthalmos resolved spontaneously within three months after surgery, first by recovery of voluntary eyelid closure and then of spontaneous blinking.

Conclusions
Temporary lagophthalmos can occur as a complication of external dacryocystorhinostomy, most likely due to damage of the only recently described superficial buccal and/or zygomatic branches of the facial nerve that in subjects run upward to cross over the medial ligament and innervate the medial part of the orbicularis oculii muscle.

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DIFFERENTS FORMS OF CONJUNCTIVAL AND EYELID LYMPHOMAS

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Goal

Presentation of cases of lymphoma in eyelid and conjunctiva in patients and different presentation start

Materials and methods

Review of clinical history multidisciplinary photographic and imaging documentation and review of literature

Results

Patient of 53 years who consulted for palpebral tumor in the right lower eyelid of 6 months of evolution, with personal history of major bilateral BTE adenomegalia the contralateral side. It presents the ophthalmological examination: visual acuity of 8/10 in both eyes without correction, 10/10 correction, bmc: od temporary scleritis, conjunctival fornix mass and two lower eyelid lesions; oi unremarkable, MOE preserved without diplopia. Fundus: no particularities .Computed Tomography in hyperdense lesion was evident in scleral insertion of the lateral rectus. excisional biopsy and tarsal conjunctival lesion and cancer screening was performed. flow cytometry was performed, confirming the diagnosis with biopsy result conjunctival and orbital NHL lymphoma type MALT lineage. It was indicated marrow aspiration and chemotherapy for 6 months indicated.Patient of 65-year-old who consults for red eye of 6 months duration, no history, treated as viral conjunctivitis, visual acuity of 10/10 in both eyes without correcion, bmc: conjunctival fornix mass on od, rest without particularities. Computed tomography in no pathologies are observed; excisional biopsy confirmed diagnosis of lymphoma Conjunctival type of NHL, MALT lineage is performed. Patient 60 years old, who consults for unilateral proptosis of 3 months of evolution, that the examination had av sc 10/10 without correction, bmc: unremarkable, HERTEL 22 mm od, oi 17mm, fo: no particularities. Computed Tomography in hyperdense lesion was evident in superointerna retro-orbital area. It is performed biopsy confirmed diagnosis of MALT-cell NHL

Conclusions

Lymphomatous lesions conjunctival lesions are presented as salmon-colored sacks fund but in some cases may occur conmitantes associated with orbital lesions with infiltration of muscles extraoculares.En ophthalmologic examination must analyze the conjunctiva and funds sac and contralateral eyelid. with excisional biopsy diagnosis is made and treatment is excision plus radiation therapy and or quemioterapia.

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SEBACEOUS CARCINOMA OF THE EYELID WITH PAGETOID INFILTRATION OF THE CONJUNCTIVA: TWO CASE REPORTS

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Goal

To show the importance of Sebaceous Gland Carcinoma (SGC) of the eyelid. It is a very rare, slow growing, malignant tumor. Most ocular sebaceous carcinomas originate in the tarsal meibomian glands. It commonly occurs in the sixth to eighth decade of life, with preponderance for women and Asians. The upper eyelid is affected more frequently. The disease can spread directly by orbital invasion, lymphatic spread to regional lymph nodes and hematogenous spread to distant organs. Correct diagnosis of SGC is often delayed due to its resemblance to a variety of benign conditions of the eyelids such as chalazion or chronic blepharoconjunctivitis.

Materials and methods

A review of the literature was performed, focusing on the epidemiology, clinical presentation, diferential diagnosis, treatment and monitoring

Results

We report on two female patients suffering from sebaceous carcinoma of the upper lid with pagetoid infiltration of the conjunctiva. The time span from initial treatment up to definite diagnosis and treatment was one year . In both cases the tumor was radically removed surgically. Histopathologically, it were diagnosed as a SGC. There was no lymphovascular invasion and no metastasis; therefore no other treatment was included.

Conclusions

SGC is a rare but aggressive neoplasm that tends to clinically and histopathologically mimic other conditions. Remains a common diagnostic pitfall for both the clinician and histopathologist. Therapy of choice is the radical surgical removal of the tumor. It should be considered in cases of persistence of conjunctivitis or chalazion despite appropiate therapeutic interventions.

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TOTAL RECONSTRUCTION FUNCTIONAL OF THE UPPER AND LOWER EYELID USING COMBINED FLAPS AND FREE GRAFTS

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Goal

To describe a surgical technique for total reconstruction of the upper eyelid and the lower eyelid in two cases using combined flaps and free skin and mucosal grafts.

Materials and methods

Retrospective and descriptive study of two patients with advanced malignant tumor recurrence (one of them with Sebaceous cell carcinoma and one with Basal Cell carcinoma). The patients had total reconstruction of the upper eyelid and partial reconstruction of the lower eyelid with the use of three different types of flaps (Periostium, Tripier and Fricke) and free skin and mucosal grafts.

Results

Surgery produced complete reconstruction of upper and lower eyelids in both cases with good functional and cosmetic results. There was no tumor recurrence and the follow up time was 18 months.

Conclusions

Total reconstruction of the upper eyelid and partial reconstruction of the lower eyelid can be performed satisfactorily with good functional and cosmetic results with the use of combined flaps and free skin and mucosal grafts. In this way adequate eyelid function and vision can be preserved.

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TRANSCONJUNCTIVAL FAT REPOSITION WITHOUT PEDICLE IN LOWER BLEPHAROPLASTY

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Goal

To present and describe the experience of the author in lower eyelid blepharoplasty, a surgical technique transconjunctival fat transfer without pedicle, in the nasojugal fold (tear trough) in order to achieve an aesthetic improvement.

Materials and methods

Retrospective, observational and descriptive study where clinical history was reviewed and images for a period of 2 years. They were excluded from the study patients with a history of eyelid surgery and / or lifting of the middle third of the face. Described in detail surgical technique, representative photographs are presented to assess the outcome; the results and complications were reviewed.

Results

They were included in the study 14 patients. The average age was 62 years (range 49-75) and mean follow-up was 6 months (range 2-13). It was included 12 women and 2 men. No postoperative complications were recorded. All patients were satisfied with the surgical results felt.

Conclusions

The technique of fat repositioning without pedicle provides a subtle change in the contour of the lower eyelid. It is not as powerful as alloplastic implant, which other author have suggested, but has the advantage to be autogenous tissue; or to have used the lipofilling. In the author's experience has shown subjectively a decrease in depth fold nasojugal, is used filler patient's own fat and the same area. No longer requiring additional time or specific fat processing. The complications are the same for any other variation of transconjunctival blepharoplasty.

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ORBITAL MUCOCELE

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Goals

The aim of our poster is to show four patients with diffents types of mucocele of paranasal sinus and their signs and symptoms.

Materials and methods

We present four cases of orbital mucocele, their locations and their signs and symptoms.

Results

Dermoid and epidermoiyd cystic, angiofibromas, neurofibromas, osseous fibromas, cylindromas, inverted papillomas, cholesterol granulomas, and odontogenic cysts may cause expansion similar to mucoceles in the sinus walls and, therefore, they should be included in the differential diagnosis. CT is the most important and beneficial method, and it reflects the imaging of homogeneous, cystic, expansile mass eroding the surrounding bone tissue. MRI is used to determine the involvement of neighboring soft tissue and to distinguish the lesion from other soft tissue neoplasms. Mucoceles are treated surgically. The location, magnitude, and expansion of the lesion are determinants of the appropriate surgical procedure. The endoscopic approach is a faster procedure with less morbidity and a shorter time. One exception is when the frontal sinus its compromised laterally, in that case the best approach is an orbitotomy.

Conclusions

Mucocele is a rare condition that can affect any paranasal sinus. Therefore it is not a well-known disease for the general ophtalmologyst. The location, clinical manifestations, magnitude and expansion are determinants of the surgical approach.

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ORBITAL HEMANGIOPERICYTOMA

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Goal

The goal of our poster is to report a case of Orbital Hemangiopericytoma we received in the Hospital, to describe both clinical and histopathological findings and the treatment of choice.

Materials and methods

Clinical and histopathological features were reviewed in a 50 year old female patient who was confirmed as having primary orbital hemangiopericytoma in Hospital de Clinicas de Buenos Aires.

Results

The patient who was diagnosed as having primary orbital hemangiopericytoma by histopathologic and clinical findings, presented with progressive proptosis and some associated symptoms such as extraocular motility limitation. Visual Field showed superior temporal scotoma. Neuroimaging showed a well-circumscribed mass in the superior medial aspect of the right orbit, a lateral displacement of the optical nerve, which compromised medial rectus and extended to the etmoidal senus and CNS. Biopsy was taken and later, due to its retro-orbital localization partial surgical resection was performed. At this time, radiotherapy is being considered as an adjuvant treatment.

Conclusions

Both clinical and histopathological findings are important for diagnosing and evaluating the treatment outcomes of orbital hemangiopericytoma. Total excision is suggested as the treatment of choice, and radiotherapy can be and effective adjuvant treatment for recurrence.

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THE GARDEN OF MINERVA

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Goal

In the XXI century it survives over the years a small garden, overlooking the Mediterranean, surrounded by trees and flowers, is a faithful representative of the Medical School of Salerno from the Middle Ages Considered the first botanical garden, past show and present of this important area of medical and pharmacological studies.

Research Methodology

"Ostensio simplicium" in the Simple Jardin del Maestro Mateo silvático, cultivated some of the plants from which the active ingredients used for therapeutic purposes in medicine of the time were obtained. In the master's work the silvático Pandette (Opus pandectarum Medicinae), with a simple lexicon 500 plastas describes your benefits medicinales..El l silvático work: of the 487 chapters on plants, 233 (42.9%) are defined with a name of Arab origin, 134 (27.6%) with a Greek origin and only 120 episodes (24.6%) are called by a Latin word

Materials and methods

Different photographic shots of the city of Salerno and the Garden of Minerva, currently performed. Information was collected in museum and in bibliographic.

Results

School was largely based on the Humoral Theory of Hippocrates and Galen, but also on the experience gained in the daily exercise. In addition, translations of Arabic texts, this experience is added a vast knowledge of herbal medicine and pharmacology. The characteristics of the Garden of Minerva and knowledge of pharmacology and botany of its founder Matthew silvático, made this space would allow the development of different plants, shrubs and tubers, but so also the scientific knowledge of physicians of the period.

Conclusions

The Jardin de la Minerva has a special microclimate favored by the low incidence of the north wind and the favorable exposure, which, even today, allows the cultivation of plant species demanding in terms of humidity and heat, When walking through internal trails Garden not only see a rescued archaeological site, like many, but it represents an important link in the history of medicine and one of the first universities.

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UPPER EYELID RETRACTION IN GRAVE'S DISEASE

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Goals

The aim of our poster is to describe demographics, differential diagnosis, clinical manifestations and treatment methods of Upper eyelid retraction in thyroid eye disease

Materials and methods

We present some patients corrected by different surgical techniques and the postoperative results.

Results

Grave's upper eyelid retraction is a very frequent sign of Graves' orbitopathy which can be mild, moderate or severe. Between its differential diagnoses, contralateral ptosis, congenital retraction and Marcus Gunn phenomenon can be found.
Several lengthening technics have been proposed to correct this disorder, as müllerectomy, levator aponeurosis recession or levator aponeurosis transposition, being the most common complication hiper or hypocorrection. We present some cases treated by different techniques with good results.

Conclusions

Upper eyelid retraction is a very frecuent presentation in patints with Graves orbitopathy and many different approaches have been described to solve it. However, predictability of final eyelid height and contour following surgical correction remains problematic. We present some cases with good postoperative results using relatively easy and safe procedures.

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OPHTHALMOMYASIS AND SKIN CANCER

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Goal

To report three cases of ocular myaisis related to oncologic lesions, review of the literature and pathology**.**

Materials and methods

Three cases with medical records and their corresponding histopathology are presented. All patients are from Argentina and live in rural provinces of Argentina. They have been diagnosed and properly treated.

Results

In the three cases, patients had infestation from larvae of Cochliomya hominivoras in ulcerated lesions of basal cell carcinoma. Neither manual larvae removal, nor antibiotic or antiparasitic treatment weren't enough to solve the orbital infestation. Orbit exenteration was needed to achieve final cure in all cases.

Conclusions

Due to the potentially devasting consequences ending in mutilating surgery, it is mandatory to recognise and identify patients with risk of having myasis infestation**.**

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TREATMENT OF DRY EYE SYNDROME IN YOUNG AGE GLAUCOMA

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Goal

This study born from the necessity of reducing symptoms of dry eye syndrome in patients subject to anti-glaucoma treatment. Thanks to the introduction of zinc sulphate and ialuronic acid, it has been opened a new path, more appropriate and less invasive by the chemical point of view.

Materials and methods

This study, realized in 2016, controlled and randomized has been carried on 20 patients (40 eyes) that during the pre-surgical period has done:
BUT – SCHIRMER TEST – FERNING TEST – NO CONCACT TONOMETRY.
The tests has been repeated after 3 months using the same diagnostic instruments.
The chosen patients have instilled Zixol, single dose colllyirium 3 times a week for 3 months.

Results

The test results show the real improvement of ocular surface.

Conclusions

They've been analyzed the possible association of symptoms with the best results of lachrymal test and it has been noted an outstanding augmentation of BUT, as consequence of increased biolife of fat and mucinous molecules that holding water molecules, considerably increase corneal hydration, reducing symptomatology. Together with the more hydrating effect of ialuronic acid, it's possible to see reduction of symptoms linked to the foreign object's sensation.

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RIBOFLAVIN-BASED STAINING OF THE EPITHELIAL OCULAR SURFACE: A NEW DIAGNOSTIC OPPORTUNITY

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Purpose
Our purpose was to evaluate the effectiveness and safety of an new dye solution with fluorescent properties containing Riboflavin (Droptest) for the slit lamp examination of the corneal and conjunctival epithelial defects and to compare with the traditional staining by fluorescein and lissamine green in Sjogren Syndrome patients.

Materials and methods
We studied 20 eyes of 10 patients suffering from Sjogren Syndrome with bilateral epithelial corneal-conjunctival defects. Each patient was subjected to staining with Fluorescein solution and Lissamine green matches (F+L) in right eye and with Droptest solution (D) in left eye; after washing with NaCl 0,9% solution, we performed staining with D solution in right eye and with F+L in other eye. The observation was made by slit lamp with cobalt blu light after fluorescein administration and in white light after lissamine-dye; the examen after Droptest administration was made with cobalt blu light and anteposition of filter wratten #12 (yellow).
The evaluation was performed by two independent examiners for both eyes after each step, using the Lemp scheme, and underwent to statistic elaboration.

Results
The average corneal score for the right eyes, based on Lemp scheme, was 4,2 using F+L staining and 4,1 after D coloration, whereas for the left eyes was 4,7 with F+L and 4,6 with D evaluation.
The average conjunctival score was in right eyes 5.1 for F+L and 5.0 for D, while in left eyes 5,4 for F+L and 5,4 for D.
No statistically significant difference between the two groups was found.
In 9 of 10 patients, after asking their preferences, Droptest© coloration was subjectively more tolerated than F+L procedure. No side effects reported.

Conclusions
Our study highlights that this new riboflavin-solution technique (Droptest), combined with the anteposition of a wratten 12 filter on slit lamp, is equally effective and equally safety for the detection of corneal and conjunctival suffering areas, compared with the classic combined use of sodium fluorescein, specific for the corneal epithelium, and lyssamine green, specific for the conjunctival injuries. The riboflavin solution was preferred by 90% of the patients, with better patient compliance and reduction of examination time, compared with the evaluation using the white light for lyssamine and

cobalt blue light for fluorescein stain.. In conclusion the formulation containing riboflavine (Droptest) appears to represent an appropriate substitute of fluoresceine in these type of patients, it is an innovative way, but further studies are needed.

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THE SCHOLA MEDICA SALERNITANA AND OPHTHALMOLOGY

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Purpose

The Schola Medica Salernitana dates back to Middle Ages. It was in strong contrast to the beliefs of that time and it became a pioneer institution to which the following universities would conform. Studies concerning the various branches of medicine would result in essays that eventually became true cornerstones. Our investigation, by tracing back the history of medicine, will allow us to rediscover the first approaches to eye surgery and the treatments which were considered most appropriate for the treatment of eye diseases.

Investigation methodology

Strolling about the old town is not difficult to dive in institutional structures such as palaces, gardens, sculptures still relevant; the tradition is not supported by historical documents, dates the foundation of the ninth century school, through the work of four teachers: Helinus the Jew, Pontus the Greek, Adela the Arabic and Salernus the Latin. To relive the history of the Schola Medica Salernitana we went to the Virtual Museum of Salerno.

The first historical evidence of the activity of the school date back to the Thent century and are contained in the Historia inventionis ac traslationis et miracula S. Trophimenae, in Chronicon Hùgone of Flavigny, and in the Reims Richeiro Historia.

Early surgical elements are found in the Thirteenth century, when in Salerno are studied the basic standards of teaching surgery, encoded by Ruggero from Frugardo and Rolando from Parma. It speaks for the first time of a surgery about eye diseases in the Treaty of Ruggero from Frugardo Surgery, who proposed treatments used to solve the red eyes and ocular hypertension proceeding with an engraving of intervention of the frontal artery.

Results

The ophthalmic surgical practice was deeply analyzed in the second half of the XIII century thanks to the studies of Benvenuto Grafeo, author of *De Arte Probatissima Oculorum* and *De oculorum adfectibus*, which describes various ocular diseases and different surgical interventions. Another exponent of Salerno ophthalmic doctrine was David Armenio author of the *Tractatus de Oculis Accanamusali*, his work is considered the foundation of Salerno ophthalmology. We can find in this manuscript a very rare iconographic testimony documenting the eye surgical instruments of Salerno. In the

manuscript it is preserved a rare documentary iconography detailing eye surgery tools. The tools, depicted so clearly and precisely, are accompanied by a clear indication of their use: scissors, needles, hooks, chisels and cauteries for the removal of cataracts, lacrimal fistula, corneal blisters and other similar interventions.

Conclusions

The medicine-eye surgery was one of the glories of the Schola Medica Salernitana. Thanks to the works of Benvenuto Graphaeo and David Armenio began important studies in this field which may be considered a reference point for all subsequent ophthalmological medicine.

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THE AESTHETIC MEDICINE IN THE SCHOLA MEDICA SALERNITANA: TROTULA DE RUGGIERO

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Object

The Schola Medica Salernitana was the first Cultural Center not controlled by the Church.It was the first and largest medical institution in Europe during the Middle Ages, therefore considered by many as the forerunner of modern universities. There began the translations from Arabic into Latin of medical texts from the ancient Greek scientists, making them accessible to Western scholars too. The school was also open to women who attended both as students and as teachers. Trotula is the most important exponent of the doctors who was interested in cosmetics, We can find her knowledge in one of the most important treaties of aesthetic medicine.

Investigative methodology

The use of cosmetics to improve the human body is lost in the mists of time. Sources attest the use since prehistoric times, perhaps to strike fear at rivals and preys, for religious and magical rituals. The use of cosmetics, however, has changed during the time, following the concept of beauty, adapting to the taste, to the specific needs and trends.

The search for beauty and its origins led to Salerno, considered as the melting pot of Mediterranean civilization, which gave shape to this knowledge through the Schola Medica Salernitana and where took part many active women. We discovered visiting the Virtual Museum that among mulieres Salernitanae there was Abella, Rebecca Garner, Mercuriade, and last but not least, Trotula De Ruggiero (1050-1097) with his treatises *De Mulierum Passionanibus ante and post partum*, defined *Trotula major* concerning the gynecology and obstetrics and *De ornatu mulierum*, said *Trotula minor*, a treatise on skin diseases and their care.

Results

Our journey back in the history of aesthetic medicine, has brought out an ancient treatise, "*De ornatu Mulierum*" which teaches women how to preserve and enhance their beauty and how to treat skin diseases through a series of precepts, tips and natural remedies. In the statement the author gives some make-up lessons, suggests how to hide wrinkles, remove puffiness from the face and eyes, shave the body, lighten the skin, hide blemishes and freckles, wash teeth and eliminate bad breath, dye hair, do the waxing, gingivitis and how to cure chapped lips. It also provides guidelines for preparing and using ointments and medicinal herbs for the face and hair and dispenses advices to improve wellbeing through steam baths and massages. Trotula describes in his treatise a primordial "scrub" for face. Indeed it recommends using an exfoliating

cleanser made with bread crumbs to smooth facial skin. It also describes a kind of primitive peeling using the irritant effect of the onion.
The paper reports 96 plants derivatives, 20 animal preparations and derivatives, 17 minerals, and 6 mixed preparations, such as ingredients for 63 total recipes, able to obtain as many remedies for cosmetic purposes and / or medicinal products.

Conclusions

Trotula De Ruggiero had innovative ideas in many aspects: she considered that prevention was the main aspect of medicine and propagated new methods, unusual for the era, emphasizing the importance the hygiene, balanced nutrition and physical activity play for health. Most of the plants mentioned in the Treatise and also the other plants used in the school of Salerno for the experimental preparations, at the beginning, grew spontaneously in the area, then they were cultured together with other plants introduced in the Minerva Gardens of Salerno.

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