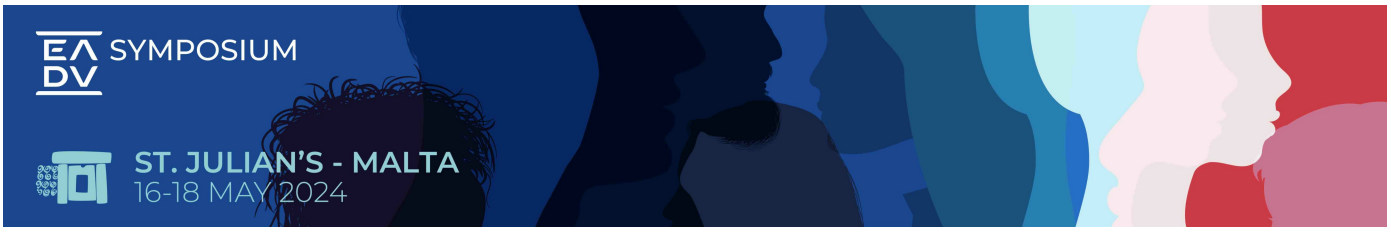


Abstract N°: 41

Four years experience in Mohs Surgery

Alessandro Giuseppe Greco[1]

[1]Fundació Hospital de l'Esperit Sant, Dermatology and Venereology, Santa Coloma de Gramenet, Spain

Introduction & Objectives: the objective of the presentation is to comment on the quadrennial experience in Mohs surgery carried out at the Hospital since the beginning of the service in January 2020. We will focus the presentation on the the data obtained, analyzing the trend throughout the four years of activity, commenting the type of pathology treated, comparing reconstructive techniques or combinations of techniques to repair the final defect.

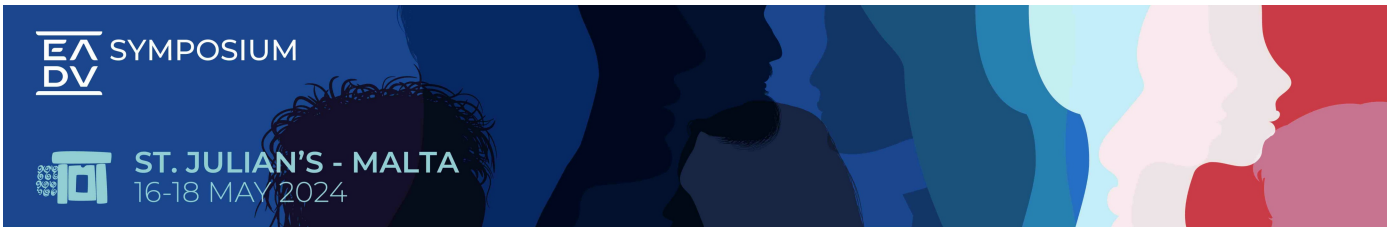
Materials & Methods: From January 2020 to December 2023, the Hospital's Mohs Surgery service has performed a total number of 280 surgeries for the treatment of non-melanoma skin cancer: 75% for basal cell carcinoma, 21.7% for squamous cell carcinoma, and 3.3% for other tumors.

Considering the cases treated, all were located in the head and neck district. Regarding the reconstruction of the final defect: 253 cases were reconstructed through the application of a single reconstructive technique: that is, 29 through direct closure, 13 through total skin graft, 8 through second intention, 203 through flap and 27 cases through a combination of multiple surgical techniques.

Results: the purpose of the presentation is to comment on the results obtained during the activity of the Mohs surgery service and, successively, to present the 3 most representative surgical cases that ended with a complex final defect and required an appropriate reconstructive approach, since by their complexity corresponded to a reconstructive challenge.

Conclusion: In Mohs surgery it is not possible to predict the entity of the final defect, especially when the technique is reserved for the most aggressive and invasive histological subtypes of skin cancer.

For this reason, the Mohs surgeon needs to master reconstructive techniques and adapt them to the resulting defect at the moment when, thanks to microscope observation, tumor-free margins have been assured. Once the tumor has been removed, the optimal result is to ensure that the reconstruction first ensures the restoration of the organ or the area involved from a functional point of view and at the same time that the reconstruction does not alter the macroscopic aesthetic appearance.



Abstract N°: 42

Management of the pilonidal sinus in a proctology unit

Fatima Zohra Benamor Seghir*[1], Ahmed Bellabah[1], Fatima Zahra El Rhaoussi[1], Mohamed Tahiri Joutei Hassani[1], Fouad Haddad[1], Wafaa Hliwa[1], Wafaa Badre[1]

[1]UHC Ibn Rochd, gastro-enterology and proctology, Casablanca, Morocco

Introduction & Objectives:

Pilonidal sinus is an uncommon and benign chronic proctological condition that mainly affects adolescents and young adult males. It is a pseudo-cystic cavity containing hairs most often located in the hypodermis of the sacrococcygeal region. Its treatment is surgical, consisting of a single-piece excision, a method called “open sky”. The objective of this work is to evaluate the epidemiological, therapeutic and evolutionary aspects of the pilonidal sinus, in order to highlight the place of this classic surgical technique in its management based on our experience.

Materials & Methods:

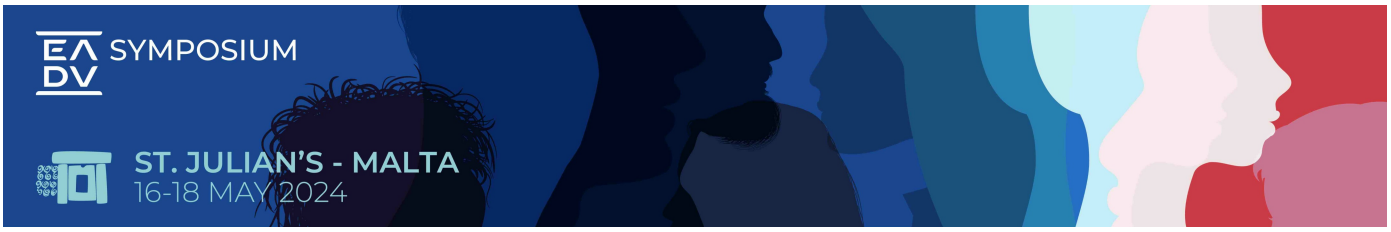
This is a retrospective and descriptive study, spread over a period of 9 years, collecting 166 cases of pilonidal sinus with sacrococcygeal localization operated on within our department. For each patient, we specified the epidemiological-clinical, therapeutic and progressive characteristics of their disease.

Results:

The frequency of the pilonidal sinus is estimated at 7% of anal and perianal suppurations. The average age of our patients was 32.9 years. A male predominance was noted with a sex-ratio (M/F) of 4.53. The average consultation time was 13 months. The main risk factors found were overweight or obesity (22.2%), hirsutism (13.2%) and a job requiring prolonged sitting (21%). 12.6% reported a family history of pilonidal sinus. The revealing clinical manifestations were distributed as follows: chronic purulent or serosanguineous discharge in 96.3% of cases, pain in 62% of cases, pruritus of the sacrococcygeal region in 37.3% of cases and an abscess in 38.5% of cases. All patients received surgical treatment consisting of open excision combined with daily local care with close and regular monitoring until complete healing. The pathological study of the surgical specimen confirmed the diagnosis in all cases. The average healing time was seven weeks. 7.2% of cases of recurrence were noted which were treated by re-excision.

Conclusion:

The pilonidal sinus is the most common cause of suppuration in the sacrococcygeal region. Open resection remains the surgical technique of choice in its treatment, allowing good progress and avoiding recurrences provided that the patient adheres well to care and hygienic measures. In our study, the results were generally satisfactory, the only drawback being the long healing time.



Abstract N°: 45

Combination of reconstructive techniques in Mohs micrographic surgery

Alessandro Giuseppe Greco[1]

[1]Fundació Hospital de l'Esperit Sant, Dermatology and Venereology, Santa Coloma de Gramenet, Spain

Introduction & Objectives: The objective of the presentation is to introduce the results of a new Mohs Surgery unit and illustrate the experience during the first three years of service activity. The lecture will expose the results and will focus on the four most representative cases, whose final defect constituted a reconstructive challenge due to its complexity and peculiarity.

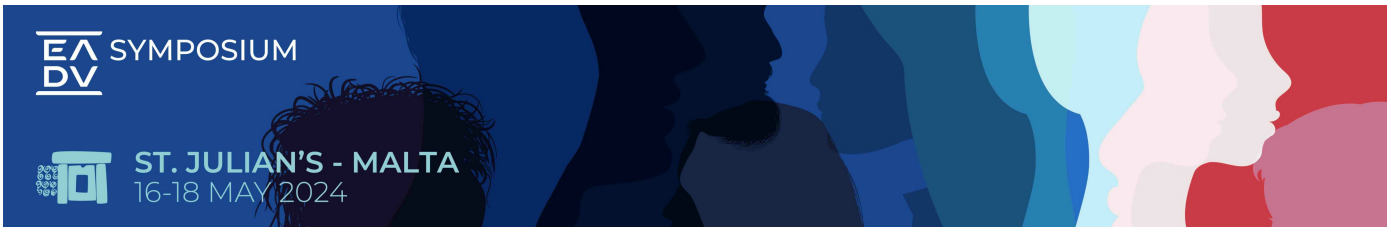
Materials & Methods: From January 2020 to January 2023, a total number of 200 surgeries were performed for the treatment of non-melanoma skin cancer: 74.5% for basal cell carcinoma, 22.0% for squamous cell carcinoma, and 3.5% for other tumors.

Considering all the treated cases, (99%) were located on the face and scalp, (0.5%) in the cervical region, (0.5%) on other areas . Of these, 22 (11%) were reconstructed with direct closure, 157 with the application of a single reconstructive technique, that is, 9 by total skin graft (4.5%), 5 by secondary intention (2.5%), and 143 by flap (71.5%) and 21 cases (10.5%) through a combination of multiple surgical techniques.

Results: The purpose of the presentation is to expose the results obtained during the activity of the Mohs surgery service, analyzing histological types, recurrency rates, reconstructive techniques and complications during the three years follow up and, successively, to disclose the four most representative surgical cases whose final defect required, due to its complexity, an adequate reconstructive approach.

Conclusion: Mohs surgery is a surgical procedure that allows to excise the skin cancer with a minimal secure margin that is analyzed under the microscope.

Until Mohs surgery is performed it is impossible to predict the final defect, because it's the result of the addition of all the stages needed. The resulting defect is often asymmetric, irregular and heterogeneous and often involves several aesthetic units. When several face aesthetic units are compromised by surgery, Mohs surgeon has to select the correct reconstructive technique or combine multiples techniques if needed. The target of the reconstruction after Mohs surgery is the restoration of the physiological function of the affected area without neglecting the aesthetic component. The desired result is being able to achieve functional reconstruction and preservation of the appearance and aesthetic balance of the tissues and organs involved by placing the sutures as much as possible on natural folds of the skin.



Abstract N°: 200

Hemi glabellar flap technique for upper canthal line

Eleftheria Tampouratzi[1], Panagiotis Rigatos[2], Maria Pizimola[3], Ioannis Katsantonis[4]

[1]Tzaneio General Hospital, Greece, [2]patra, [3]rhodos, [4]Tzaneio General Hospital, Dermatology and Venereology

Introduction & Objectives:

Tumors of the periorbital region constitute 5-10 % of total cutaneous malignancies. Reconstructive surgery of upper canthal line is challenging due to anatomic complexity of the region and has not been particularly described notably. The most usual technique for periorbital defects is free full thickness skin grafts and glabellar flap. The goal of reconstruction is to achieve both functional and aesthetic results by maintaining the normal concavity of the canthus, without distortion of the surrounding tissues. The "hemi glabellar" technique,is a modification of conventional glabellar flap and was used successfully in upper canthal line in the patient described below.

Materials & Methods:

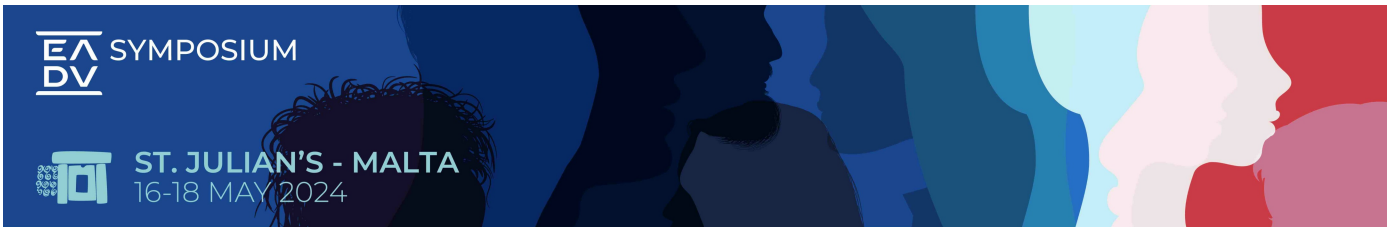
A 62 years old Caucasian woman presented with a non healing nodule on the right upper canthal line for 2 years. The lesion was excised with a 2cm defect (limits of 0.5cm of apparently non involved skin). The canthal side offered a pedicle to inverted V-shaped advancement flap. The flap was advanced, then rotated to adapt properly. The defect closed in a V-Y manner and trimmed to fit the upper canthal line.

Results:

The histopathology report confirmed complete resection of nodular basal cell carcinoma and the patient had an excellent cosmetic outcome at 2 months follow-up.

Conclusion:

The upper canthus is a highly complex region that involves various skin textures, thicknesses and contours. Surgical treatment of tumors in the area is a challenge. The classical glabellar flap is a viable reconstruction technique to overcome the disadvantages described above for the median canthal area. In the case presented here we used the "hemi glabellar" technique as a simple and easy modification for the upper canthal line lesion. Eventually maintaining of adequate blood supply resulted to normal skin color, texture and overall satisfying scar formation.



Abstract N°: 582

Title: Ten-Year Experience of Mohs Micrographic Surgery for Lentigo Maligna: A Single-Center Retrospective Analysis

Evangelia Vetsiou[1], Arvindh Sekaran[1], Sarah Mcdonald[2], Ed Rytina[2], Thomas Ha[1]

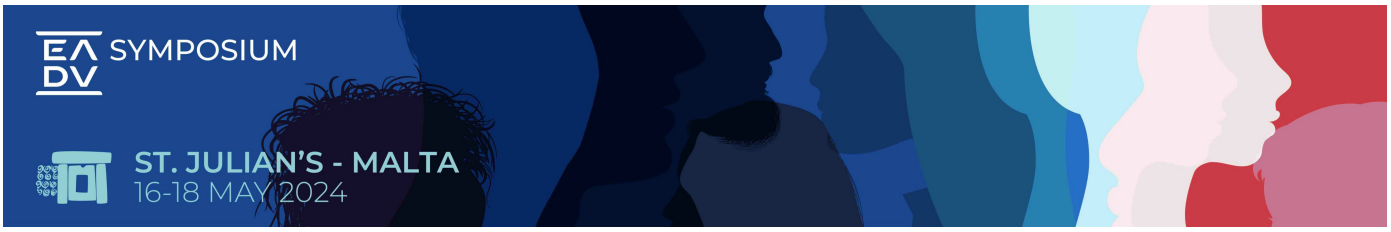
[1]Addenbrooke's Hospital, Dermatology, Cambridge, United Kingdom, [2]Addenbrooke's Hospital, Histopathology, Cambridge, United Kingdom

Introduction & Objectives: The application of Mohs Micrographic Surgery (MMS) in the management of Lentigo Maligna (LM) remains a subject of controversy. This study presents a comprehensive 10-year retrospective analysis of patients diagnosed with LM who underwent treatment utilizing MMS within our department.

Materials & Methods: A retrospective review of our department's case database spanning from 2014 to 2024 identified 26 patients with histologically confirmed LM who underwent MMS. All cases involved the application of H&E with Melan A immunostaining. SOX10 was used in cases that it was considered to be necessary.

Results: Among the 26 patients, 11 were male and 15 female. Predominantly, 96% (25 cases) of LM cases were localized on the head and neck, while 4% (1 case) were found on the trunk or limbs. Surgical margins were defined using Wood's lamp examination. The distribution of layers required for excision was as follows: 53.8% (14 cases) needed one layer, 19.2% (5 cases) required two layers, 19.2% (5 cases) necessitated three layers, and 7.7% (2 cases) mandated four layers. Follow-up durations ranged from 3 to 30 months, without any instances of recurrence observed.

Conclusion: This study presents the initial data on the utilization of Mohs Micrographic Surgery for Lentigo Maligna within our department. Our findings align with existing literature, demonstrating that MMS yields favorable cure rates for this challenging cutaneous malignancy.



Abstract N°: 851

Prediction of skin graft necrosis with intra- and postoperative perfusion analysis by laser speckle

André De Castro Pinho[1, 2], Ana Brinca[1, 2], Ricardo Vieira[1, 2]

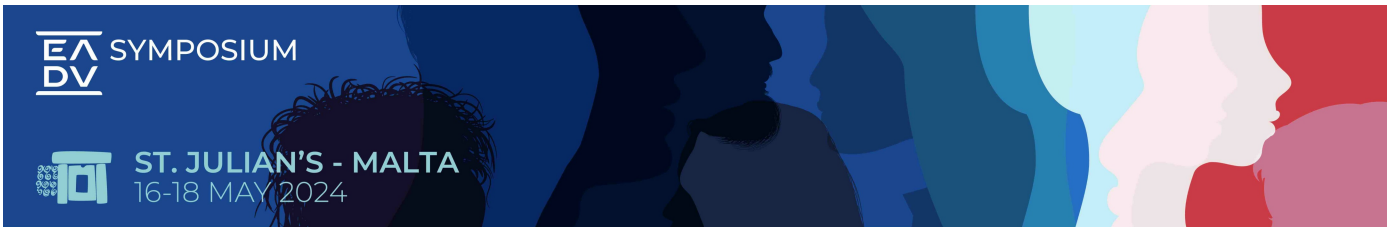
[1]Centro Hospitalar e Universitário de Coimbra, Dermatology Derpartment, Coimbra, Portugal, [2]Faculty of Medicine, University of Coimbra, Coimbra, Portugal

Introduction & Objectives: Skin graft necrosis is a common complication in dermatologic surgery, but reliable methods for predicting its extension are lacking. Laser speckle contrast imaging (LSCI) enables a rapid, non-invasive skin perfusion assessment, yet its application in skin grafts remains underexplored. We sought to analyse the relationship between the perfusion, assessed intra- or postoperatively with LSCI, and the necrosis extension on day 28. Additionally, we aimed to determine if the perfusion measurements can predict the development of ≥ 20% (clinically significant) necrosis.

Materials & Methods: Over 16 months, all eligible adults undergoing skin grafts following skin cancer removal were included. Perfusion was assessed by LSCI on the graft bed on day 0 and the graft surface on days 7 and 14. Graft necrosis extension was determined on day 28.

Results: Fifty-five grafts were analysed. A strong inverse correlation between perfusion and necrosis extension was observed on days 0 (rs= -0.79) and 14 (rs = -0.72), being moderate on day 7 (rs = -0.66). Statistically significant linear regression models of necrosis based on perfusion on days 0 (R2 = 0.75), 7 (R2 = 0.47) and 14 (R2 = 0.63) were obtained. The best-fitted model is "necrosis extension = 0.12 - 0.38 x Ln (graft bed perfusion)". Binary logistic regression demonstrated a 57% decrease in the odds of ≥ 20% necrosis for each 0.1 unit increase in graft bed perfusion. ROC curves were used to determine perfusion thresholds for ≥ 20% necrosis. The threshold with the highest positive (100%) and negative (93%) predictive value was identified on the graft bed.

Conclusion: Intraoperative graft bed perfusion primarily explains graft necrosis extension. LSCI might provide valuable insights as a predictive tool of perfusion-based skin graft necrosis, allowing the selection of the best patients for skin grafting and anticipating the need for prolonged wound care.



Abstract N°: 979

Unveiling skin graft reperfusion in dermato-oncologic surgery: a prospective study by laser speckle

André De Castro Pinho[1, 2], Ana Brinca[1, 2], Duarte Flor[1], Joana Xará[1], Mariana Sousa Batista[1, 2], Ricardo Vieira[1, 2]

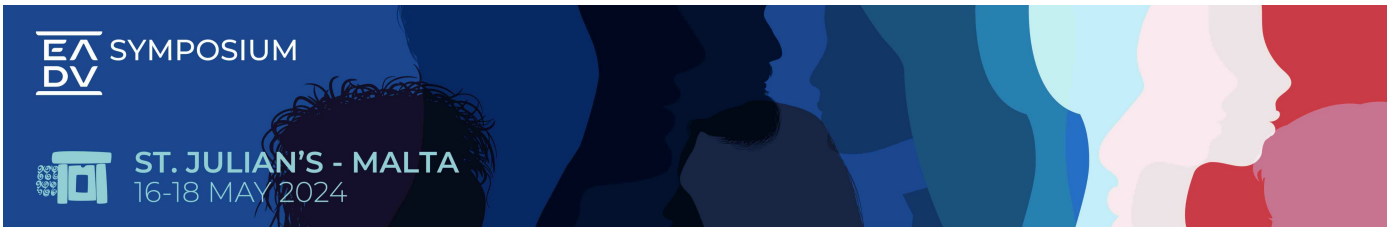
[1]Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal, [2]Faculty of Medicine, University of Coimbra, Coimbra, Portugal

Introduction & Objectives: Revascularisation is a critical process for skin graft survival and involves the ingrowth of new vessels from the wound bed (angiogenesis), extensive regression of the graft native vessels, and anastomosis between the preexisting wound bed vessels and graft vessels (inosculation). It is assumed that it might take 8 to 12 days for a proper vascular system to be established. Still, evidence about the reperfusion dynamics beyond this period is scant, especially with human skin grafts in a dermato-oncologic surgery. Laser speckle contrast imaging (LSCI) enables a rapid, non-invasive skin perfusion assessment, yet its application in skin grafts remains underexplored. We aimed to prospectively characterise the reperfusion of human skin grafts over four weeks using LSCI and compare the reperfusion dynamics according to the necrosis extension (less than 20% versus necrosis from 20 to 50%) and anatomic location.

Materials & Methods: Over 16 months, all eligible adults undergoing skin grafts following skin cancer removal were included. Perfusion was assessed by LSCI on the graft marginal skin on day 0 (control skin) and graft surface on days 7, 14, 21 and 28. Graft necrosis extension was determined on day 28.

Results: Fifty-five grafts were analysed: 22 on the scalp, nine on the face, and 20 on the lower limb. Regardless of the necrosis extension, as early as day 7, the graft perfusion equalled the control skin perfusion, overcame it on day 21, and remained stable until day 28. Grafts with 20 to 50% necrosis exhibited significantly lower values until day 21, converging with grafts showing less than 20% necrosis by day 28. Among the grafts with less than 20% necrosis, we observed that the interaction between the healing time and anatomic location contributed more to the graft perfusion than each factor isolated. The reperfusion on the scalp and lower limb followed the same pattern as the previously described for grafts overall. We also observed differences in reperfusion within grafts in these locations, with the centre consistently better perfused than the periphery until day 21. This difference only dissipated on day 28. Nevertheless, on the face, the skin graft perfusion did not differ from the control skin from day seven onwards, and there were no significant differences in reperfusion within the graft during the study period.

Conclusion: The intricate nature of human skin graft reperfusion makes this a long-lasting process that does not cease when it reaches the control skin perfusion by day 7. Moreover, it spans the traditionally assumed 8 to 12 days for appropriate differentiation of afferent and efferent vessels. The presented data provides a better understanding of reperfusion in humans, which might ultimately be employed in developing skin substitutes.



Abstract N°: 1034

Pre-operative Antiseptic Skin Preparation: Regional Habits

Jo-Yve Wong*[1], Olivia Dolan[1]

[1]Royal Victoria Hospital, Dermatology, Belfast, United Kingdom

Introduction & Objectives:

Pre-operative antiseptic skin preparation is a critical component of dermatological surgery, to reduce the risk of surgical site infections. Procedures range from clean low-risk biopsies, to prolonged complex facial surgeries at high-risk sites. Various antiseptic solutions exist, and limited evidence exists on which agent is the most effective. Alcohol-based compounds also carry a fire risk, especially electrocautery use. Therefore, special considerations on antiseptic selection is essential, depending on patient factors and operative field. Supply issues surrounding chlorhexidine-based preparations currently limit the choice of solutions used. With the recently updated 17th July 2023 British Society of Dermatological Surgery (BSDS) Pre-Operative Antiseptic Skin Preparation Guidance Statement, our study aimed to present an overview of current practices and regional habits in pre-operative skin preparation within the dermatological surgical setting.

Materials & Methods:

A comprehensive survey was distributed to members of the dermatology team involved in skin surgery, across all five healthcare trusts within a single regional jurisdiction. Multiple choice and free-text response was gathered on antiseptic agent selection and preparations available for procedures at different sites. This included punch biopsy, curettage and cautery, excision, and grafts and flaps, on the head and neck or trunk and limbs. Additional questions encompassed considerations surrounding special sites such as mucous membranes, if practices changed following supply issues with chlorhexidine, and awareness of BSDS guidance.

Results:

Respondents (n=40) consisted of consultants (33%), nurses (33%), specialist trainees (23%), specialty doctors (10%), and internal medical trainees (3%). Iodine-based solutions were the most used agent across majority of procedures and sites, followed by chlorhexidine-based and normal saline respectively (Figure 1). Around the eyes, external acoustic meatus, and mucous membranes, normal saline was the most used (52%), followed by iodine-based (35%), and chlorhexidine-based standard (9%) and saline-diluted (4%) solutions (Figure 2). If iodine-based solutions were used, 63% flushed or washed with saline after. Most respondents were unsure which specific agents they used for chlorhexidine-based (70%) and iodine-based (55%) preparations. Practice did not change for 73% of respondents following supply issues surrounding chlorhexidine, and only 30% were aware of the BSDS Guidance Statement. Free-text answers reported two patient incidences of minor ignition during unipolar electrocautery with alcohol-containing chlorhexidine-based preparations.

Conclusion:

Our study highlights the intricacies involved in pre-operative skin preparation for dermatological surgery, particularly amid supply challenges with chlorhexidine-based solutions. The BSDS updated guidance offers clear guidance. Our study reveals variances in level of awareness among surveyed healthcare professionals. Additionally, reported adverse incidences underscore the need for vigilant risk assessment and education on flammable compounds during electrosurgery. Moving forwards, addressing supply constraints, enhancing guidance dissemination, and promoting evidence-based practices are essential to optimise patient safety and surgical outcomes in dermatological surgery.

Figure 1:

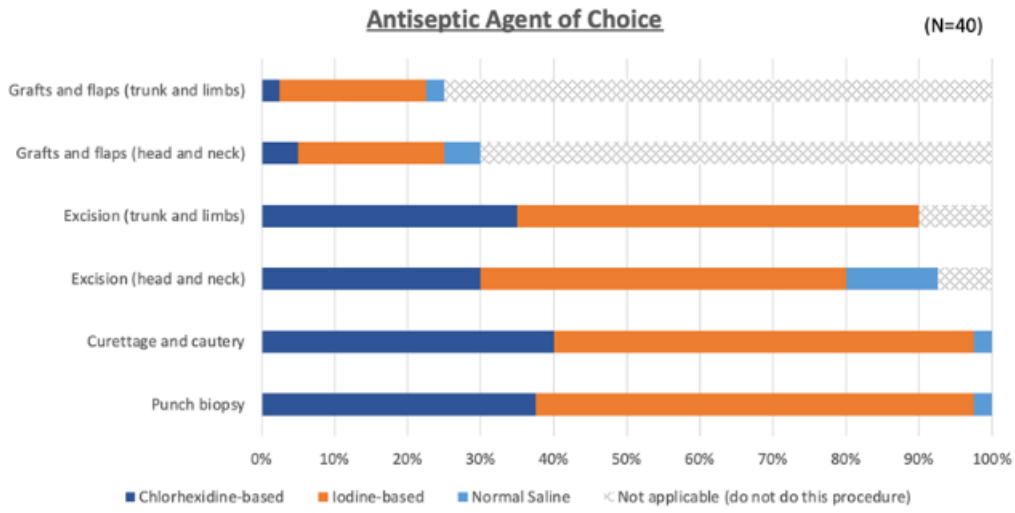
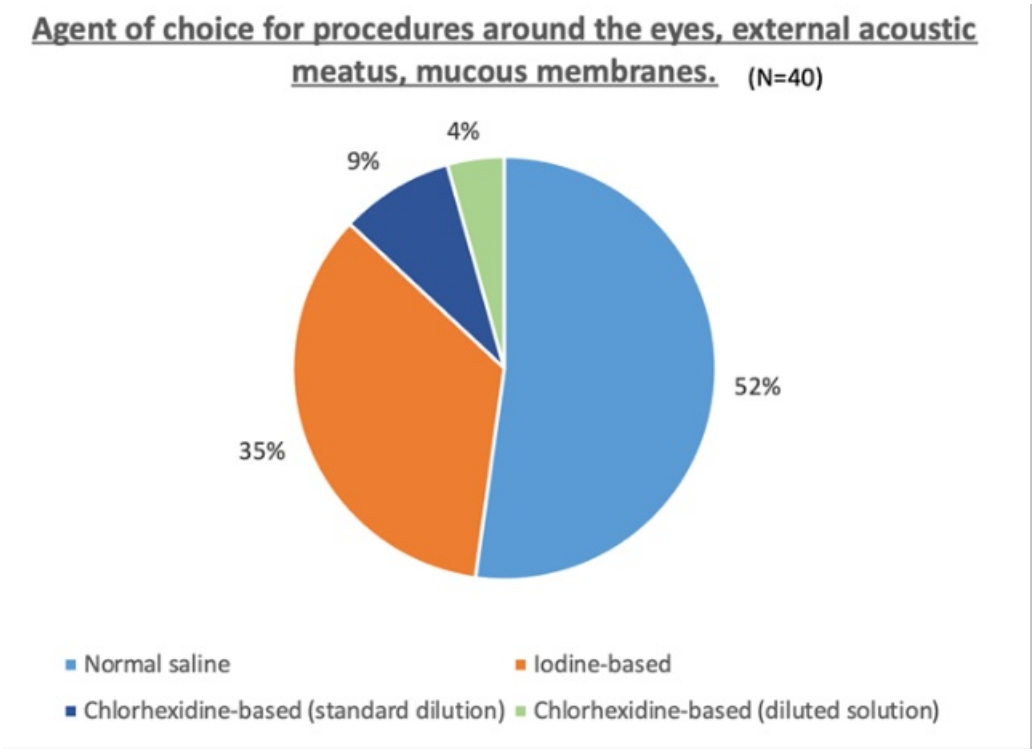
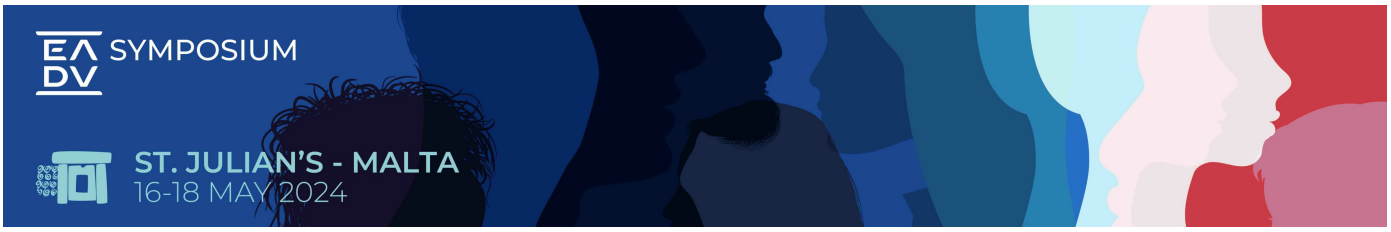

Antiseptic Agent of Choice
(N=40)
Grafts and flaps (trunk and limbs)
Grafts and flaps (head and neck)
Excision (trunk and limbs)
Excision (head and neck)
Curettage and cautery
Punch biopsy
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Chlorhexidine-based
Iodine-based
Normal Saline
Not applicable (do not do this procedure)

Figure 2:


Agent of choice for procedures around the eyes, external acoustic meatus, mucous membranes.
(N=40)
4%
9%
52%
35%
Normal saline
Iodine-based
Chlorhexidine-based (standard dilution)
Chlorhexidine-based (diluted solution)



Abstract N°: 1255

A Systematic Review on Treatment Outcomes of Striae

Catherine Zhu*[1], Lorena Alexandra Mija[2], Kaouthar Koulmi Bsc[1], Benjamin Barankin MD, Frcpc, Faad[3], Ilya Mukovozov MD, PhD, Frcpc, Dabd, Faad[3]

[1]McGill University, Faculty of Medicine, Montreal, Canada,[2]Université de Montréal, Faculté de Médecine, Montreal, Canada, [3]Toronto Dermatology Center, North York, Canada

Introduction & Objectives:

Striae are fine lines on the body that occur following rapid skin stretching (i.e., following pregnancy, puberty, weight change). Although this condition affects up to 88% of the general population, striae is notoriously hard to treat and no consensus on treatment currently exists. This systematic review aims to assess the current literature on treatment outcomes associated with striae and evaluate the efficacy and safety of different treatment options reported for each subtype of striae. We also wanted to provide an updated summary of the efficacy and safety of currently available treatment modalities for the different subtypes of striae such as striae alba, striae rubra and striae gravidarum.

Materials & Methods:

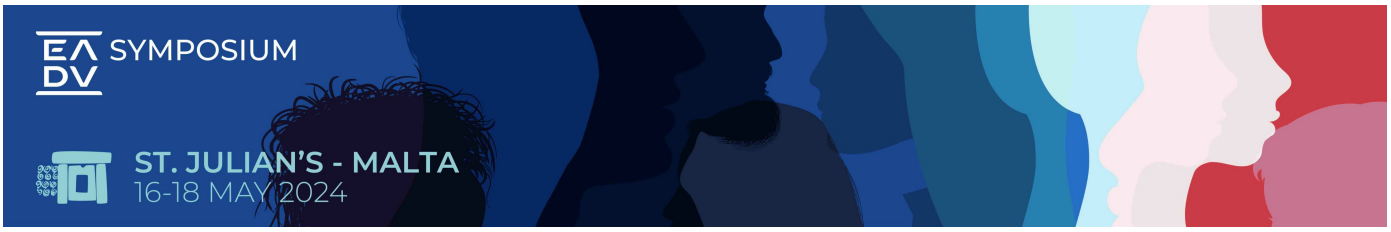
A systematic search of MEDLINE, Embase, and PubMed was performed according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) guidelines with no publication date or language restrictions. All articles with original data and treatment outcomes were included. Outcomes from each study were coded into 3 categories: complete response (CR), partial response (PR) and no response (NR).

Results:

Out of 1384 records identified, 151 studies on the treatment of striae met inclusion criteria (83% female, mean age at diagnosis=30.2) and 4806 treatment outcomes of striae were described (72% were striae distensae [SD], 13% striae alba [SA], 7% striae rubra [SR], and 8% striae gravidarum [SG]). Energy-based devices were the most reported modality (56%; n=2699/4806), followed by topicals (19%; n=919/4806) and combinations (12%; n=567/4806). The most common treatment response was partial (90%; n=4331/4806) with only a very small number of cases achieving CR (3%; n=142/4806) and NR (7%; n=333/4806). The highest rates of CR were injection-based devices for SD (7%; n=12/172), CO2 lasers for SA (4%; n=12/341) and platelet-rich plasma injections for SR (31%; n=4/13). There were 8 cases of CR reported with the use of tretinoin-based products in SG.

Conclusion:

Our review provides an updated summary of the efficacy of currently available treatment modalities for SD and may serve as an accessible and well-organized resource to guide treatment decision-making. Treatment options for striae are varied, likely indicating a lack of effective treatments due to the diversity in striae subtypes. Improved outcomes in striae management may be achieved with additional research on factors that predict treatment response.



Abstract N°: 1654

Use of Integra for thumb length conserving surgery for an acral melanoma in-situ

Jonathan Young*[1], Elizabeth Ellul Gialanze'[2], Matthew Borg[3], Liam Mercieca[4]

[1]Mater Dei, Internal Medicine, L-Imsida, Malta, [2]Mater Dei, Accident & Emergency, L-Imsida, Malta, [3]Mater Dei, Plastic Surgery, L-Imsida, Malta, [4]Mater Dei, Dermatology, L-Imsida, Malta

Introduction & Objectives:

Materials & Methods:

Results:

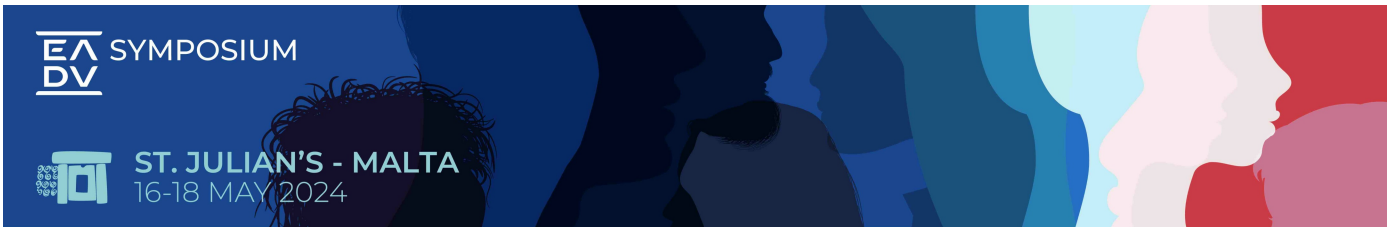
An 80-year-old man presented to the dermatology department in August 2021 with a 20-year history of a slowly growing pigmented lesion on his left thumb, initially dismissed as a patch of ink due to his pastime of developing photos. Examination revealed a pigmented macule with irregular borders roughly 2.5cm in size and involving the dorsal, medial and ventral aspects of the distal phalanx of the left thumb. Dermoscopic findings strongly suggested malignant melanoma. Two 3mm punch biopsies were performed, one from the medial edge of the distal phalanx and another from the pulp of the left thumb, both confirming melanoma in-situ.

Management options included amputation, topical imiquimod, or a "degloving procedure" followed by reconstruction with Integra®. Unfortunately, other reconstruction options such as abdominal or groin flaps were deemed unsuitable due to the possibility of invasive disease present in the rest of the lesion, with a risk of seeding to donor sites. The patient opted against amputation due to functional and aesthetic concerns. Referred to plastic surgery, a 0.5cm wide local excision of the melanoma in-situ with subsequent degloving, nail plate excision and Integra® application were performed. Histology confirmed complete excision with no invasive malignancy in the nail plate. Three weeks later, a split-thickness skin graft was applied over Integra®, yielding satisfactory functional and aesthetic results as the patient was able to maintain functionality of his left thumb with good cosmesis and only slight length discrepancy.

Acral melanomas (AM) pose diagnostic challenges, often leading to delayed diagnosis and high local recurrence rates. Surgical considerations balancing functionality and cosmesis with acceptable margins are crucial. Amputation was traditionally recommended, but studies show improved survival with conservative techniques, including Integra®. Integra® is a bilaminar dermal regeneration template, with a matrix of glycosaminoglycans and collagen, covered by a protective silicone sheet. Compared to other reconstructive options, it provides superior coverage, especially in wounds with exposed bone or tendon.

Conclusion:

Finally, this case was intriguing since the melanoma in-situ was initially presumed to be a discolouration secondary to the photo developing liquid hence the delay in presentation and increase in size of the lesion. One of the main constituents of this liquid is hydroquinone; however, despite inhibiting melanin synthesis, it has not yet been shown to have any inhibitory or stimulatory effect on melanomas. Based on our experience, we agree that it may be possible to consider a more conservative surgical approach to AM treatment, especially in the case of in-situ tumours. We are happy that we managed to achieve a functionally and aesthetically-satisfactory result for our patient while providing complete excision of his acral melanoma in situ.



Abstract N°: 1672

Beyond Primary Closure: Preauricular Transposition Flap for Reconstruction of a Defect in the Posterior Auricular Region

Macarena Stevenson*[1], Nelson Lobos[1]

[1]Clinica Alemana, Vitacura, Chile

Case Presentation

We present two cases of elderly patients with infiltrative basal cell carcinomas (BCC) located in the posteromedial and inferior region of the ear: an 86-year-old woman with a 5 x 3.5 cm lesion and an 85-year-old man with a 6 x 5.5 cm lesion. Both underwent Mohs micrographic surgery, resulting in sizable defects - 6.5 x 5 cm affecting the concha and postauricular sulcus for the woman and 7 x 6 cm for the man- with the latter extending to the mastoid process. Concerns arose about the affected area's cosmetic appearance and postoperative functionality due to the lesions' size. Considering these factors and the magnitude of the defects, a transposition flap involving preauricular and lateral cervical tissue was proposed.

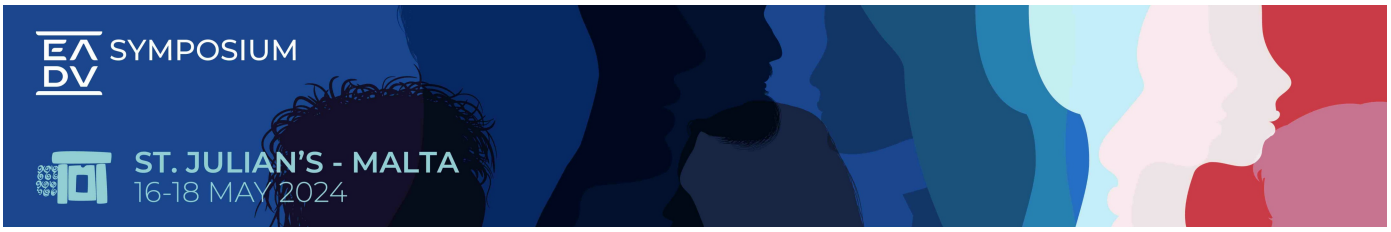
Discussion

The external ear comprises delicate cartilaginous tissues that serve as a framework for its complex topography. Reconstructing surgical defects in this area presents considerations, as tumors tend to be infiltrative and require wide resection to prevent recurrences. Options for closing complex cutaneous defects in the auricular pinna include local flaps, skin grafts, and healing by secondary intention. Another one is the tunneled preauricular transposition flap or the island flap on a revolving door. However, for more extensive defects, a transposition flap should be considered. In the case of defects in the posterior region of the ear, the preauricular region is often the preferred donor site, offering apparent advantages such as lax tissue for proper closure and less visible scarring. However, possible obliteration of the sulcus and concha could occur in grafts with poor tissue integration.

The defects in both cases encompassed a substantial part of the auricular lobe and retroauricular region, with cartilage exposure. The preauricular skin transposition flap stands out by not bridging the helix with the retroauricular region, preserving the three-dimensional appearance, and ensuring adequate vascularization in the donor area. Almeida et al. successfully reported on a flap from the preauricular region with the superior pedicle, achieving primary donor area closure in the preauricular sulcus region. There would be no glabrous skin flap in abundant beard or sideburn cases. Additionally, when designing the flap, a key element is preserving the parotid gland in the preauricular region. In this case, performing the preauricular flap with the infraauricular pedicle was decided for an effective repair. Despite the complexity of these reconstructions, both patients demonstrated satisfactory outcomes during follow-up, highlighting the efficacy and safety of this approach in addressing challenging ear defects.

Conclusion

An alternative surgical technique is proposed, easily performed, and designed with a superior or inferior pedicle, depending on the defect's position. It offers several advantages, such as its execution in a single surgical step, reducing morbidity, and providing a significant aesthetic result. In both cases, the transposition flap allowed the preservation of the retroauricular sulcus and the closure of the donor site. Additionally, the scars were hidden along the skin tension lines, maintaining functionality and allowing glasses or hearing devices to be used.



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Bilobed and Multilobed flaps for the reconstructon of medium to large defects on the face

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Introduction & Objectives:

Multilobed flaps are a useful surgical technique for the reconstruction of defects in areas with low laxity, such as the nose.

The aim of this study was to evaluate the outcomes of bilobed and multilobed flap reconstruction for the surgery of facial medium to large defects.

Materials & Methods:

This retrospective study was conducted in our department, between 2021 and 2024. The records of patients who had bilobed or multilobed flap reconstruction for the treatment of medium to large defects on the face were retrieved. Only patients who gave informed consent and whose postoperative images are recorded were eligible for inclusion. The outcomes were assessed based on postoperative complications, functional and esthetic aspects and patient satisfaction.

Results:

Twelve patients were included. The mean age was 63.5 years (45-79). All patients had BCCs. BCCs were nodular in 7 cases and trabecular in 6 cases. BCCs were located on the nose ala in 6 cases, the nose tip in 4 cases, the nasolabial fold in 1 case, and the superior lip in 1 case. The average size of the BCC was 1.54cm.

Mohs surgery was indicated in 8 cases.

Reconstruction used bilobed flap (7 cases), followed by trilobed (3 cases) and multilobed (2 cases) flaps. One case of infection was noted, requiring antibiotic treatment.

Healing was satisfactory in 80% of patients, with no cases of dystrophic scarring. Aesthetic outcomes were excellent in 80% and good in 20%.

Conclusion:

In this study, 10 flaps were mainly used for the reconstruction of nasal defects.

The multilobed flaps can deliver a vertical tension vector to prevent alar rim elevation and avoid distortion of the periorbital structures.

After multilobed flaps reconstruction, potential complications include flap necrosis, infection, or hypertrophic scarring.** In our series, one case of surgical site infection was observed.