Dear friends,

A newsletter of the society reflects the uniqueness of its personality and provides a forum for scientific and social exchange for the members. It therefore, gives me a great pleasure to see the newsletter of the APSOPRS take shape and see the light of the day. I must thank the editor Dr. Audrey Looi for all the hard work put in to bring out this edition with such an interesting and instructive content.

What has APSOPRS achieved during the past one year, since we last met in Singapore? One of the most important objectives that I set out in my President’s message was promotion of the specialty in the region by developing and affiliating National societies and by enhancing coordination with other National and supranational organizations in the field.

Have we moved in the right direction? Our society has become a reciprocal society to the American society of Ophthalmic Plastic and reconstructive surgery (ASOPRS) which enables member to become members of the society and participate actively in its meetings. We have also been affiliated to the International Council of Ophthalmology (ICO) and the Asia Pacific Academy of Ophthalmology (APAO) making our members effective members of those prestigious bodies as well.
We have been invited to organize a session at the World Ophthalmology Congress (WOC) meeting at Tokyo next year. We are also co-organizers for the ISO meeting at Guangzhou, China in November and are holding an APSOPRS session at the meeting of the Oculoplastic Association of India in Bangalore in September. These international collaborations have helped us to be more visible and active as an organization.

At the same time we have been active in promoting the development of National Oculoplastic Societies in the Asia Pacific region and affiliating these societies to the APSOPRS. This would help promote the spread of specialty and build collegiality between the Oculoplastic Community in the region. It should help in fulfilling our objective of developing excellent Oculoplastic service and training facilities in the region. The office bearers of the society have been playing a proactive role in carrying out all the activities of the society.

We are looking forward to a fruitful meeting of the APSOPRS next year in New Delhi, India from Sept 26-28, 2014 and I would like to invite you to this academic and social extravaganza as its organizing Chairman.

I would like to request all of you to be active participants in the development of the specialty and would love to hear from you how we can be more effective in the promotion of the specialty in the region.

Warm regards,

Dr. Ashok Kumar Grover
President, APSOPRS

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Editorial Note

Dear friends and colleagues,

Since the setting up of APSOPRS in 2000, we have always looked forward to our 2-yearly meetings where we get to share experiences and operative techniques with one another. These meeting have certainly led to an exciting exchange of ideas and taken our subspecialty in the Asia-Pacific region to a higher level. They have also allowed us to forge solid friendships which make our practice not only rewarding but also highly enjoyable.

With this inaugural issue of the APSOPRS newsletter, we hope to perpetuate this spirit of continual sharing and learning. Dr Reynaldo Javate, our founding President, is the best candidate to tell us more about how APSOPRS came into being. Dr Shantha Amrith, one of our most senior members who served two terms as treasurer has kindly contributed an informative article that tells us all we need to know about necrotizing fasciitis in the periocular region. Dr Li Dong Mei and colleagues have shared with us the Chinese experience with refractive disorders associated with congenital ptosis.

Whether it is invited articles, contributions for Case Highlights and Operative Pearls, or the Meeting Reviews and Event Announcements, I am confident our readers will find the material interesting and useful.

I would like to give special thanks to my Editorial Board who has contributed to the newsletter in one way or another as well as to Ms Myra Ng, my department secretary, for her work in putting this newsletter together.

Sincerely,

Dr Audrey Looi
Editor
Vice-President, APSOPRS
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A Look Back With Fresh Eyes at APSOPRS’ History

Dr Reynaldo M. Javate
University of Santo Tomas Hospital, University of Santo Tomas, Manila, Philippines

My journey as the Founding President of the Asia-Pacific Society of Ophthalmic Plastic and Reconstructive Surgery (APSOPRS) has been nothing short of wonderful. About the same time 20 years ago, I had already finished my fellowship at the Manhattan Eye, Ear and Throat Hospital in the United States. Consequently, I was on my way to becoming a member of the American Society of Ophthalmic Plastic and Reconstructive Surgery and began training with my former mentor and dear friend, the late Dr. Albert Hornblass, whom APSOPRS owes its beginnings to.

It was from him that I learned more than just the ropes, techniques and skills that were necessary to being a surgeon. Fortunate to be placed under his wing, he taught me more than what I needed to learn by giving me practical advice and inspired me to establish an organization of passionate practitioners.

My experiences as a member of the American Society of Ophthalmic Plastic and Reconstructive Surgery allowed me to see this as a benchmark and envision the same practice among neighboring countries in Asia.

Immediately after my training and becoming an official member, I flew back home to the Philippines to start working on this idea. After two years of immense planning, organizing, and communicating with oculoplastic surgeons all over the Asia-Pacific, APSOPRS was finally born. The society, being the first and only organization in its kind in the Asia-Pacific, was founded in the year 2000 with the following objectives:

1. To unify the Asia-Pacific Ophthalmic Plastic and Reconstructive Surgeons and Societies into a cohesive and productive organization.
2. To regularly organize and sponsor World Class Congresses and Live Surgery Workshops which will serve as venues for the common desire to advance our knowledge and practice of ophthalmic plastic and reconstructive surgery.
3. To promote joint sponsorship of various projects among various societies.
4. To conduct studies on Oculoplastic conditions peculiar and more commonly found in Asia Pacific region.
5. To promote cordial relationship and camaraderie among its members.

The initiative to establish the APSOPRS arose from our desire to assume a more active role in the global search for medical progress. Ophthalmic plastic and reconstructive surgeons organized as one body converged with an aim to advance knowledge in the field through meaningful communication and understanding among neighboring countries of Asia, Australasia, and Oceania. We believe that APSOPRS can provide us with the much needed forum where 1) we learn from our counterparts in Europe, Africa, and the Americas, and 2) share with them our unique contribution to the advancement of ophthalmic plastic and reconstructive surgery. The pursuit of knowledge is not merely an individual’s task. Rather, it is a participative endeavor that works as a network of collaborative ventures towards self-sufficiency, creativity, and progress.

In November 26, 2000, the first inaugural scientific meeting of the APSOPRS was held at the Edsa Shangri-La Hotel in Manila, Philippines. This landmark event was attended by participants from 12 countries, which include the Philippines, Australia, Hawaii, India, Japan, Singapore, Indonesia, Korea, Malaysia, Pakistan, Bangladesh, Taiwan, and Korea. Notable speakers such as the likes of Stephen Bosniak, Albert Hornblass, Juan Murube, Dwight Kulwin, Branson Call, Jemshed Khan, and Marian Zilkha came to present the newest information on their chosen area of expertise.

Well-known practitioners, fellow ophthalmologists, and academicians also shared recent innovations, new insights on oculoplasty and potential inventions at the three-day conference. The organizational meeting was an ideal venue for its founding members to interact with one another and collectively chart the direction of the society.

Although the concept of organizing oculoplastic surgeons in the Asia-Pacific Region was a longtime dream, it has become a pulsating reality which all of us claim as our own. In the future, we hope that this society will be the forum for our leaders and members in oculoplastics to take a more active role in the worldwide effort to advance our specialty. Through this organization, I cherish the hope that the unique voice of the medical practitioner in the Asia-Pacific can be given a voice and due understanding. Just as our European
and American counterparts have taken the initiatives to form their respective organizations, we in the Asia-Pacific are also active partners, dynamic contributors and innovators in the global search for medical progress. This organization is not just my brainchild; it is ours. May God Almighty continue to bring to successful completion what we have all begun together.

PERIORBITAL NECROTIZING FASCIITIS - A REVIEW

Dr Shantha Amrith
National University Health System, Singapore

Definition and nomenclature
Necrotizing fasciitis [NF] is an uncommon severe infection characterised by rapidly progressing necrotizing infection of the subcutaneous tissue and superficial fascia with secondary necrosis of the overlying skin. Fournier first described it in 1883. The term necrotizing fasciitis was first used by Wilson in 1952.¹ It is also known as hospital gangrene, suppurative fasciitis, Fournier’s gangrene, streptococcal gangrene, necrotizing erysipelas, flesh eating bacterial infection and progressive bacterial synergistic gangrene. Shindo et al² have suggested a strict definition of NF to include extensive necrosis of superficial fascia, rapid spread to involve the surrounding tissues and systemic toxicity. This disease was recognized by Hippocrates way back in the fifth century BC.³ The groin, abdomen, lower limbs are more frequently involved. Involvement of the face is rare due to excellent blood supply.

Predisposing factors
About 25% of patients may have no triggering cause.⁴ Most common trigger for periorbital necrotizing fasciitis is blunt, penetrating or surgical trauma. Sometimes the injury may be so trivial that the patient may not be able to recollect it. Insect, human and animal bites have been some of the injuries described. Among the surgeries that have led to NF were ENT procedures,⁵ dental procedures,²,⁶ blepharoplasties, with or without laser resurfacing,¹¹ conjunctivo-dacryocystorhinostomy using Jones tube,¹¹ forehead lump removal¹²,¹³ and a wedge resection for basal cell carcinoma of the eyelid.¹⁴ Recently there was a case report of periorbital necrotizing fasciitis following exposure to artificial colours used during a festive occasion in India.¹⁵

Almost 50% of NF occurs in healthy individuals with no prior pre-existing illness. Advanced age (over the age of 50) has been indicated as a risk factor for death.¹⁶ Other diseases such as chronic renal failure, peripheral vascular disease, deep vein thrombosis, drug abuse, diabetes mellitus, alcoholism, rheumatologic disease, and systemic malignancy are some examples of comorbidities found in patients with periorbital NF. Immunosuppression with drugs such as steroids,⁷,¹⁷-¹⁹ tacrolimus²⁰ and adalimumab,²¹ chemo-therapeutic agents¹¹,²²,²³ and colchicine²⁴ can predispose some patients to periorbital NF. Rare instances of malnutrition,²⁵ leucocyte adhesion deficiency in a new-
Microbiological features

NF is divided into two types on the basis of microbiological culture. Type 1 NF is polymicrobial caused by both aerobic and anaerobic organisms and NF type 2 by a single organism such as streptococci or staphylococci or a combination of the two. Type 1 NF is commonly seen in immunocompromised patients, whereas Type 2 NF patients often have no such immunodeficiency. Group A beta haemolytic streptococcus (GABHS) and Staphylococcus Aureus are the most commonly implicated organisms. The M protein in the cell wall of the GABHS is a super antigen responsible for the virulence of the organism and it inhibits antibody-mediated phagocytosis. Strains also secrete exotoxins A and/or B, which result in protease induced tissue destruction and toxic shock.

Among the viruses, chicken pox virus is reported to cause NF. Fungal infections such as Cryptococcus and candida and aspergillus have been isolated in two immuno-competent cases, and following trauma. In 1996, Banerjee et al have subdivided head and neck NF into craniofacial NF & cervical NF. 56% of craniofacial NF shows pure culture of GABHS whereas cervical NF shows infection with multiple organisms. Type 1 NF seems to be quite rare in the periorbital region as in 2/3 of the reported cases have pure cultures. This is probably due to the high vascularity of the region.

Pseudomonas Aerogenosa is the second most common organism responsible for NF after GABHS. Most patients with pseudomonas infection showed neutropenia and improvement in the neutrophil count happened at the same time as the resolution of infection.

Pathology

Necrotizing fasciitis of the eyelids behaves differently from the NF elsewhere in the body. The skin of the eyelid is thin and it lacks subcutaneous tissue. The rich blood supply of the orbicularis acts as a barrier between the skin & the underlying periorbita thus preventing the spread of infection to the orbit. The necrosis of the skin occurs rapidly and as a result, the lids are unlikely to harbour the smouldering nidus of infection. The thin skin allows early recognition of the disease. Elner et al in their series have reported the time interval between the onset of symptoms & the treatment as less than three days. The dermis is attached firmly at the nasojugal fold medially and to the malar fold laterally. This firm adhesion prevents the spread of inflammation. The path of least resistance for the spread of the inflammation is over the nasal bridge to the contralateral lids. This may be the reason for high incidence of bilateral NF. In early stages there is oedema in the dermis and deep subcutaneous tissues. Later stages of the disease show widespread necrosis of skin and subcutaneous tissue, with neutrophils and/or bacteria. Blood vessels show thrombosis due to damage to the vessel wall.

The thrombosis of the blood vessels may be enhanced because of systemic hypercoagulability. Increased fibrin deposition and decreased fibrinolysis also hasten the thrombosis. Thrombosis of the blood vessels is responsible for the inability of the antibiotics to reach the site of infection. This allows free multiplication of the bacteria. The tissue damage is probably caused by the bacterial necrotoxins which are also responsible for the complications such as glomerulonephritis, and endocarditis.

Clinical Features

Patients present with the history of acute periorbital swelling associated with severe pain. In some patients it may be indistinguishable from preseptal cellulitis. Patients may have systemic features like high fever, with rigor and sweating. Skin over the swelling appears erythematous and can be mistaken for erysipelas. The disease progresses rapidly and the lesion turns gangrenous within 24 hours. At this stage, the skin shows violaceous discoloration and fluid filled bullae appear on the skin, which help to distinguish it from preseptal cellulitis. The subcutaneous tissue involvement is more extensive than the involved overlying skin. In the later stages the area involved becomes anaesthetic from the destruction of the cutaneous nerves. There can be crepitus on palpation, which may be seen as air in the soft tissue on x-ray. Patient may be toxic, and in later stages may have signs of multi-organ failure or disseminated intravascular coagulation. Elner et al have reported loss of vision due to CRAO in their series.

The diagnosis of NF is mostly done on the basis of clinical features. Making a distinction between NF and other non-severe soft-tissue infection can be difficult. Presence of bullae, violaceous discolouration and skin necrosis point towards the diagnosis of NF. (Figure 1)
Investigations
The diagnosis of NF is mostly done on the basis of clinical features. However it is the delay in diagnosis that is responsible for the mortality associated with the disease. One of the reasons for late diagnosis is its rarity or lack of awareness. The symptoms that should prompt towards the diagnosis of NF are severe pain, toxic symptoms with or without the coexisting co morbid conditions. Bluish discoloration of the skin with necrotic patches is very diagnostic of NF.

Leucocytosis is considered as one of the indicators of risk and helps to differentiate NF from other soft tissue infections. It has more than 90% sensitivity and specificity. Seven out of 10 cases with pseudomonas infection show the presence of neutropenia. Presence of neutropenia should therefore alert one for a Pseudomonas infection. CT scan & MRI also help in making an early diagnosis. The characteristic radiological findings in computed tomography help to differentiate NF from cellulitis, myonecrosis, and phycomycesis. MRI can detect the extent of NF and can identify soft tissue oedema infiltrating the fascial planes many hours prior to the appearance of cutaneous signs. CT scan has also been used as a guide to surgical debridement.

Bacteriologic studies should be obtained before starting the antibiotic therapy including Gram's stain, aerobic and anaerobic cultures of the wound. Blood culture may not be positive in all cases. Elevated anti-DNase B titres and anti-hyaluronidase titres may provide serologic evidence of Streptococcal infection. Anti-streptolysin O titres and erythrocyte sedimentation rate may be raised but are of no diagnostic significance. Frozen section biopsy has been advocated by Stamenkovic and Lew for early diagnosis and prompt treatment.

Treatment
Early recognition and initiation of high dose antibiotics combined with tissue debridement helps to decrease the mortality. Mild cases may respond to antibiotic therapy alone. Because of the thrombosis of the blood vessels, antibiotic may not reach the infected site. Therefore, antibiotic therapy has to be combined with prompt surgical debridement of the affected tissue. Standard antimicrobial therapy should consist of a combination of beta-lactam antibiotics, such as penicillin or cephalosporin, and clindamycin. Benzyl penicillin is effective against GABHS. Addition of protein synthesis inhibiting antibiotics like clindamycin has a favourable outcome. It decreases the production of streptococcal toxins and enzymes even at subinhibitory concentration. Type 1 NF require addition of aminoglycosides. Surgical debridement decreases the bacterial load and production of hyaluronic acid, which permits the bacterial dissection through the connective tissue. Aggressive surgical debridement helps to decrease the mortality. There have been reports of exenteration being performed for NF. Good blood supply of the eyelids spares the lid margin from necrosis. Williams et al have suggested surgical debridement should involve mainly the subcutaneous tissue that harbours the infection without extensive skin resection in NF involving the head and neck. Retention of maximum amount of viable skin and orbicularis oculi permits rapid healing, assists in antibiotic delivery and reduces the facial disfigurement. Repeated debridement may be necessary if the response to treatment is slow. Once the acute phase is taken care of, reconstructive surgery can be planned at a later date. The role of hyperbaric oxygen therapy in the management of NF is controversial. Hyperbaric oxygen therapy may help to limit the ischemic tissue affected by NF. Intravenous gamma globulins are also recommended in the management of NF. Intravenous pooled immunoglobulins and heparinization help by neutralising superantigen activity and aiding antibiotic perfusion.

Prognosis
The major morbidity is loss of vision either due to central retinal artery occlusion or orbital spread necessitating removal of orbital contents including eyeball or corneal perforation. Other reason for morbidity is loss of skin and soft tissue leading to
cosmetic disfigurement and functional problems that need to be addressed subsequently.

Mortality from periorbital necrotising fasciitis is approximately 8.3%6, less than previously reported and is due to systemic complications like septicaemia, shock and multi-organ failure. NF involving lower part of the face has higher mortality due to spread of the infection to the neck and thorax.45 In all these cases the debridement was delayed or not performed. Early diagnosis and treatment helps to decrease the mortality and the morbidity. A high index of suspicion is required. There were at least a few reports that suggest that surgical debridement was not necessary as the patients showed improvement with antibiotic therapy. These cases are usually mild and diagnosed promptly with immediate institution of antibiotics.

Conclusion
Mortality due to periorbital NF may be on the decline due to awareness and prompt antibiotic institution including multiple surgical debridements if necessary. This prevents escalation to toxic shock which seems to precede all deaths reported so far. Vigilance and prompt action can help to save lives and decrease morbidity due to periorbital NF.

References


REFRACTIVE ERROR AND AMBLYOPIA IN CONGENITAL PTOSIS

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Abstract

Purpose: To investigate the refractive error and amblyopia in a large group of patients with congenital ptosis presenting to a specialist at the ophthalmology center.

Methods: This is a hospital based descriptive study conducted at Beijing Tongren Hospital from May 2010 to December 2012. In this study, we evaluated the frequency of ametropia and amblyopia in 242 eyes of 187 patients (age between 5 and 12) with congenital ptosis. The patients were classified according to the degree of ptosis as mild (36 eyes), moderate (92 eyes) or severe (114 eyes) ptosis. Statistical analysis was performed using the chi-square test and t-test.

Results: In 242 ptotic eyes, the frequency of myopia, hyperopia and astigmatism was 17.0%, 62.8%, and 31.1%, respectively. The overall incidence of amblyopia in ptotic eyes was 29.8%. The incidence of amblyopia in the severe ptotic eyes were higher than those in the mild or moderate ptotic eyes (54.7% vs 43.5%, p=0.044).

Conclusions: The incidence of ametropia and amblyopia were high in congenital ptosis. Referring to the causes of amblyopia, stimulus deprivation observed as a sole cause was much higher than before. Furthermore, amblyopia was more frequent in severe ptotic eyes.

Introduction

The upper eyelid margin is normally 0.5-2.0mm below the superior limbus at the primary position. Congenital ptosis is a common eyelid disorder among children, and is defined as unilateral or bilateral upper eyelid margin which is lower than normal. Classic experiments in animal models with visual deprivation induced by unilateral lid closure have shown that without an image on the retina the normal control mechanism of eye growth is compromised, resulting in axial myopia. However, in other animal species, the data reported were more variable and divergent. Some authors found an increase of axial length, while others found either no correlation or even hyperopia instead. Similarly, Charlotte et al. found more hyperopia in congenital ptosis. Recent studies found that patients with congenital ptosis may be at higher risk for amblyopia, yet only a small percentage of stimulus deprivation amblyopia has been found. Almost all investigators in China adopted the demoded criterion to define amblyopia. Nevertheless, there is a lack of studies dealing with large numbers of patients with congenital ptosis. The aims of the present study were to investigate the frequency of ametropia and amblyopia in congenital ptosis, and to determine the possible influence of stimulus deprivation amblyopia.

Patients and Methods

Patients A group of 316 consecutive patients with congenital unilateral or bilateral ptosis, established by ophthalmic examination were studied between May 2010 and Dec. 2012. The inclusion criteria was any patient with congenital ptosis age 5 to 12 years. The exclusion criterion were secondary ptosis after trauma, tumors (especially neurofibromas and hemangiomas), myopathies, optical media opacities, myasthenia gravis trauma, retina diseases, third nerve palsy, double elevator palsy, blepharophimosis syndrome, neurologic and systemic diseases, and previous eye or ptotic surgery. From the original group, 187 fulfilled these criteria.

Methods

Initially, a complete ocular examination was performed for each patient with congenital ptosis, and after passing inclusion and exclusion criterion, the following data were obtained: gender, investigate age, unilateral or bilateral ptosis, degree of ptosis, visual acuity (linear Snellen E test), refraction under cycloplegia (e.g. 1% atropine for three times a day, 3 days)

The amount of ptosis was measured while the patient looked in primary gaze. Ptosis was classified as mild when drooped eyelid covered no more than 1/3 pupil, moderate when 1/3—1/2 pupil was covered, and severe when more than 1/2 pupil was covered. Myopia was defined as spherical degrees (DS) ≤ -0.75 diopter (dpt), and hyperopia was defined as DS ≥ 0.75 dpt. Eyes with no myopia or hyperopia were classified as emmetropia. Cylinder degrees (DC) ≥ 1.25 dpt was astigmatism, which was classified with-the-rule (60°≤ axis ≤ 120°), against-the-rule (0°≤ axis ≤ 30°,or 150°≤ axis ≤ 180°), or oblique (30°≤ axis ≤ 60°, or 120°≤ axis ≤ 150°). Amblyopia was defined as age under 3 years with best corrected visual acuity (BCVA) of less than 0.5, age between 4 and 5 years with BCVA of less than 0.6, age between 6 an 7 years with BCVA of less than 0.7, age greater than 8 years with BCVA of less than 0.8, or greater than 2 Snellen lines difference between 2 eyes. Amblyogenic refractive errors were assessed in patients with astigmatism of 2.00 dpt or more, anisometropia (spherical degree differences between eyes of 1.00 dpt or more, or cylinder degrees differences between eyes.
of 1.50 dpt or more), hyperopia of 3.00 dpt or more, and
myopia of 6.00 dpt or more.\(^8\)

Categorical data were compared using the paired sample T test, chi-square test and rank sum test (SPSS version 17.0 for Windows). The level of significance was
\( p < 0.05 \) with all statistical tests.

Results
In compliance with these criterion, 242 ptosis in 187 patients (132 unilateral, 55 bilateral) were evaluated. The mean age at the time of the investigation was 7.37 years ± 2.25 years (range 5 year to 12 years). From 187 patients with congenital ptosis, 136 were male and 51 were female. Three patients presented with Marcus Gunn jaw-winking syndrome. Strabismus was observed in a non-ptotic eye. Of the 242 ptotic eyes, 36 eyes were mild, 92 eyes were moderate, and 114 were severe according to the classification described earlier.

Frequency of ametropia
In all ptotic eyes (unilateral and bilateral), there was significantly more hyperopia than myopia (152 vs 41, \( p < 0.05 \)). Seventy-five eyes (31.1%) were diagnosed with astigmatism. When comparing only children in the age range 3 to 6 years (n=142 ptotic eyes), the incidence of myopia in unilateral and bilateral congenital ptosis was in part, significantly higher compared with mass screening: 7.0% vs 0.28%\(^6\), \( p < 0.05 \) as well as with hyperopia (≥2.00 dpt): 45.1% vs 26.4%\(^6\), \( p < 0.05 \), and with astigmatism, 36.6% vs 7.7%\(^6\), \( p < 0.05 \), respectively.

In unilateral ptosis, 16 ptotic eyes and 20 fellow eyes were emmetropic. The rate of myopia and hyperopia in unilateral congenital ptosis was 21 vs 87 but compared with the fellow eye, the rate of myopia was 21 vs 18, and the rate of hyperopia was 87 vs 90 (Table 1), and none of the comparisons were significant, \( p > 0.05 \). However, the rate of astigmatism was higher in ptotic eyes than in the fellow eyes, 40/132 vs 16/132, \( p=0.000 \). In bilateral ptosis, the rate of hyperopia to myopia was 65 vs 20. In 75 patients with astigmatism (40 unilateral and 35 bilateral), 43 were with-the-rule, 26 were against-the-rule and 6 were oblique. When analyzing myopia, hyperopia and astigmatism between unilateral and bilateral congenital ptosis, respectively, the rates were not significantly different: 15.9% vs18.2%, 65.9% vs 59.1%, 30.3% vs 31.8%, \( p > 0.05 \) (Table 1).

<table>
<thead>
<tr>
<th>Table 1 Myopia, hyperopia, and astigmatism in unilateral and bilateral congenital ptosis.</th>
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<tr>
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<tr>
<td>Ptotic Eye</td>
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<td>Fellow Eye</td>
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</table>

In unilateral and bilateral congenital ptosis, the rate of myopia, hyperopia and astigmatism in mild and moderate ptotic eyes were: 19.5%, 58.6% and 21.1%, respectively. Eyes with severe ptosis were myopic in 14.0% of cases, hyperopia in 67.5% of cases and astigmatism in 42.1% of cases. In unilateral and bilateral congenital ptosis when ptosis was severe relative to mild and moderate ptosis, astigmatism was statistically more significant, 42.1% vs 21.1%, \( p=0.000 \). However there was no significant difference in myopia and hyperopia, \( p > 0.05 \) (Table 2).

<table>
<thead>
<tr>
<th>Table 2 Myopia, hyperopia, and astigmatism in mild and moderate ptosis and severe ptosis</th>
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<tr>
<td></td>
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<tr>
<td>Myopia</td>
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<tr>
<td>Hyperopia</td>
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<tr>
<td>Astigmatism</td>
</tr>
</tbody>
</table>

Of the 242 ptotic eyes, BCVA values were obtained in 149 eyes (82 unilateral and 67 bilateral). Amblyopia was detected in 72 of 149 eyes (48.3%). Overall, the incidence of amblyopia was 29.8% (72/242), which was significantly higher compared with mass screening: 3.4%~4.6%\(^6\), \( p < 0.05 \). Among the 72 amblyopic eyes, 51 eyes were unilateral and 21 eyes were bilateral.

The incidence of amblyopia in unilateral congenital ptosis was 62.2% (51 out of 82 ptotic eyes had amblyopia), in bilateral ptosis, the incidence was 31.3% (7 patients with amblyopia affecting one eye and 7 patients with amblyopia affecting both eyes, making a total of 21 out of 67 eyes). Statistically, the incidence of amblyopia was different between unilateral and bilateral ptosis in ptotic eye (\( p=0.000 \)) (Table 3).
Of the 149 eyes, 26 were mild ptosis, 59 were moderate ptosis and the remaining 64 were severe. Amblyopia was present in 37 eyes out of 64 eyes (57.8%) when ptosis was severe versus 35 out of 85 eyes (41.2%) in mild and moderate ptosis, which was statistically significant ($p=0.044$) (Table 4).

The causes of the 72 amblyopic ptotic eyes, including stimulus deprivation amblyopia, are summarized in Table 5. Stimulus deprivation amblyopia was found to be the sole cause of amblyopia in congenital ptosis in 22.8% (34/149) of the patients. The incidence of stimulus deprivation amblyopia was statistically higher in unilateral ptosis than in bilateral ptosis: 30.5% vs 13.4%, $p=0.014$. Based on this results, stimulus deprivation amblyopia does not seem to be more frequent in uni- or bilateral ptosis with severe ptosis ($p=0.527$). However, amblyogenic refractive errors were more frequent in severe ptosis than in mild and moderate ptosis, 24 out of 64 eyes versus 14 out of 85 eyes, $p=0.004$.

**Table 5 Causes of amblyopia in ptosis eyes**

<table>
<thead>
<tr>
<th>Causes of Amblyopia</th>
<th>No. of Eyes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anisometropia</td>
<td>5 (5 ul+0 bl)</td>
</tr>
<tr>
<td>Anisometropia + Ametropia</td>
<td>23 (16 ul+7 bl)</td>
</tr>
<tr>
<td>Ambetropia</td>
<td>10 (5 ul+5 bl)</td>
</tr>
<tr>
<td>Strabismus</td>
<td>0</td>
</tr>
<tr>
<td>SDA</td>
<td>36 (27 ul+9 bl)</td>
</tr>
</tbody>
</table>

ul = unilateral, bl = bilateral

In addition, the rate of astigmatism was statistically higher in amblyopic eyes than in non-amblyopic eyes (37.5% vs 13.0%, $p=0.000$). Amblyopic ptosis was more hyperopic than non-amblyopic ptosis, which was assessed by spherical equivalent refractions (1.95±2.90D vs 0.69±1.71D, $p=0.001$).

**Discussion**

**Ametropia**

In a small sample of 50 unilateral ptosis, the presence of more myopia in the ptotic eye compared with the fellow eye has already been reported, although not at a significant level. In accordance with the above results, Charlotte et al. studied 95 congenital ptosis, and found significantly more myopia in the ptotic eye than in the fellow eye. This conclusion was different from the present study which showed a similar myopic incidence between the ptotic eye and the fellow eye (15.9% vs 13.6%). Moreover, there was no significant difference when comparing the hyperopia of the ptotic eye with that of the fellow eye, Charlotte et al. detected more hyperopia than myopia in the ptotic eyes, which is consistent with our results, hyperopia vs myopia in the ptotic eye, 152:41 (their data, 58:10). The observed higher incidence of hyperopia in ptotic eyes may be related to the age of the patients. Comparison of our data from children age 3 to 6 years with those of mass screenings must take into consideration that the latter were done without cycloplegia or only in part under cycloplegia. Therefore, in mass screenings the frequency of myopia could be overestimated, and the frequency of hyperopia could be under-estimated. This could be consistent with our findings of more myopia in congenital ptosis in this age group (7.0% vs 0.28%). However, in our opinion, the incidence of hyperopia (≥2.00 dpt) was high (45.1% vs 26.4%) and it could not be affected by this possible error.

In agreement with previous studies, we detected more astigmatism in congenital ptosis compared with the mass screenings. The incidence of each type of astigmatism found in congenital ptosis was different between authors. In our studies, we found that with-the-rule astigmatism was more frequent compared to against-the-rule astigmatism and oblique astigmatism in ptotic eyes (43 with-the-rule astigmatism, 26 against-the-rule astigmatism and 6 oblique astigmatism). Stark et al. found an equal incidence of against-the-rule astigmatism relative to with-the-rule astigmatism. Kasaei found 90% were with-the-rule astigmatism. Although our data is most consistent with that of Kasaei et al., a difference in astigmatism classification must be considered. In contrast to our classification, Kasaei et al. defined with-the-rule astigmatism as 0°≤ axis ≤30° or 150°≤ axis ≤180°. Thus, each type of astigmatism is still not clearly determined in congenital ptosis. Srinagesh also found a high incidence of with-the-rule astigmatism in congenital ptosis, yet he did not state the definition in detail. In our study, a higher incidence of astigmatism was related to severe ptosis compared to mild and moderate ptosis, yet the incidence of myopia...
or hyperopia was not related to the severity of ptosis. It is possible that astigmatism and ptosis may be a coincidental, and not a causal relationship.

Recent studies (Table 6) have demonstrated that amblyopia is found more frequently in congenital ptosis than in the general population (3.4%~4.6%)\textsuperscript{9,10}. Our study found a 48.3% incidence of amblyopia in patients with congenital ptosis, significantly higher than in the general population. Considering different definitions of amblyopia and investigation age, the incidence of amblyopia in congenital ptosis varies. Because the diagnostic criterion of amblyopia were revised in China, there was a change in the incidence of amblyopia. Thus, the frequency of amblyopia in our series is lower than reported in some previous studies, which defined amblyopia as BCVA < 0.9 or a difference of 0.2. The very high amblyopia incidence is consistent with the possibility that amblyopia is highly related to congenital ptosis.

Table 6 Frequency of amblyopia and stimulus deprivation amblyopia (SDA): comparison with other authors

<table>
<thead>
<tr>
<th>Author</th>
<th>Number of Patients</th>
<th>Frequency of Amblyopia</th>
<th>Definition of Amblyopia</th>
<th>Frequency of SDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlotte et al.\textsuperscript{4}</td>
<td>100</td>
<td>69.5%</td>
<td>difference of 0.2 or BCVA &lt; 1. (20/20)</td>
<td>3.9%</td>
</tr>
<tr>
<td>Oral et al.\textsuperscript{14}</td>
<td>72</td>
<td>48%</td>
<td>BCVA≤0.7</td>
<td>26%</td>
</tr>
<tr>
<td>Thapa\textsuperscript{15}</td>
<td>78</td>
<td>19.2%</td>
<td>difference of 0.2 or BCVA≤6/9</td>
<td>3.8%</td>
</tr>
<tr>
<td>Srinagesh et al.\textsuperscript{16}</td>
<td>92</td>
<td>23.9%</td>
<td>difference of 0.2 or unilateral fixation preference</td>
<td>2.2%</td>
</tr>
<tr>
<td>Kasae et al.\textsuperscript{13}</td>
<td>100</td>
<td>34.2%</td>
<td>difference of 0.2 or BCVA &lt; 1.0 (20/20)</td>
<td>10.5%</td>
</tr>
<tr>
<td>Present study</td>
<td>193</td>
<td>48.3%</td>
<td>described as above</td>
<td>22.8%</td>
</tr>
</tbody>
</table>

The causes of amblyopia in several studies were not consistent. It is controversial whether ptosis alone can cause amblyopia. In different studies, the frequency of stimulus deprivation amblyopia in congenital ptosis ranged from 0% to 26%. In our study, this incidence was 22.8%, much higher than in the studies of Thapa\textsuperscript{15} and Srinagesh et al.\textsuperscript{16}, yet similar to the study by Oral et al.\textsuperscript{14}. The incidence of strabismus found by different authors ranged from 4% to 30%\textsuperscript{14,16}. The low incidence of strabismus in our series of ptotic eyes may be the result of our strict exclusion criterion which excluded third nerve palsy or double elevator palsy. In addition, patients with strabismus were sent to the strabismus clinic in our hospital. Stimulus deprivation amblyopia was more common in unilateral congenital ptosis, emphasizing that more amblyopia was found in patients with unilateral congenital ptosis.

Conclusions

Patients with congenital ptosis have higher rates of amblyopia. There is a greater possibility of amblyopia during severe ptosis, which is often accompanied by ametropia and/or anisometropia. We strongly recommend early and frequent ophthalmic evaluation and timely treatment of these conditions to prevent irreversible visual impairment in congenital ptosis.
References

Case Highlights

MANAGEMENT OF FLOPPY EYELID SYNDROME

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Jakarta, Indonesia

Introduction
Floppy eyelid syndrome (FES) is an enigmatic eyelid disorder first reported in 1981. Floppy eyelid syndrome (FES) is a very uncommon disease involving the laxity of the upper eyelids. Currently, there has been no specific data regarding the epidemiology of FES both in Indonesia and worldwide. In the Oculoplastic and Reconstructive Surgery in Cipto Mangunkusumo Eye Clinic, this is the first case of FES.

History
An 84-year-old male came with a chief complaint of being unable to open his eyelid for two years, making him unable to perform daily activities without sticking adhesive tapes to his eyelids. The patient also complained spontaneous eversion of both eyelids with foreign body sensation and redness of the eyes. There was no history of spontaneous eversion of the eyelids or snoring during sleep or trauma. He had a history of hypertension and high cholesterol levels for more than ten years, currently on medication. There was no history of diabetes mellitus or any heart disease.

Examination
From the ophthalmologic examination, both upper eyelids were very lax and were already everted upon presentation. The conjunctiva of both eyelids was hypertrophic. Blepharoptosis and brow ptosis were also present. The vertical eyelid fissure of both eyes was 0 mm and margin reflex distance was unable to be evaluated. Levator function of both eyes was less than 4 mm and the Bell’s phenomenon was positive. The visual acuity of both eyes was 6/15; intraocular pressure was within normal limit. Eyeball movement of both eyes was good to all direction. Conjunctiva I was hyperemic and corneas were clear. Other examinations were unremarkable except for cataract.

Figure 1. Picture before surgery showing spontaneous eversion of both eyelids.

Management
The patient underwent surgery for both eyes; lateral tarsal strip for eyelid laxity, direct browplasty for brow ptosis, and fascia lata suspension procedure for blepharoptosis.

After the surgery, the patient was able to open his eyes. Two weeks after the surgery, the vertical eyelid fissure of the right eye and left eye improved to 6 mm and 8 mm respectively, and the margin reflex distance was 1 mm and 2 mm in the right and left eye respectively. There was no lagophthalmos.

Discussion
The diagnosis of FES is based on clinical findings; the presence of rubbery, floppy, and easily evertable upper eyelids as found in this patient. There may also be chronic conjunctivitis of the upper tarsal conjunctiva with other eyelid pathologies such as upper eyelid ptosis and blepharochalasis which were all also found in the patient.

Depending on the severity of the clinical appearance, treatment of FES may be conservative or surgical. Topical medications such as lubricants, steroids, and antibiotics may improve symptoms. Surgical approaches had been routinely performed in patients with FES, but no standard technique had been reported.

In this patient, surgery was indicated based on the persistent eversion of both upper eyelids. Lateral tarsal strip was performed since it was a simple yet very good method to fix eyelid laxity and was proven to be superior compared to the full-thickness wedge excision method. Direct browplasty was chosen to correct the brow ptosis as it was asimple procedure compared to other methods. Fascia lata suspension was chosen to correct the blepharoptosis because the initial levator function of the eyelids was poor (less than 4 mm).

Figure 2. (A) Picture of patient 2 weeks after the surgery. (B) 1 month after the surgery.
The surgical result of the patient was remarkable since the patient can now open his eyelids and perform daily activities without the aid of adhesive tapes. Objectively, both the vertical eyelid fissure improved to 6 mm and 8 mm in the right and left eye respectively, while the margin reflex distance improved to 1 mm and 2 mm in the right and left eye respectively. The prognosis of the patient was relatively good since no obesity was associated.

References

CONJUNCTIVOCHALASIS AS AN EASILY OVERLOOKED CAUSE OF TEARING

Dr Hunter Yuen Kwok Lai
The Chinese University of Hong Kong

Conjunctivochalasis is a common age-dependent disorder of the conjunctiva characterized by redundant folds of inferior bulbar conjunctiva overlying the lower eyelid margin disrupting the tears film. This can cause tearing symptoms despite patients have a patent nasolacrimal system and sometimes oculoplastic surgeons may be consulted for these cases.

Symptomatic conjunctivochalasis that fails conservative lubricant treatment is traditionally excised surgically in the operative theatre with or without amniotic membrane transplantation and/ or sclera fixation. Subconjunctival fibrin sealant injection followed by resection has been used.

Recent studies in the literature have demonstrated the safe and successful management of conjunctivochalasis with superficial cauterization or subconjunctival coagulation with a fine-needle electrode using a high-frequency radio-wave electrosurgical unit. Argon laser photocoagulation under slit-lamp in the office settings has also been used as well.

The pictures show a patient who has received bilateral superficial conjunctival cauterization for tearing caused by conjunctivochalasis, conjunctiva resection was not performed. His tearing symptoms resolved afterwards. He has also received both upper lid blepharoplasty as well in the same OT setting.

Pre-operative photo:

![Pre-operative photo](image1)

Post-operative photo:

![Post-operative photo](image2)
References


Operative Pearl

A 3-YEAR-OLD GIRL WITH HUGE ORBITAL MASS

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A 3-year-old girl visited our clinic with exophthalmos and intermittent discharge from the right eyelid (Figure 1A). Exophthalmos had been present since birth and it progressed and resulted in eyeball perforation and collapse. Oozing and discharge from the upper eyelid had been intermittently noticed after bouts of erythematous eyelid swelling. The patient had not been able to have medical attention because of economic problem. There were no perinatal events or growth and developmental abnormalities.

PROPTOSIS was marked in the right orbit with upper eyelid swelling with crust and a fistulous tract. The eyeball was not seen and conjunctiva was prolapsed. There was no abnormality in the left eye. CT scan of the orbit revealed that huge soft tissue mass in an enlarged bony orbit with multiple irregular fat densities, calcific nodules, and a collapsed eyeball-like structure (Figure 1B, 1C).

Excision of the fistulous tract and draining cyst from the upper eyelid and tissue biopsy through a subciliary incision in the lower eyelid were performed. Pathologic finding was compatible with a dermoid cyst. Presence of calcified nodules with disorganized features of the orbital contents and the pathologic findings warranted the diagnosis of congenital orbital teratoma. Serum α-fetoprotein (AFP) and human chorionic gonadotropin (hCG) levels were checked for possible malignant potency, which revealed within normal limit.

The patient underwent debulking surgery 6 months after biopsy procedure. With a subciliary incision of the lower eyelid, a fair amount of the tumor was excised (Figure 2A). The surgery was especially focused on removing all the cystic structures. The mass was consisted of thick-walled keratin-filled cysts, tooth-like masses, and soft tissue. The eyeball and optic nerve could not be found during debulking surgery. Pathologic examination showed mature cartilages and cystic structures lined with keratinized stratified squamous epithelium and dermal appendages, which were compatible with teratoma (Figure 2B, 2C).

FIG. 1. A: The patient showing right exophthalmos with upper eyelid swelling and fistulous tract. B, C: Orbital CT scans reveal huge orbital mass in an enlarged bony orbit with irregular fat densities, calcific nodules, and the collapsed eyeball-like structure (arrow).

Excision of the fistulous tract and draining cyst from the upper eyelid and tissue biopsy through a subciliary line in the lower eyelid were performed. Pathologic finding was compatible with a dermoid cyst. Presence of calcified nodules with disorganized features of the orbital contents and the pathologic findings warranted the diagnosis of congenital orbital teratoma. Serum α-fetoprotein (AFP) and human chorionic gonadotropin (hCG) levels were checked for possible malignant potency, which revealed within normal limit.

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FIG. 2. A: Debulking procedure showing soft tissue mass with keratin-filled cysts, tooth-like masses. B: Histopathologic finding discloses cystic structure lined with keratinized stratified squamous epithelium and hair follicle (arrow, hematoxylin-eosin, x100), C: mature cartilage (arrowhead, hematoxylin-eosin, x200).

Being no tumor growth for 4 years of follow-up, reconstruction of the upper eyelid was performed (Figure 3A). Eyelid margin was dissected from the brow tissue after supraclival incision. The medial border of the tarsal plate remnant in the lateral upper eyelid was incised vertically to the eyelid margin. It was sutured to the medial one after excising central scar tissue to the extent to make a proper eyelid tension (Figure 3B). Orbicularis muscle pedicle flap was lowered from the eyebrow to make a bed for a skin graft. Post-auricular skin graft was sutured to the skin defect (Figure 3C). Another socket reconstruction procedure using a buccal mucosal graft was added to manage shallow conjunctival fornices 6 months after the eyelid reconstruction procedure (Figure 3D, E).

FIG. 3. A: Eyelid ectropion was released with supraclival incision (dotted line). Eyelid was shortened horizontally with excising central scar tissue medial to the tarsal remnant in the lateral eyelid. B: Tarsal plate was repaired and orbicularis muscle pedicle flap was lowered from the eyebrow to make a bed for a skin graft. C: Post-auricular skin graft was sutured to the skin defect. D: Socket was reconstructed with buccal mucosal graft for correcting shallow conjunctival fornices. E: The patient with prosthesis 6 months after eyelid reconstruction.
Congenital intraorbital teratoma is a rare cause of dramatic proptosis in the newborn. It can produce unilateral orbital enlargement, exophthalmos, and visual loss due to extensive tumor growth. Exenteration with preservation of the globe and vision has been introduced.\textsuperscript{1,2} For this case, being no visible eyeball or visual potential, exenteration might be indicated. Instead, tumor debulking procedure was attempted for cosmetic rehabilitation since it showed benign nature. The tumor was debulked especially being focused on eradicating the keratinizing cysts because the rapid growth in the majority of orbital teratomas can be explained by the accumulation of secretions within cystic spaces.\textsuperscript{2} During 4 years of follow-up, this patient did not show tumor regrowth, so, eyelid reconstruction was performed and achieved good cosmetic outcome. Of note, judicious follow-up is necessary for possible malignant transformation, though it has not been reported in the orbital teratoma, evaluating clinical signs and checking serum level of AFP and hCG. High serum AFP and/or hCG levels indicate the presence of the immature teratoma cells both in the primary and in residual tumor.\textsuperscript{3} Debulking excision can be considered as an alternative treatment option for extensive mature intraorbital teratoma with no visual potential for cosmetic rehabilitation.

References

MANAGING EYELID THICKENING AND PTOSIS ASSOCIATED WITH PACHYDERMOPERIOSTOSIS

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Beijing Tongren Eye Center, Beijing Tongren Hospital, Beijing Ophthalmology & Visual Science Key Lab, Capital Medical University, China

ABSTRACT
A 27-year-old Chinese patient with bilateral eyelid thickening and ptosis secondary to the rare condition of pachydermoperiostosis was presented. Surgical treatment was performed by horizontal tightening via a full-thickness wedge resection combined with levator shortening and advancement. Satisfactory aesthetic and functional results were achieved. The histopathology of eyelid tissue showed sebaceous gland hyperplasia and chronic inflammatory response.

INTRODUCTION
Pachydermoperiostosis (PDP), also known as primary hypertrophic osteoarthropathy, is a rare hereditary disorder characterized by digital clubbing, periostosis and pachydermia. It is more common and severe in males. The condition typically develops during puberty and progresses into early adulthood before stabilization\textsuperscript{(1;2)}.

Facial involvement is the most striking feature of PDP, presenting with thickening and furrowing of facial skin and scalp and sebaceous gland overactivity. Ocular manifestations include thickening and lengthening of the eyelids and chronic tarsitis due to hypertrophy of palpebral tissues\textsuperscript{(2;3)}. We report a case of bilateral eyelid thickening and ptosis associated with PDP.

CASE REPORT
A 27-year-old male complained of difficulty in opening both eyes and ocular discharge. The medical history revealed that he was diagnosed with PDP 7 years ago. Arthroscopic debridement for osteoarthritis of the knees was performed a year ago. He is the first child of first-cousin consanguineous parents. No other affected individuals were found in his family.

On presentation, his skin was greasy on the face and heavily thickened with wrinkles on the forehead and scalp. His hands and feet were enlarged with distal clubbing (Fig. 1). Visual acuity was 20/20 in both eyes.
His bilateral eyelids were massively thickened and ectropic. The upper lids were ptotic with a margin-reflex distance of 0 mm and the levator function was severely poor (0 mm) on both sides. He therefore opened eyes predominantly using frontal muscles (Fig. 2). The eyelids could be readily everted, demonstrating diffuse papillary conjunctival reaction. Color vision, ocular movements and intraocular examination were normal. Blood tests showed a moderate normochromic normocytic anemia.

The diagnosis of bilateral ptosis, lid laxity and ectropion associated with PDP was made. Surgical management was initiated on the left eye. Excess skin was excised following upper eyelid crease incision. The upper lid was shortened by full-thickness wedge resection and the enlarged tarsal plate was adequately thinned and excised (Fig. 3). Along the upper edge of tarsal plate, the levator aponeurosis was separated and then shortened by 15 mm and advanced by 2 mm. Eyelid crease was reformed by anchoring the lid skin to the levator aponeurosis with deep fixation sutures at the desired position. Skin incision was closed with a running suture. The lateral tarsal strip was then performed to tighten the lax lower lid. Similar procedure was conducted on the opposite eye about 11 months later. Tissue from the eyelid was submitted for histopathologic evaluation.

The result demonstrated sebaceous gland hyperplasia, abscess formation, perivascular granulomatous proliferation with giant cells, and swelling of collagen bundles (Fig. 4). The patient was satisfied with improved appearance and visual field (Fig. 5).

**DISCUSSION**

PDP was first described in 1868 by Friedreich as an example of acromegaly. In 1935, Touraine, Solente, and Gole postulated that PDP was different from acromegaly and hypertrophic osteoarthropathy secondary to thoracoabdominal neoplasia or chronic pulmonary disease. Clinically, PDP is classified into three forms: the complete form involves periostosis and pachydermia; the incomplete form presents with periostosis without pachydermia, while the fruste form has pachydermia but with minimal or absent periosteal involvement(4). The presented case corresponds to the complete form of PDP.

The precise etiologic of PDP still remains unknown. Homozygous and compound heterozygous germline mutations in the gene *HPGD* encoding 15-hydroxyprostaglandin dehydrogenase (15-PGDH) have been reported in familial PDP cases. 15-PGDH is the main enzyme of prostaglandin degradation and...
increased levels of prostaglandins, especially PGE$_2$, contribute to the pathogenesis of PDP(5-7). More recently, Zhang and colleagues(8) identified homozygous guanine-to-adenine transition in the gene SLCO2A1 encoding a prostaglandin transporter protein as the causative mutation in a single PDP-affected individual from a consanguineous Chinese family. Mutations in SLCO2A1 inactivate PGE$_2$ transport and result in dysregulation of PGE$_2$.

Ptosis associated with PDP is often not severe enough to require surgery(9). Excision of an ellipse of the upper eyelid skin was first described to correct both the vertical and horizontal dimensions of the eyelids(10). Ohtsuka and Takayangi(11) introduced three-staged procedures of lid shortening, upper lid tarsectomy, and blepharoplasty, in case of delayed healing. However, Seyhan et al.(12) recently performed upper and lower eyelid blepharoplasties and full-thickness wedge resections on both sides simultaneously with satisfactory outcomes. In the present case, the patient’s levator function was greatly reduced.

We reconstructed both the upper and lower eyelids on each side successively. Our technique combining eyelid shortening and thinning with levator shortening and advancement effectively corrected ptosis, lid laxity and ectropion. The histopathologic findings of the eyelid were fundamentally consistent with previously reported cases in other races (13).

ACKNOWLEDGEMENT

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References

Meetings

**APSOPRS 2012**

Organizing Chairman: Dr Yip Chee Chew
Khoo Teck Puat Hospital, Singapore

Summary contributed by: Dr Livia Teo
Singapore National Eye Centre

Asia Pacific Society of Ophthalmic Plastic and Reconstructive Surgery 2012 was held in Singapore, a country known for its cleanliness, hospitality and beautiful skyline. The meeting was held in conjunction with the National Healthcare Group Eye Institute’s 5th International Ophthalmology Congress, in collaboration with the Middle East Africa Oculoplastic Society (MEAOPS). 52 invited speakers and 421 delegates congregated at the Singapore Expo Convention and Exhibition Centre to experience and embrace “The Art and Science of Oculoplastic Surgery” from the 24th to 25th of August 2012.

The meeting was preceded by the pre-congress event on 23rd August where delegates presented their free papers in the junior, intermediate, senior and open categories. Papers were not limited to oculoplastics topics and included cornea and refractive, retina and glaucoma, to name a few. The standard of the papers was high and competition was stiff. Distinguished overseas judges included Dr Anthony Tyers from the United Kingdom and Dr Kim Yoon Duck from Korea. The decision process was a tough one but a best paper award was eventually presented in each category.

The afternoon session of the pre congress day included two workshops that ran concurrently. The workshop on “Sutures, grafts and flaps: going back to basics” was conducted by oculoplastics and plastics surgeons.

This workshop focused on the didactic and practical aspects of suturing techniques, grafts and reconstructive flap procedures. The session on “How to write a scientific paper” was targeted at healthcare professionals who are involved in scientific research, and focused on tips to help them gain experience in research paper writing.

24th August marked the first day of the main congress. Member of Parliament for Sengkang West, Dr Lam Pin Min, graced the occasion as guest of honour. Dr Yip Chee Chew, President of APSOPRS 2012, gave the welcome address followed by Dr Wong Hon Tym, Medical Director, National Healthcare Group Eye Institute at Tan Tock Seng Hospital with the opening address.

The first symposium was on challenges in eyelid surgery, with the first plenary lecture by Dr Anthony Tyers. The topic of his lecture was “Pre-operative planning and decision making in eyelid tumour resection” where he discussed his personal experience with eyelid tumour assessment and management, providing useful insight to all training and practicing ophthalmologists who were present. In the second symposium, there was a shift in focus to the rehabilitation of the anophthalmic socket. The second plenary lecture was by Dr Anthony Tyers, where he went beyond the basics of the what and why of a contracted socket, to impart practical pointers on how to deal with such difficult cases.

Dr Lelio Baldeschi from the University of Amsterdam gave the Singapore Eye Foundation Lecture, where he presented an excellent overview of the various pediatric orbital oncology conditions and their successful management under his care. The orbital symposia covered a broad range of complex orbital diseases and surgery where experts from Japan, India, China, Korea, Hong Kong and Singapore shared their first-hand experience and wisdom in managing these challenging cases. To wrap up this session, the third plenary lecture was by Dr Robert Kerstan from the United States of America where he enlightened the audience on specific inflammations of the orbit.

In the afternoon, delegates were free to choose from one of three workshops, each with a different focus: 1) Botulinum Neurotoxin Type A (BoNTA): All you need to know and more, 2) APSOPRS Video workshop on common oculoplastics procedures and 3) Repair of orbital- facial fractures using a micro-plating system. The workshop on BoNTA focused on the functional and cosmetic uses of Botulinum Toxin A and dermal fillers in oculoplastics practice. A live demonstration of BoNTA and filler injection was also performed on a patient to emphasise the pearls and pitfalls of the injection techniques. World-renowned speakers conducted the second video workshop on common oculoplastics procedures. They took the participants through the basic principles and steps involved in the commonly encountered procedures, which include aponeurotic ptosis repair, entropion and ectropion repair and external dacryo cystorhinostomy. The third workshop on repair of orbital fractures was designed to familiarize the audience with the orbital anatomy and to evaluate, assess and manage the various orbital fractures commonly encountered by the oculoplastics surgeon.
The second day of the main congress focused on the lacrimal system, with experts imparting their knowledge on how to manage both the simple and complex cases of tearing. Various approaches to dacryocystorhinostomy and its complications were presented and discussed by the expert panel. Dr Nogutada Katori from Japan presented his work on reshaping the palpebral aperture with canthoplasties in the fourth plenary lecture during the aesthetics symposium. This was followed by lectures from world-renowned oculoplastics surgeons who presented their work on peri-orbital reshaping, repositioning and rejuvenation, imparting their pearls of wisdom to the audience.

The final symposium for the congress was a video symposium by experts from around the world including USA, China, Middle East, Singapore, Japan, Korea, India, Philippines and the United Kingdom. This was an exciting time for all the invited speakers and delegates as they got to share their experience managing challenging cases during their career. It was a great opportunity for everyone to interact and learn from one another.

To wrap up the congress, there were three concurrent workshops running 1) Management pearls from MEAOPS, 2) Repair of orbito-facial fractures using a micro-plating system and 3) ocular surface and eyelid reconstruction with bio-engineered tissues. The first workshop by MEOPS was a comprehensive and interactive session that provided the participants a glimpse into the innovations and advances in endoscopic lacrimal surgery, blepharoplasty and ptosis. Participants in the practical session on repair of orbito-facial fractures had hands on experience with implant and miniplatting systems to perform bony reconstruction on model skulls. In the third workshop, participants were taught how to use dehydrated amniotic membrane, bioengineered eyelid graft and fibrin adhesives to reconstruct the ocular surface. This was followed by a wet lab session where participants could gain first-hand experience handling amniotic membrane tissue.

In short, the meeting was a fantastic opportunity for experts all over the world to network, rekindle old relations and forge new friendships. Regardless of training level and subspecialty, every participant took home pearls of wisdom to better their clinical practice. It was truly a fusion of the art and science of oculoplastics that made the APSOPRS meeting a resounding success.

SINGAPORE NATIONAL EYE CENTRE OCULOPLASTIC INSTRUCTIONAL COURSE 2012, 30 NOVEMBER – 1 DECEMBER 2012

Course Director: Dr Audrey Looi
Singapore National Eye Centre

Summary contributed by: Dr Lim Lee Hooi
Singapore National Eye Centre

Course organizers 1st row from left: Dr Gangadhara Sundar, Dr Choo Chai Teck, Prof Don. O. Kikkawa, Dr Sunny Shen, Dr Jason Lee and Last row from left: Dr Eugenie Poh, A/Prof Shanta Amrith, Dr Audrey Looi, Dr Lim Lee Hooi, Dr Tan Yar Li, Dr Annabel Chew, Ms Myra Ng

2012 proved to be an exciting year for the Oculoplastic Service at Singapore National Eye Center (SNEC) as we successfully held the SNEC Oculoplastic Instructional Course with over a hundred attendees from the Asia-Pacific region and as far as Iran. The course was held over two days from 30th November 2012 till 1st December 2012. The course faculty consisted of our local Oculoplastic colleagues from SNEC (Associate Professor Seah Lay Leng, Dr Choo Chai Teck, Dr Audrey Looi, Dr Sunny Shen and Dr Lim Lee Hooi), National University Hospital (Associate Professor Shanta Amrith, Dr Gangadhara Sundar and Dr Cheng Jin Fong) and Tan Tock Seng Hospital (Dr Shawn Goh, Dr Llewellyn Lee and Dr Eugenie Poh) as well as special invited speakers from the Singapore General Hospital’s Ear, Nose and Throat Department (Associate Professor Dharambir Sethi) and the United States (Professor Don O. Kikkawa).

We were deeply appreciative to have Professor Don O. Kikkawa share with us his surgical experiences and tips on some of the more challenging eyelid and orbital diseases. Professor Don O. Kikkawa, MD, FACS is Chief of the Division of Ophthalmic Plastic and Reconstructive Surgery, and Vice Chairman at the University of California at San Diego (UCSD) Department of Ophthalmology and UCSD Shiley Eye Center in La Jolla.
He is the Vice President (2012) and President Elect (2013) of the American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS). Professor Kikkawa’s many honors include: AAO’s Senior Achievement Award; the Marvin H. Quickert Thesis Award; the ASOPRS Research Award; and the Lester T. Jones Surgical Anatomy Award for Outstanding Contribution to Ophthalmic Plastic and Reconstructive Surgery.

The 2012 Oculoplastic Instructional Course focused on eyelid and lacrimal conditions, socket reconstruction, thyroid eye disease and aesthetic reconstructive procedures. Compared to the 2009 course, we decided to take some of these common conditions beyond the basics. We delved into the management issues related to these conditions and strived to impart some useful surgical pearls to our attendees. The highlight of the course was the Live Surgery session on the second day that featured surgeries like Asian blepharoplasty, lower eyelid blepharoplasty, ptosis and epiblepharon repair and endoscopic dacryocystorhinostomy. The Live Surgery was a huge draw for the attendees with running commentaries and sharing of surgical experiences amongst the panel of chairpersons as well as the audience.

With the successful conclusion of this year’s course, we look very much forward to our next SNEC Oculoplastic Course in 2015. We hope these courses will benefit both general ophthalmologists and residents and encourage sharing of surgical skills and experiences amongst those who perform Oculoplastic and Reconstructive Surgery.

NUH EYELID SYMPOSIUM, 8 - 9 MARCH 2013

Host: Dr Gangadhara Sundar
National University Hospital of Singapore

Summary contributed by: Dr Joy Chan
National University Hospital of Singapore

The NUH Eyelid Symposium was held in Singapore from 8-9 March 2013. It was organized by the Division of Ophthalmic, Plastic and Reconstructive Surgery, Department of Ophthalmology, National University Hospital, and featured a multidisciplinary programme on a myriad of topics relating to the eyelid.

The multidisciplinary faculty comprised Oculoplastic surgeons from NUH and the Singapore National Eye Centre, as well as two distinguished Oculoplastic surgeons from Australia. In addition, our esteemed colleagues from the Departments of Anatomy, Pathology, Dermatology, Plastic Surgery and Neuro-Ophthalmology also gave talks on a plethora of topics relating to the Eyelid. These were grouped into three themes: Basic Sciences, Reconstructive Surgery and Aesthetics.

The meeting was attended by a total of 70 delegates from Southeast Asia. The delegates were a heterogeneous group comprising Ophthalmology trainees, General Ophthalmologists, Oculoplastic Surgeons, Plastic Surgery trainees and Surgeons, as well as nurses from the Operating Theatres and Outpatient Department.

The meeting kicked off on the morning of 8 March with a video assisted surgical teaching session. In this session, the faculty each contributed one to two edited videos of various eyelid surgical procedures, and these were screened to the audience. A lively discussion about surgical technique followed, giving the delegates the opportunity to ask questions about the procedures being demonstrated. A total of ten videos were presented and discussed, encompassing procedures for ptosis correction, entropion and ectropion correction, as well as aesthetic procedures.

The afternoon session consisted of the series of talks on the theme of Basic Sciences. The talks covered topics such as eyelid embryology, anatomy of the eyelids and face, pathological aspects, neuroanatomy, surgical principles and hardware, and dermatologic diseases of the eyelid.

The following day saw a comprehensive programme of lectures, following the theme of Reconstructive Surgery in the morning, and Aesthetics in the afternoon. Topics covered in the morning ranged from congenital eyelid...
disease to ptosis, eyelid apraxias, trauma, entropion, ectropion and tumours. In the afternoon, the discussion centered on aesthetic issues and their evaluation and management, from non-invasive to surgical techniques. Before the meeting closed, faculty and delegates were invited to contribute challenging cases for discussion. Three cases were presented, contributed by our Australian and local faculty. A stimulating discussion of each case followed, with many different approaches and opinions debated by the floor.

The Symposium was an overwhelming success, and feedback gathered from the delegates was excellent. Many requested for more such meeting to be organized and for other aspects of Oculoplastic Surgery to be covered. The meeting was officially closed with a group photograph of all faculty and delegates.
Social Visits

DR HUNTER YUEN’S VISIT TO SINGAPORE NATIONAL EYE CENTRE

Host: Dr Audrey Looi
Singapore National Eye Centre

Summary contributed by: Dr Livia Teo
Singapore National Eye Centre

The APSOPRS meeting serves as a platform to exchange ideas and build ties between countries in the region. It is where many a firm friendship has been established. En route back to Hong Kong from the recent APAO meeting in Hyderabad, India, Dr Hunter Yuen stopped by Singapore for a short visit. He met up with the Oculoplastics team from the Singapore National Eye Centre over a three-day period. During his visit, he had the opportunity to tour its clinical and research facilities, including the research arm - Singapore Eye Research Institute, where he was brought around to view the research clinics as well as the in-house research laboratories.

From Top Left: Dr Livia Teo, Dr Sunny Shen, A/Prof Seah Lay Leng and Top Right: Dr Lim Lee Hooi, Dr Audrey Looi and Dr Hunter Yuen at Singapore’s Long Beach Seafood Restaurant

His clinical observership comprised sessions in the clinics as well as in the operating theatre with various faculty members where they engaged in lively discussions over patient management. There was ample opportunity to catch up with each other over lunch while savouring the local Hainanese chicken rice, and wind down after work over a seafood dinner at Long Beach Seafood Restaurant at Dempsey. All in all, everyone enjoyed this invaluable opportunity to network and exchange finer points in patient management.
WHY BECOME AN APSOPRS MEMBER?

Dr. Raoul Paolo D. Henson  
Vice President APSOPRS 2012-2014  
Clinica Henson Eye Center and Ear, Nose & Throat Center, Angeles City, Philippines

I still remember vividly one of the organizational meetings before the inaugural meeting of the Asia-Pacific Society of Ophthalmic Plastic and Reconstructive Surgery (APSOPRS) in Manila. The year was 2000, the month was May and the venue was a restaurant in Greenhills, Metro Manila, Philippines. Present during the meeting were members and officers of the Philippine Society of Ophthalmic Plastic and Reconstructive Surgery (PSOPRS) - Dr. Reynaldo Javate, Dr. Prospero Tuano, Dr. Jaime Capco, Dr. Liborio Mangubat, Dr. Ruben Henson, Jr. (my father), Dr. Victor Lopez, Dr. Leonardo Mangubat, Dr. Franklin Kleiner, Dr. Mayos Pe-Yan, Dr. Angie De Leon, Dr. Alexander Tan, Dr. Alfonso Bengson, Dr. Jones Pelayo and myself. Some names might be foreign to you but these were the very people who toiled for the founding of the APSOPRS. One of the important objectives during that time was how to start recruiting members for the society. Most PSOPRS members became APSOPRS founding members, which initially augmented the membership of the society during its infancy. But the 64 million dollar question is - how can we increase the membership in the future?

Fast-forward 2013! After 13 years and birthing pains in the first few years of its existence, our society has definitely grown in leaps and bounds. Membership grew due to the excellent effort of the previous executive committees. Dr. Javate’s resiliency, passion and dedication to the growth of the society also contributed to the increase in members. With the society having meetings and symposia in different countries, more and more oculoplastic surgeons saw the importance and value of being a member. I, myself, have been attending meetings since that November month in 2000 because I believe the society can achieve more with each other’s help. Now, I’m just amazed how the society turned into a viable and respectable body that it is today.

During the early years of my practice, my father always told me to attend the meetings of the society - Which I gladly did! Thanks to his advice and prodding, I was able to travel to so many places and meet new friends and acquaintances along the way. I met doctors from all the countries that have been members of the society. With these friendships, I was able to go and visit their countries, learn their cultures and most of all, taste their food! Not only that, I was also able to visit their clinics and hospitals while learning a few surgical techniques during each visit.

Some of our members also visited me here in the Philippines either to observe in my clinic or drink some San Miguel beer! Without the society, I would not have done all of this. It made my oculoplastics practice more meaningful and challenging. I was able to pick up so many things and at the same time apply them to my patients. Now, I look forward to the society’s meetings every two years. Not only to speak but also learn new things from our dear colleagues.

With Dr. Yoon Duck Kim (Past President APSOPRS) and Dr. Franklin Kleiner (Past President PSOPRS) in Seoul, Korea.

Drinking SAKE with Dr. Kakizaki, Dr. Milind Naik and Dr. Gangahara Sundar (taken during the fellowship night, APSOPRS meeting Seoul, Korea)

The APSOPRS has a lot to offer for its members with just a mere $100 of membership fee every two years! What more can you ask from a society? So I encourage you, yes you - The one reading this article! As a member of APSOPRS, try to reach out to your colleagues and tell them the nice things that our society can offer. Section 1.1.5 of our constitution and by-laws states that the society is here “to promote cordial relationships and camaraderie among its members.” Dear friends, APSOPRS is not just all about meetings and speaking engagements...It is also about camaraderie and gaining friendships along the way.

See you in New Delhi 2014!
Announcements

Event: NUH Ophthalmic Oncology Symposium
Date: August 30-31, 2013
Venue: CRC @ NUS, Singapore

Distinguished faculty: Professor Arun Singh, Ophthalmic Oncology Service, Cleveland Clinic
Scientific Committee: Dr Gangadhar Sundar, A/P Caroline Chee

Event will be on: Basic Sciences, Principles of Pediatric & Adult Ophthalmic Oncology, Ocular Surface Tumors, Ocular Adnexal Tumors and Ocular Tumors: Retinoblastoma, Choroidal Melanoma & more ...

Proudly organized by Ophthalmic Oncology Service, Dept of Ophthalmology, National University Health.

For more details, please visit: www.ocularoncology.wix.com/symposium#!submission/c5xf or email: nuophthalmiconcology@gmail.com

Event: XXIV Oculoplastics Association of India (OPAI) Annual Conference 2013
Date: September 6th (Fri) to 8th (Sun), 2013
Venue: MLR Convention Centre, JP Nagar 7th Phase, Bangalore, India
Correspondence to: Gagan Dudeja, e-mail: gagan.dudeja@gmail.com, cell +91-9902680000

Dear Colleagues,

Namaste from India. It is a pleasure to announce that the XXIV OPAI Annual Conference will be held on 6th to 8th September 2013, at Bangalore, India. This is the largest meeting, providing an exquisite platform for discussion on Ophthamlic Plastics, Orbit, Eye Aesthetics and Ocular Oncology in Indian subcontinent. The meeting will have participation of over 300 delegates and invited faculty from India and abroad. The faculty details are available on: http://www.opai.in/opai2013/international_faculty.html

The three day program will include free papers, posters, surgical videos, educational symposia and workshops on updates in the area of Ophthalmic Plastics, Orbit, Eye Aesthetics and Ocular Oncology Eyelid and Orbit. APSOPRS will hold a special symposium in the conference on 7th of September 2013 led by Dr A K Grover, President APSOPRS. We would like to invite you to attend the conference to share knowledge about Ophthalmic Plastic & Reconstructive Surgery. The meeting information is available on www.opai.in/opai2013

Gagan Dudeja
Organizing Secretary
OPAI 2013

Event: 1st Annual Conference of Japanese Society of Ophthalmic Plastic & Reconstructive Surgery (JSOPRS)
Date: December 14 (Sat) & 15 (Sun)
Venue: Tachibana Hall at Aichi Medical University. Nagakute, Aichi, Japan.
Correspondence to: Hirohiko Kakizaki, e-mail: cosme@d1.dion.ne.jp

Dear Colleagues,

Greetings from Japan. We are pleased to announce you that the 1st annual conference of JSOPRS will be held on 14th and 15th of December, 2013 at Tachibana Hall at Aichi Medical University, Nagakute, Aichi, Japan. The two day program will include educational symposia and free papers on Eyelid, Orbit, and Lacrimal Surgery to give an update on these topics. We will invite international and national guest speakers: Prof. Don Kikkawa (USA), Prof. Yoon-Duck Kim (Korea), Dr. Audrey Looi (Singapore) Prof. Yasuhisa Nakamura (Japan), and Dr. Mika Noda (Japan). We would like to invite you to attend this conference to enhance knowledge about the Ophthalmic Plastic & Reconstructive Surgery. Your participation will make this conference a huge success. We will do our best to make this event a memorable one for you. Although our home page is now in Japanese only (http://www.jsoprs.jp/), we will soon open an English one.

Hirohiko Kakizaki, M.D., Ph.D.
President of JSOPRS

Date: September 26-28, 2014
Venue: New Delhi, India
Correspondence to: Alice How, email: apsoprs@gmail.com or Dr. A. K. Grover, Chairman, APSOPRS Oculoplastic Congress 2014, email: akgrover55@yahoo.com

Dear Colleagues and Friends,

Greetings from APSOPRS! It is with great honour that I announce the APSOPRS Oculoplastic Congress will be
held at New Delhi on September 26-28, 2014. The three day congress consists of symposia and workshop on Ophthalmic Plastic, orbital, Lacrimal, Oculofacial aesthetics and ocular Oncology to give an update to the participants on advances and cutting edge trends in oculoplastic surgery. These sessions are helmed by internationally renowned speakers from various parts of the world. The meeting will have participation of over 400 delegates from India and abroad. Please look up for update on the meeting information on www.apsoprs.org

I cordially invite you to attend to attend this exciting event in New Dehli, India, to enhance knowledge about the Ophthalmic Plastic & Reconstructive Surgery. Your participation will make this conference a huge success. We will certainly make this event and your stay in New Delhi most memorable!
For more details, please visit www.apsoprs.org or email: apsoprs@gmail.com

Dr. A.K. Grover
President, Asia Pacific Society of Oculoplastic & Reconstructive Surgery (APSOPRS)
Chairman, APSOPRS Oculoplastic Congress 2014

Awarded Padma Shri by the President of India
Past President, All India Ophthalmological Society (AIOS)
Chairman, Subspeciality Education Committee, International Council of Ophthalmology (ICO)
Past President, Oculoplastic Associations of India (OPAI)
Board Member, Afro Asian Council of Ophthalmology (AACO)
Councillor at Large, Asia Pacific Academy of Ophthalmology (APAIO)
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