





The influence of BMI and age on lipedema symptoms and comorbidities: a pre-and postoperative evaluation

Anna Malfertheiner*^{1, 2}, Anna Maria Ernst^{3, 4}, Hannelore Bauer⁵, Hans-Günther MacHens¹, Anna-Theresa Lipp⁶

¹Klinikum rechts der Isar, Technical University Munich, Department of Plastic Surgery and Hand Surgery, Munich, Germany ²Universitätsmedizin Halle, Martin Luther University Halle-Wittenberg, Department of Dermatology and Venereology, Halle (Saale), Germany

Introduction & Objectives: Lipedema is a chronic disease of painful adipose tissue, which is still under- and misdiagnosed. Currently, liposuction is considered the gold standard for treatment of lipedema. In the present study pre- and postoperative conditions of lipedema patients were evaluated focusing on the question of whether the patients' age and BMI influence the commonly observed beneficial effect of liposuction.

Materials & Methods: Stage II lipedema patients who had undergone liposuction 6 to 12 months prior to the survey were given the opportunity to complete an online questionnaire regarding a range of pre- and postoperative conditions. Data from 61 patients who were subdivided into groups according to their age and BMI were analyzed.

Results: Overrepresented comorbidities were overweight and obesity (77%, n=47) and sleeping disorders (16.4%, n=10), followed by eating disorders (14.8%, n=9), migraine (14.8%, n=9), depression (12.9%, n=8) and hypothyroidism (14.8%, n=9). 29.5% (n=18) did not suffer from any disease mentioned in the questionnaire. Underrepresented were inflammatory diseases and diseases related to the metabolic syndrome. The occurrence of lymphedema and venous insufficiency was found to be unrelated to the patients' BMI but was more frequent in patients of older age (40-60 years). The back and the lower arms were significantly more frequently affected in obese participants compared to normal weight and overweight patients. Liposuction reduced comorbidities except inflammatory diseases and hypothyroidism. Pain and bruising were significantly reduced in patients of all weight and age categories. Psychological symptoms as mood swings and quality of life impaired obese participants more than normal weight and overweight participants. Leading surgical complications were general short-term complications as well as tissue alterations.

Conclusion: Lipedema related symptoms were significantly reduced after liposuction. While the BMI does not affect the severity of symptoms pre- or postoperatively, general weight gain appears to be an additional trigger in older patients, beside potential hormonal changes which was stated by all respondents regardless of BMI and age. Despite the indication of relatively frequent side effects, almost all participants (98.3%, n=59) would recommend liposuction as an effective method of treatment.

³Institute of Anatomy and Cell Biology, Paracelsus Medical University, Salzburg, Austria

⁴University of Salzburg, Department of Biosciences, Salzburg, Austria

⁵University of Salzburg, Department of Biosciences, Salzburg, Austria

⁶PANTEA® Privatpraxis für Plastische & Ästhetische Chirurgie und Lipödem-Chirurgie, Munich, Germany







Video Presentation: Submental and Submandibular Liposuction

Mohammad Reza Namazi*1, Vahid Dastgerdi²

¹Shiraz University of Medical Sciences and Dr. Namazi skin and Hair Clinic, Shiraz, Iran

²Dr. Namazi Skin and Hair Clinic, Shiraz, Iran

Introduction & Objectives: In this video presentation, I will show our easy technique for submental and submandibular liposuction. The transcript of the video is as below:

Materials & Methods: The area having excess fat is already marked out. We prepare the anesthetic solution with an epinephrine concentration of 1:200000 and inject it using a cannula entering a point at each mandibular angle and also a third point under the chin. The entry points were stabbed by the tip of a knife 11 to allow the entry of the cannula. It is important to inject 1-2 cm beyond the marking to prevent any pain in case the cannula tip crosses the marking. We have injected around 100 cc of the anesthetic fluid for this case. Liposuction is performed by inserting a harvest cannula, connected to a suction machine, through the entry points at the mandibular angles. If the fat is localized to the midline area under the chin, only one entry point, which is under the chin, is used for both anesthetic injection and liposuction. Pinching the skin over the cannula makes suctioning more efficient by moving the fat towards the cannula tip. The pinch test can help us know whether enough fat is removed or further suctioning is needed.

Results: Nice definition and contouring of the submental and submandibular regions is produced.

Conclusion: liposuction can be used to make a nice definition and contouring of the submental and submandibular regions.







Comparing the surgical outcomes of minimal incisional technique versus narrow hole extrusion technique (NHET) for removal of epidermoid cyst: A randomised, prospective study from a tertiary care centre.

Monal Sadhwani*1

¹Deenanath Mangeshkar Hospital and Research Center, Dermatology, Pune, India

Comparing the surgical outcomes of minimal incisional technique versus narrow hole extrusion technique (NHET) for removal of epidermoid cyst: A randomised, prospective study from a tertiary care centre.

Introduction & Objectives:

Epidermoid cysts are benign lesions arising from pilosebaceous units. The three main excision techniques used to remove them include conventional wide excision, excision with minimal incision and narrow hole excision technique (NHET). In this study, we aim to compare the surgical efficacy and outcomes between minimal incision technique and NHET.

Materials & Methods:

This was a prospective study conducted on sixteen patients presenting with epidermoid cyst. The patients were randomly assigned into the two surgical groups. Inflammed and infected cysts were excluded from the study.

Surgical Technique:

NHET:

A skin biopsy punch or an electrocautery machine was used to make a narrow opening of around 1.5-2mm in size around the punctum of the cyst and the contents were subsequently expressed by manual pressure. After complete removal of the cyst wall, the cavity was cleaned with povidone iodine solution and the base was cauterised to prevent recurrence. The wound was left to heal by secondary intention after applying a waterproof dressing.

Minimal incision and closure:

The skin layer was incised in a straight line along the punctum of the cyst. Dissection was carried out using forceps so as to not rupture the cyst wall, enabling the cyst to be removed in toto. The wound was closed in a single layer by non-absorbable, simple, interrupted sutures.

All the patients were given a course of oral antibiotic post operatively and followed up after a week (for wound assessment in NHET and suture removal in minimal incision technique) and every two weeks thereafter upto a period of three months. Parameters like scar length, recurrence and complications were assessed at each visit. SPSS version 11 was used to evaluate the data. P value of less than 0.05 was considered significant.

Results:

Out of the total sixteen cysts included in the study, eight each were operated by minimal incision and NHET. The mean preoperative cyst diameter for minimal incision technique was 1.48cms, while for the NHET technique was 1.16 cms. Two patients developed secondary infection of the wound after NHET. Two patients of the minimal incisional group had wound gaping after suture removal. The mean time required for complete healing and the mean scar length in NHET and minimal incisional group was 4.5 weeks /2.25 weeks and 0.35cm/0.35cm respectively . None of the patients developed recurrence during the follow up period.

The risk of bleeding and post operative haematoma are higher with incision technique. This may obscure the operating

field. With NHET, bleeding can be simultaneously controlled. The cyst wall can be removed in toto with minimal incisional technique. However, the risk of wound dehiscence with incisional technique is higher. NHET can lead to residual cyst wall, thus increasing the chances of recurrence. Previously inflamed, scarred and larger cysts are difficult to remove by NHET.

Conclusion:

The aesthetic outcome of minimal incisional technique is excellent. However, for cysts smaller than 2.2cm in diameter, NHET is recommended.







Simple Techniques, Superior Outcomes: Xanthelasma Excision at a Tertiary Care Center.

Monal Sadhwani*1

¹Deenanath Mangeshkar Hospital and Research Center, Dermatology, Pune, India

Simple Techniques, Superior Outcomes: Xanthelasma Excision at a Tertiary Care Center.

Introduction & Objectives:

Xanthelasma palpebrarum is the most common type of cutaneous xanthoma, primarily affecting females between the ages of 40 and 60. Various treatment modalities have been explored, including topical trichloroacetic acid (TCA) application, cryotherapy, and energy-based devices (EBDs) such as CO2 lasers and radiofrequency ablation. However, these approaches often yield suboptimal cosmetic results, with potential complications including scarring, burns, and post-inflammatory hyperpigmentation. This study aims to evaluate the efficacy of simple elliptical excision, a surgical technique that offers a more reliable solution for treating XP.

Materials & Methods:

This was a retrospective, randomised study conducted on 52 patients at a tertiary care center over a 12-month period. The inclusion criteria were both treatment-naïve and treatment-resistant cases of XP. Exclusion criteria included patients with Lee Grade IV lesions (extensive or deep involvement) and those with uncontrolled systemic conditions.

Procedure: After infiltrating the lesion with local anaesthesia, all patients underwent simple elliptical excision of the xanthelasma lesions. The wound was closed in a single layer using a polyamide, monofilament, non-absorbable, 6-0, running continuous sutures. Patients were followed up at 7 days for suture removal and subsequently at 1 month and 6 months post-procedure. During each visit, aesthetic outcomes were assessed, and any recurrence of lesions was documented.

Patient Satisfaction and DLQI Evaluation: Patient satisfaction was assessed at 6 months using a visual analogue scale (VAS) from 0 to 5. Additionally, the Dermatology Life Quality Index (DLQI) was measured before treatment and at the 6-month follow-up, to assess the impact of XP and its treatment on the patients' quality of life. **

Results:

The study included 52 patients, comprising 41 females and 11 males, with a mean age of 46 years (range: 30–65 years). 22 patients had Grade I, 12 patients had Grade II and 18 patients had Grade III involvement. No patient had Grade IV involvement. 31 patients had family history of xanthelasma.

The average satisfaction score of the patients was 4.7/5, indicating a high level of satisfaction with the aesthetic and functional outcomes of the procedure. Patients reported minimal postoperative discomfort and were generally pleased with the cosmetic appearance of the excision sites.

The average DLQI score before treatment was 8.3, indicating a moderate impact on quality of life due to the cosmetic appearance of XP. At 6 months post-procedure, the average DLQI score had decreased to 1.2, reflecting a significant improvement in patients' quality of life following treatment. (p value: 0.001)

Among the 52 patients, there was no recurrence of xanthelasma lesions at the 6-month follow-up. Complications were minimal, with only 2 patients experiencing minor wound dehiscence, which was managed conservatively. No cases of post-inflammatory hyperpigmentation or hypertrophic scarring were observed.

Conclusion:

Simple elliptical excision is a reliable and effective treatment option for xanthelasma palpebrarum, with minimal complications and high patient satisfaction. The technique is particularly suited for small to moderate lesions, offering a balance between aesthetic outcomes and safety.







Efficacy of 3D Bioprinting Technology to Prepare a Bioink Containing Autologous Melanocytes versus Non-Cultured Epidermal Cell Suspension (NCES) in the treatment of Vitiligo: A Randomized Controlled Trial

Shrinivas Patil*1

¹Command Hospital Air Force Bengaluru, Department of Dermatology, Venereology and Leprology, Bengaluru, India

Introduction & Objectives: Vitiligo involves melanocyte destruction and depigmented patches, with greater impact on darker skin. Current treatments yield inconsistent results. 3D bioprinting offers a solution by precisely depositing autologous melanocytes to create skin substitutes, addressing limitations of conventional methods. This randomized controlled trial (RCT) evaluates its efficacy in creating bioink-based skin substitutes for stable vitiligo. Secondary objectives include safety, repigmentation, patient satisfaction, and feasibility in dermatology.

Materials & Methods: This RCT, conducted over 6 months at a tertiary care center, included 50 male patients aged 20-45 years with stable vitiligo. Inclusion criteria: stable vitiligo for ≥6 months, active vitiligo, no keloid history, or previous melanocyte transplantation. Skin grafts were harvested, trypsinized, incubated at 37°C for 1 hour, and centrifuged to obtain melanocyte pellets. These were mixed with hydroxy methylcellulose and calcium alginate to prepare a bioink loaded into a 3D bioprinter, creating flexible, thin skin substitutes for transplantation. Patients were randomly assigned to two groups: the experimental group (Group A, n=25) received 3D bioprinted skin substitutes, while the control group (Group B, n=25) underwent conventional melanocyte transplantation. After dermabrasion, skin substitutes were applied to vitiligo lesions. The primary outcome was the percentage of repigmentation, assessed via clinical photography and dermoscopy. Repigmentation was categorized as: no repigmentation (0%), partial (<50%), moderate (50-75%), and full (>75%). Secondary outcomes included adverse events like erythema, infection, or graft failure. Between-group comparisons were made using independent t-tests, with p<0.05 considered significant.

Results:A total of 50 patients participated, with lesions on arms, hands, chest, and legs. At 4 months, Group A showed substantial improvement, with 22 of 25 patients (88%) achieving significant repigmentation and 18 patients (72%) >75% repigmentation (p<0.01). In Group B, 14 patients (56%) achieved moderate repigmentation, and 10 (40%) achieved >75% repigmentation (p=0.15). The mean repigmentation rate in Group A was 82.3% (p<0.01) compared to 65.4% in Group B (p=0.12). Group A demonstrated earlier and more significant repigmentation than Group B, consistently outperforming in both speed and degree. At 4 months, 72% of Group A achieved >75% repigmentation, significantly higher than 40% in Group B (p<0.05), underscoring the superiority of bioprinted constructs.

Conclusion: This RCT demonstrates that 3D bioprinting technology provides a promising alternative to conventional melanocyte transplantation for vitiligo. The study shows 3D bioprinted constructs achieve significantly higher repigmentation levels and have a favorable safety profile compared to traditional methods.







Eying Success—Neoadjuvant Vismodegib for Locally Advanced Periocular Basal Cell Carcinoma

Amy Long*1, Patrick Ormond1

¹St James's Hospital, Dublin, Ireland

Introduction & Objectives:

Vismodegib has demonstrated a significant response rate in locally advanced periocular basal cell carcinoma (BCC). However, maintaining long-term therapy is challenging due to primary or secondary resistance, and side effects that restrict treatment duration. An alternative approach involves using neoadjuvant vismodegib followed by Mohs micrographic surgery.

Materials & Methods:

Herein we report a case of recurrent periocular BCC treated with neoadjuvant vismodegib followed by Mohs micrographic surgery.

Results:

A 61 year old female was referred to dermatology with a recurrent infiltrative BCC on her left lower eyelid. The lesion was previously treated with Mohs micrographic surgery six years prior. Her past medical history was significant for nonmelanoma skin cancer and osteoporosis. An MRI orbit was performed showing a focal lesion at the medial canthus, extending to the periorbital fat just inferior to the medial rectus insertion, abutting but not definitely invading the globe. The case was reviewed at a multidisciplinary skin cancer meeting, where it was determined that the lesion was not initially suitable for Mohs micrographic surgery. The patient declined orbital exenteration as a treatment option. Neoadjuvant vismodegib was commenced at a dose of 150mg orally once daily. During treatment, she experienced side effects, including dysgeusia and muscle cramps. After five months of therapy, objective regression of the BCC was observed, and a decision was made to proceed with Mohs micrographic surgery. Tumour extirpation was achieved in a single stage, and the patient underwent successful reconstruction by an oculoplastic surgeon.

Conclusion:

We consider vismodegib to have a definitive role as a neoadjuvant treatment for locally advanced periocular BCC, including operable cases. Further exploration of indications beyond current approvals (metastatic or locally advanced BCCs unsuitable for surgery or radiotherapy) is warranted. Prospective studies with extended follow-up are needed to evaluate the long-term efficacy and outcomes of neoadjuvant vismodegib combined with Mohs micrographic surgery in such cases.







Role of nanofat injection in treating post-traumatic scars

Mahmoud Rageh*1, Shady Ibrahim1, Mohamed El-Khalawany1

¹Faculty of Medicine, Al-Azhar University, Department of Dermatology, Cairo, Egypt

Role of nanofat injection in treating post-traumatic scars

Introduction & Objectives:

Scars are the common and unpleasing result that occur following injuries of different causes. They have a great impact on the affected subjects both physically and psychologically. We tried to evaluate the role of autologous nanofat injection in refining the esthetic appearance of post-traumatic scars, along with pathological correlation of the results.

Materials & Methods:

Nineteen patients with post-traumatic scars were treated with a single session of nanofat injection. The results were assessed after 6 months from the session using Vancouver scar scale (VSS) in addition to pathological evaluation via image analyzing system.

Results:

The age ranged between 19 and 40 years old. Statistically significant improvement on the VSS was noted regarding the height and pigmentation of the treated scars. On histopathological evaluation, there was a high statistically significant increase regarding epidermal thickness, collagen fibers, elastic fibers, and vascularity.

Conclusion:

Nanofat injection is a potential efficient therapeutic modality for post-traumatic scars.







Evaluation of Shave Excision for Atypical (Dysplastic) Nevi: A Retrospective Review of Treatment Efficacy

Omeed Modiri*¹, Xochitl Longstaff¹, Matthew Yan¹, Jeremy Davis¹

¹University of California, Los Angeles, Los Angeles, United States

Introduction & Objectives:

Atypical nevi are benign melanocytic neoplasms that serve as a marker for increased melanoma risk, with their risk of malignant transformation being less understood. Their management remains a topic of discussion, as there is no clear consensus on whether surgical intervention is necessary for all atypical nevi or how extensive such intervention should be. While many dermatologists favor conservative excision to ensure complete removal, the use of standard full-thickness excision may result in overtreatment, particularly for benign lesions with low malignant potential. A shave excision is a relatively well-tolerated procedure that can offer several advantages compared to traditional full-thickness excision. In this study, we evaluate the efficacy of shave excision with histologic margin assessment as a less invasive alternative for the treatment of atypical nevi.

Materials & Methods:

We conducted an IRB-approved retrospective chart review of all cases of atypical nevi treated with shave excision with margin control by an individual Mohs surgeon at an academic institution, between January 2020 to January 2022. Individuals treated with shave excision for neoplasms other than atypical nevi, including recurrent nevi, were excluded. Data extracted included patient demographics, nevi characteristics, excision pathology, and margins.

Results:

A total of 38 cases of atypical nevi treated with shave excision were included in this study, with 34 on the trunk and extremities and 4 located on high-risk anatomical sites (including the face, hands/feet). Among these, 3 cases exhibited moderate atypia, 26 cases showed moderate-to-severe atypia, and 8 cases demonstrated severe atypia. Residual atypical melanocytes were identified in 54.1% of cases with prior biopsy. Shave excision margins were clear of atypia in 89.5% (34/38) of cases. Notably, positive excision margins were observed in 50% (2/4) of cases on high-risk sites, compared to 5.9% (2/34) of cases on the trunk and extremities. Recurrence was observed in 5.2% of patients with initially clear excision margins, with a mean follow-up of 1.8 years. None of the cases analyzed were upstaged to melanoma or melanoma in situ.

Conclusion:

Shave excision with margin control is an effective treatment for atypical nevi, offering benefits over other modalities because they can be performed quickly and are generally well tolerated. Dysplastic nevi on high-risk sites treated with shave excision were noted to have a higher rate of positive excision margins compared to atypical nevi treated on the trunk or extremities, suggesting that these sites may represent more challenging sites to treat with shave excision alone, thus alternative approaches such as Mohs can be considered. Further studies incorporating larger sample sizes are warranted to corroborate our findings and to assess for long-term outcomes.







Rare Cut: Mohs Surgery for Fibrous Malignant Histiocytoma -Case Report

Madalina Ioana Marza^{1, 2}, Maria Moga^{1, 2}, Mircea Cotruta², Andrei Burlibasa², Cristina Cotruta³

¹Clinical Hospital of Infectious and Tropical Diseases "Dr. Victor Babes", Bucharest, Romania

Rare Cut: Mohs Surgery for Fibrous Malignant Histiocytoma -Case Report

Introduction

Cutaneous malignant fibrous histiocytoma is a very rare aggressive sarcoma known for its high recurrence rate and potential for metastasis. Treatment is based on simple surgical excision with wide margins. This peculiarity of the case is represented by the treatment approach as it was treated using the Mohs surgery.

Case Presentation

An 80-year-old female presented into our clinic with a periorbital mass with an increased growth rate over the previous 6-8 months. The patient had no other comorbidities nor any history of trauma or radiotherapy. Clinical examination illustrated a friable, centrally ulcerated 25 mm exophytic tumour located in left supraorbital area. Histopathological report revealed giant, oval and spindle-shaped cells with multiple nuclei and atypical mitoses. Additionally, infiltration of adnexal structures and deeper layers was observed. The patient underwent a three-stage Mohs excision with intraoperative frozen section evaluation with reconstruction using a rhombic flap.

Conclusion

Malignant fibrous histiocytoma** is one of the most common soft tissue sarcomas, but its cutaneous presentation is extremely rare. While wide margins excision is typically the standard of care, given the tumour's location, Mohs surgery was deemed a more appropriate approach for optimal margin control and cosmetic outcomes.

²University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania

³"Bine" Medical Clinic, Bucharest, Romania







Mohs Micrographic Surgery in Female Genital Cancers: A Systematic Review

Sheila Sharifi*¹, Isabel Rodriguez¹, Sarah Antonevich¹, Sara Osborne², Keyvan Nouri¹

¹University of Miami Miller School of Medicine, Dr. Phillip Frost Department of Dermatology and Cutaneous Surgery, Miami, United States

²University of Minnesota Medical School, Minneapolis, United States

Introduction & Objectives:

Mohs micrographic surgery (MMS) has shown promising efficacy in female genital cancers, including Extramammary Paget's disease (EMPD), Dermatofibrosarcoma protuberans (DFSP), squamous cell carcinoma (SCC), and basal cell carcinoma (BCC). However, limited consolidated research exists on the clinical outcomes following MMS in female genital cancers. The aim of this systematic review is to synthesize and evaluate recent literature on the application and utility of MMS in the management of female genital cancers.

Materials & Methods:

A comprehensive search was conducted of the PubMed and EMBASE databases was conducted on October 16, 2024 using the keywords "Mohs surgery" or "Mohs micrographic surgery" and "female genital" or "vulvar cancer" or "vaginal cancer" or "valvar" or "vagina." Studies were included if they directly discussed MMS for female genital cancers, particularly EMPD, DFSP, SCC, and BCC, with attention to clinical outcomes, were of the correct study type (e.g., clinical trials, cohort studies, case control studies, cross sectional studies, case reports and case series), and were published in peer-reviewed journals in English.

Results:

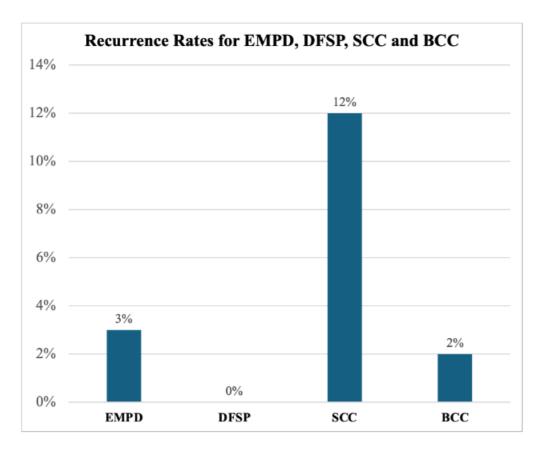
Our results identified a 95% curative rate following MMS for EMPD, DFSP, SCC and BCC, following analysis of 166 treated cases. Specific recurrence rates can be found in Figure 2.

Twenty patients in this analysis experienced successful cure with MMS after treatment failure with other modalities, including wide local excision, total or partial vulvectomies, CO2 laser and other medical therapies.

Conclusion:

MMS provides superior outcomes as compared to traditional excisional approaches, potentially secondary to its precision-guided approach and histological analysis. Future studies should utilize larger patient cohorts and investigate rarer malignancies and combination therapies to optimize treatment guidelines for female genital cancers.

Figure 2. Recurrence Rates for EMPD, DFSP, SCC and BCC



EMPD: Extramammary Paget's disease

DFSP: Dermatofibrosarcoma protuberans

SCC: Squamous cell carcinoma

BCC: Basal cell carcinoma







Basal cell carcinoma invasion depth measurement with 22-75 MHz high-frequency ultrasound and histomorphology. Comparative study.

Nikita Bezuglyy*1, Artur Bezugly²

- ¹Noninvasive Skin Diagnostics Laboratory ANTA-Med, Moscow, Russian Federation
- ²Academy of Postgraduate Education of the Russian Federal Medical Biological Agency, Dermatovenerology and Cosmetology, Moscow, Russian Federation

Introduction & Objectives:

High frequency ultrasound (HFUS) skin imaging was announced as the accurate and objective instrument for the basal cell carcinoma (BCC) and melanoma preoperative measurements. Tumor size and invasion depth are the critical parameters for basic cell carcinoma (BCC) treatment planning. Therefore, noninvasive tumor thickness measurement before the surgery or therapy has great potential to clarify the tumor invasion depth and the boundaries character.

Materials & Methods:

Tumor thickness was measured with 22 and 75 MHz HFUS on 34 clinically diagnosed BCCs before surgical excision. After excision, each tumor thickness was determined with histomorphometry. Histological slices were prepared on the same axis as HFUS scans.

Results:

The HFUS patterns for the superficial, nodular, micronodular, and sclerodermiform BCCs were described.

The average BCCs thickness was $1710\pm944~\mu m$ measured by high-frequency ultrasound, and $1507\pm861~\mu m$ during the histological examination. The average BCCs thickness, determined by the histological method, was slightly less, but these differences were not significant (p>0.05).

A significant, very high correlation was found between the results of BCCs thickness measuring using HFUS and the histomorphometry, Spearman's correlation coefficient R=0.96 (p<0.01).

Conclusion:

The high and very high correlation between the HFUS histological examination results established in this study confirms the accuracy of the BCCs size and invasion depth quantitative measurements using HFUS.

This valuable diagnostic information is necessary for complete tumor removal and has a certain prognostic meaning for BCC treatment planning, and patients management.







Simplifying Surgical Management of Patients with Gorlin Syndrome

Miranda Wallace*1, Jim Muir¹

¹Mater Hospital Brisbane, South Brisbane, Australia

Introduction & Objectives:

Gorlin Syndrome (or Nevoid Basal Cell Carcinoma Syndrome) is caused by a germline mutation in two genes, more commonly the PTCH1 gene and the SUFU gene. In Australia, it is estimated to affect approximately 1 in 164,000 people based on data from 1994.

Materials & Methods:

We report a case of a 41 year old female with Gorlin Syndrome who had more than 190 BCCs (basal cell carcinoma) identified in a single skin check session. She had previously received vismodegib but had issues with access so had ceased. During the period of cessation the number of BCCs had increased, with at least 20 lesions on the face. The other manifestations of Gorlin Syndrome were fused vertebrae, recurrent dental cysts and a bifid rib. The patient opted for multiple surgical sessions to minimise tumour burden through a combination of curette and cautery and excisions, prior to recommencing vismodegib.

Results:

Recent recommendations for cancer surveillance in Gorlin Syndrome support skin examinations from age 10 and age 20 depending on the affected genetic variant. Guidelines suggest that surgical excision is the gold standard for treatment of BCCs, with Mohs micrographic surgery being preferred for sensitive facial lesions. Radiation may lead to an increase in BCCs in the irradiated areas. Hedgehog pathway inhibitors such as vismodegib and sonidegib may not be tolerated lifelong due to side effects or other factors such as cost and accessibility. In such patients, alternative methods of treatment, such as serial curettage and cautery may be options for local control of a high burden of small lesions.

Conclusion:

The general population of Australia has a large burden of melanoma and non-melanoma skin cancer, and patients with a predisposition for development of BCC's, such as those with Gorlin Syndrome are required to have regular surveillance skin checks and lower threshold for biopsy.







In-vivo and ex-vivo sonographic evaluation of tumor margins during micrographic controlled surgery: a promising new tool in dermato-oncology?

Diana Crisan*¹, Ximena Wortsman^{2, 3, 4, 5}, Fernando Alfageme Roldán⁶, Karin Scharffetter-Kochaneck¹, Maria Crisan⁷, Lukas Bernhard¹, Evelyne Tarnowietzki¹, Lars Schneider¹, Monika Schmid-Wendtner^{8, 9}

Introduction & Objectives: The current research examined the *in vivo* and *ex-vivo* use of high-frequency ultrasound (HFUS – 17MHz) during micrographic-controlled surgery (MCS) of non-melanoma skin cancer (NMSC) of the head-and-face area, particularly the perioperative surgical margin assessment for potential reduction of surgical steps and hospitalization time in our patients.

Materials & Methods: Pre-operative *in vivo* and *ex-vivo* sonographies of 136 NMSCs from 111 patients were evaluated retrospectively for tumor margin assessment during micrographic controlled surgery (MCS) by an experienced dermatosurgeon, while the specimens were independently assessed by a histopathologist.

Results: Our *ex-vivo* tumor margin assessment showed a specificity of over 98% for squamous cell carcinoma (SCC) and basal cell carcinoma (BCC), with only 5 false-negative and 2 false-positive results, when compared to histopathology. HFUS identified tumor-free margins in 89% of investigated lesions after the first resection, based on pre-operative sonographic marking and *ex-vivo* sonographic margin assessment, as well as 8 incomplete (R1) resections (6%), where a re-excision was immediately performed, and histology confirmed the presence of tumor rest. Overall, HFUS showed a very high accuracy in detecting both cancer-free margins and remaining tumor rests.

Conclusion: The present study confirms the potential of HFUS in identifying tumor-free or tumor-infiltrated margins in an *ex-vivo* setting, even in infiltrative/sclerodermiform lesions, enabling an immediate intervention, sparing surgical steps, decreasing perioperative anxiety and hospitalisation time in dermatosurgical patients. Potential limitations of the procedure seem to be the identification of very superficial tumor rests and perineural infiltration, which might be difficult to differentiate sonographically from inflammation or actinic elastosis. In such situations, the employment of other imaging methods, displaying a better superficial resolution such as ultra-high-frequency ultrasound or confocal microscopy could increase the precision of the procedure. Despite this limitation, HFUS in this setting has the potential to significantly increase the accuracy of the surgical intervention, by pre-operatively correctly marking the tumor margins and assessing them quickly after excision, increasing patient satisfaction by maintaining cosmesis and functionality and improving the quality of healthcare.

¹University Hospital Ulm, Clinic of Dermatology and Allergic diseases, Ulm, Germany

²School of Medicine, Pontificia Universidad Catolica de Chile, Department of Dermatology, Santiago, Chile

³Faculty of Medicine, Universidad de Chile, Department of Dermatology, , Santiago, Chile

⁴Institute for Diagnostic Imaging and Research of the Skin and Soft Tissues, Santiago, Chile

⁵University of Miami, Miller School of Medicine, Department of Dermatology and Cutaneous Surgery, Miami

⁶Hospital Universitario Puerta De Hierro Majadahonda , Dermatology, Madrid, Spain

⁷University of Medicine and Pharmacy Iuliu Hatieganu, Clinic of Dermatology and Venerology, Cluj-Napoca, Romania

⁸Ludwig-Maximilian University, Department of Dermatology and Allergology,, Münich

⁹Interdisciplinary Oncological Center, Münich, Germany







Giant epidermal inclusion cyst treated with intralesional injection of triamcinolone acetonide: A case report

Tiar Marina Octyvani*1

¹Primaya Evasari Hospital, Department of Dermatology, Venereology, and Aesthetics, Jakarta, Indonesia

Introduction & Objectives:

Epidermal inclusion cyst (EIC) is an epithelial-lined cyst filled with keratin and lipid-rich debris. It can rarely measure more than 5 cm in diameter, which is considered a giant EIC that causes patient discomfort and requires surgical excision, as it does not regress with medical treatment alone. EIC was often injected with intralesional triamcinolone acetonide before surgical excision to reduce the inflammation and relieve the symptoms. We present a case of a giant EIC treated with intralesional injection of triamcinolone acetonide, aimed to evaluate safety and efficacy in relieving the symptoms.

Materials & Methods:

A 72-year-old male presented with an erythematous palpable mass in size 7 x 6 x 3 cm on the vertebrae area, which had been there since he was a teenager, kept growing and repeatedly oozing and shrinking, but never completely resolved. He has a family history with the same symptoms. Lately he felt tenderness and fever; thus, he sought medical treatment. The ultrasound of the lesion described thickening of skin, an oval hypoechoic lesion, circumscribed edges, parallel to the skin, measuring 5.11 x 3.05 x 4.87 cm, with posterior enhancement, without infiltration into the muscles and visible destruction or erosion of nearby thoracic vertebrae. The diagnosis was epidermal inclusion cyst (EIC) with a secondary infection. He received oral azithromycin 500 mg for 5 days, acetaminophen 500 mg 3 times a day, and topical wet dressing with normal saline, then mupirocin cream on the lesion twice a day. On day 5, the central punctum appeared; we decided to do the incision of the punctum until 5 mm more and drained it; the filling showed green-colored debris. We did cyst lavage with normal saline until it was clear enough, and then we injected the cyst with 3 ml of triamcinolone acetonide (TA) 40 mg/ml. We closed the opening with sterile gauze without suture. We asked the patient to change the gauze at home once a day; after 2 weeks, there was no debris left and we closed the opening. The patient felt no pain and fever after the treatment; he refused to receive wide excision. After 3 months, the lesion did not show signs of growing.

Results:

For large EIC in a suspicious area, ultrasound may be beneficial, especially to ensure that the lesion is limited to the skin and does not infiltrate the surrounding tissue. The patient refused wide excision, which made us consider the intralesional TA while reducing the size of the cyst, relieving the pain, and relieving the inflammation. Initial therapy was systemic antibiotics because the symptoms suggested a secondary infection. We did drainage then intralesional TA injection after 5 days of antibiotics, considering the infection may get worse if the corticosteroid is injected at the initial visit. Draining EICs tends not to be a successful therapy as the cyst is likely to reform, although in our patient it did not grow after 3 months. It is difficult to predict how long EIC in our patient will remain stable; thus, excision to completely remove the cyst is still recommended.

Conclusion:

Treatment of EIC with intralesional triamcinolone acetonide injection is safe and effective to relieve symptoms and stabilize the size after drainage for several months. Further wide excision to completely remove the cyst is still recommended.







Palmar Circumscribed Hypokeratosis: A Diagnostic Challenge with a Simple Therapeutic Approach

Juan Osorio¹, Maria Clara Jácome Sandoval², Valeria Erazo Martínez², Jhonatan Quintero², Angélica Baquero¹

¹Semillero de Investigación en Dermatología - Universidad de Caldas, Facultad de ciencias para la salud, Universidad de Caldas, Manizales, Colombia

²Universidad de Caldas, Dermatología, Facultad de ciencias para la salud, Manizales, Colombia

Introduction & Objectives:

Circumscribed palmar or plantar hypokeratosis (CPH) is a rare dermatological condition first described in 2002 by Pérez et al. Since then, only 105 cases had been documented by 2020. Although generally considered benign, some cases have been linked to premalignancy and malignancy. Available treatments have yielded heterogeneous results, with no standardized approach. This study documents two novel cases of CPH, one of which achieved successful resolution with cryotherapy.

Materials & Methods:

A 73-year-old man presented with a multiple-year history of a right-hand palmar lesion. Clinical examination revealed a 1 cm erythematous plaque with hyperkeratosis and scaling on the right thenar eminence. A biopsy showed an abrupt decrease in the stratum corneum thickness, with a step-like transition between normal and affected areas, confirming CPH. Cryotherapy was applied in two cycles of 15 seconds.

A 34-year-old woman from the United States presented with a 3-week history of a circumscribed lesion on the left thenar palm. She exhibited a 20x12 mm erythematous oval plaque with peripheral scaling. A punch biopsy was performed under suspicion of CPH vs. Mibelli's porokeratosis. The histopathological findings confirmed the diagnosis of CPH. However, the patient did not attend follow-up visits, preventing further clinical assessment of therapeutic outcomes.

Neither patient reported previous trauma.

Results:

The male patient showed an 80% resolution of the lesion two months after cryotherapy, reporting both subjective and objective improvement.

Conclusion:

CPH primarily presents as a single erythematous plaque with a hyperkeratotic border, typically affecting middle-aged women but also occurring in other age groups. The main differential diagnoses include Bowen's disease and Mibelli's porokeratosis. Its etiology remains unclear, with proposed theories including trauma, burns, HPV-4 infection, clonal epidermal malformation, primary keratinization disorder, and corneocyte fragility. CPH has been associated with malignancy, including actinic keratosis and squamous cell carcinoma. Histopathological findings confirm the diagnosis of CPH, characterized by a sharp decrease in ortho-keratotic stratum corneum thickness. Various treatments have been attempted, with cryotherapy showing promising results. In our case, cryotherapy led to significant improvement, supporting its efficacy as a treatment option. Further studies are needed to establish standardized management protocols for CPH.







Efficacy of a Dual-Length Microneedle Radiofrequency Device with Microblade Design for Neck Rejuvenation

Ji Yeon Hong¹

¹Chung-Ang University College of Medicine, Dermatology, Seoul, Korea, Rep. of South

Abstract

Introduction & Objectives:

Neck aging, particularly the formation of horizontal wrinkles, poses a significant cosmetic concern, and achieving satisfactory outcomes remains challenging. Minimally invasive approaches, such as microneedle radiofrequency (RF) devices, have gained attention for their potential in skin rejuvenation. This study aims to evaluate the efficacy and safety of a novel microblade RF device, DoubleTite®, for nonsurgical neck rejuvenation in improving horizontal neck wrinkles and overall skin quality.

Materials & Methods:

Twelve healthy Korean volunteers participated in this study, receiving two DoubleTite® treatment sessions spaced four weeks apart. Objective assessments were conducted at baseline, week 4, and week 12, evaluating Horizontal Neck Wrinkle Severity (HNWS) scores and Global Aesthetic Improvement Scale (GAIS) scores. Additionally, skin biophysical parameters, including hydration, transepidermal water loss (TEWL), and elasticity, were measured. Safety evaluations were performed to monitor treatment-related adverse effects.

Results:

A significant reduction in HNWS scores was observed at weeks 4 and 12 (p < 0.001), demonstrating improvements in horizontal neck wrinkles. GAIS scores indicated overall aesthetic enhancement. Skin hydration increased, TEWL decreased, and skin elasticity improved following treatment. Reported adverse effects were mild-to-moderate and transient, with no serious side effects noted.

Conclusion:

The DoubleTite® microblade RF device effectively reduces horizontal neck wrinkles and enhances skin quality, demonstrating both efficacy and safety for nonsurgical neck rejuvenation. These findings suggest that DoubleTite® may serve as a promising minimally invasive solution for improving neck aesthetics.







Adenoid/Mucinous and Adamantanoid Basal Cell Carcinomas: Two Less-Recognized Basal Cell Carcinoma Subtypes Associated With Wide Tissue Infiltration

McKayla Poppens¹, Soraya Azzawi¹, Jeremy Davis¹, Richard Bennett²

¹UCLA, Dermatology, Los Angeles, United States

²Providence Health, Santa Monica, United States

Introduction & Objectives:

Adenoid/mucinous and adamantanoid basal cell carcinomas (BCCs) are two less-recognized but not uncommon BCC subtypes that, in our experience, often exhibit aggressive clinical behavior. Further, both of these BCC subtypes are often excluded from traditional subtype classification schemes. This study aims to assess the extent of tissue infiltration by and relative frequency of adenoid/mucinous and adamantinoid BCCs.

Materials & Methods:

384 BCCs removed by Mohs micrographic surgery (MMS) from 6/1/2013 to 12/18/2014 were subtyped. In addition to the subtypes categorized by Maloney (nodular, superficial, micronodular, infiltrative, and mixed-type), we added the lesser-known BCC subtypes of adenoid (which includes the sub-classification of mucinous) and adamantinoid. Morphea-like BCC was not included due to the small number (2) of cases evaluated during the time period. BCC subtypes not in the above classifications or found in conjunction with tumors other than BCCs were also excluded. Definitive subtype classification required that the predominant (roughly 75% or more) tumor observed was a classifiable type. Tumors with more than one identifiable subtype, but failing to meet the 75% criteria, were classified as mixed-type. Mucin produced by the tumors was highlighted by frozen section staining with toluidine blue, a metachromatic stain that stains mucin a vivid pink color and other tissues blue. For all BCC subtypes the following variables were statistically analyzed: pre-op size, post-op size after MMS, adjusted post-op area (post-op area controlling for pre-op area), prior treatments, number of stages, and anatomic location.

Results:

Adamantinoid BCCs comprised 3% of all BCC subtypes and adenoid/mucinous BCCs 7% (Figure 1). Adamantinoid BCCs were found by far to be the most aggressive BCC subtype. These latter tumors required significantly more stages to achieve a tumor-free plane (p<0.024) and resulted in much larger post-op wound areas compared to all other subtypes (p<0.004) (Figure 2). Adenoid/mucinous BCCs required a larger number of stages to achieve a tumor-free plane (p=0.027) as well as larger adjusted post-op wound areas (mm2) when compared to nodular BCCs (p=0.0001). When unadjusted for pre-op area, adenoid/mucinous BCCs had larger post-op wound areas when compared to nodular (p<0.00001) and superficial (p=0.047) BCCs, which are considered to be low-aggression BCCs. Adenoid/mucinous BCCs were found to require similar numbers of stages and produce similar post-op wound areas when compared to infiltrative and micronodular BCCs, which are considered high-aggression BCCs.

Conclusion:

Our data confirm that adenoid/mucinous and especially adamantinoid BCCs should be considered in the high-aggression BCC category along with infiltrative and micronodular BCCs.







Therapeutic Approach to a Case of Subungual Melanoma

Madalina Mariana Motoaca¹, Laura Tuvichi², Mihaela Georgescu¹

¹Carol Davila Central Military Emergency University Hospital, Bucharest, Romania

²Carol Davila Central Military Emergency University Hospital, UMF Carol Davila Bucuresti, Bucharest, Romania

Introduction & Objectives:

Subungual melanoma is a rare and aggressive subtype of melanoma, often diagnosed in advanced stages due to its subtle clinical presentation. We present a case of acral lentiginous subungual melanoma in a patient with a history of nail trauma, emphasizing diagnostic challenges and therapeutic approach. The surgical management of nail unit melanoma has evolved from aggressive amputations to digit-sparing approaches, but there are still debates on this subject.

Materials & Methods:

A 78-year-old female patient presented with a 1.5 cm pigmented lesion on the left thumb nail, extending to the proximal and distal nail folds. The lesion displayed irregular borders, color polymorphism, and nail dystrophy. Dermoscopic findings included Hutchinson's sign, disrupted pigmented lines, and globules, raising suspicion of melanoma. On year ago, the patient reported local trauma at the left thumb nail. Two months prior to the current presentation, the patient underwent total nail avulsion in the General Surgery department of another city, without histopathological examination of the excised nail. In our department, the decision was to perform complete excisional biopsy, with a 0,5 cm oncologic safety margin, followed by defect closure with a skin graft. Histopathological analysis confirmed acral lentiginous melanoma, ulcerated, Breslow index 1.2 mm, Clark level III, mitotic index 10 mitoses/mm², without perineural or lymphovascular invasion. Staging investigations, including lymph node ultrasound, abdominal-pelvic ultrasound, and chest radiography, showed no metastatic spread. The staging was pT2b, pNx, pMx.

Results:

Postoperative recovery was uneventful. Histopathological evaluation confirmed complete tumor resection. In March 2024, oncological reevaluation recommended distal phalanx amputation, which was performed by the Plastic Surgery department. To date, the patient has shown no recurrence. Follow-up is advised every 3 months for 2 years, then every 6 months up to 5 years and it involved periodic imaging to detect recurrences or metastases and dermatological and oncological follow-up. Subungual melanoma is frequently misdiagnosed as benign lesions or post-traumatic changes, leading to delayed treatment. Excisional biopsy remains the gold standard for therapeutic approach. The extent of resection is guided by Breslow index and bone invasion, with options ranging from digit sparring approach by local excision to amputation. Amputation of the distal phalanx or the entire finger is indicated in advanced cases with bone invasion or when local excision does not provide adequate safe margins. However, current literature suggests no significant survival difference between patients undergoing excisional biopsy with digit sparring versus amputation, though the topic remains debated. Preservation of function and oncologic control must be balanced in surgical decision making.

Conclusion:

In this case, surgical management was effective, with no recurrence observed. Long-term surveillance is essential to detect recurrences or metastases early. This case underscores the necessity of a multidisciplinary approach involving dermatologists, plastic surgeons, and oncologists to optimize patient outcomes in subungual melanoma.

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scrotal calcinosis a rare entity: a case report

Farouk Elguennouni*^{1, 2}, Jawad Azhari¹, Tarik Hanafi¹, Mohamed El Amraoui¹, Youssef Zemmez¹, Rachid Frikh¹, Naoufal Hjira¹

¹Mohammed V Military Training Hospital, dermatology venerology , Rabat

Scrotal calcinosis a rare entity: A case report

Introduction & Objectives:

Scrotal calcinosis is a rare, benign disorder characterized by solitary or multiple calcified nodules in the scrotal skin. Etiology remains controversial, Probably an idiopathic or dystrophic calcification secondary to trauma, inflammation, or epidermal cysts degeneration. Clinically benign, resemblance to tumors, infections, or systemic calcifying disorders is the challenge. This case report aims to: outline the clinical and histopathological diagnostic criteria, the role of surgical management in symptomatic or cosmetically concerning cases, and reinforce the importance of excluding metabolic or malignant mimics. The broader objective is to enhance clinical recognition of this rare entity to prevent misdiagnosis and ensure optimal patient outcomes.

Materials & Methods:

A 33-year-old male presented with a 5-year history of multiple, painless scrotal nodules increasing in size and number. Without history of trauma, infection, or systemic illness. Physical examination revealed numerous non-tender, mobile calcified nodules (0.5–2 cm) distributed across the scrotum, without erythema, ulceration, or discharge. Systemic examination was unremarkable. Normal phospho-calcic laboratory investigations and parathyroid hormone, ruled out metabolic abnormalities. Ultrasonography showed hyperechoic nodules with posterior acoustic shadowing, consistent with calcification. An excisional biopsy of a nodule was performed under local anesthesia. Histopathological analysis included hematoxylin and eosin (H&E) staining to evaluate calcification patterns, tissue architecture, and the presence of epithelial or inflammatory components. Surgical excision of symptomatic and cosmetically significant nodules was subsequently undertaken.

Results:

Histopathological examination revealed dense, amorphous calcified deposits within the dermis, surrounded by fibrous tissue and a minimal lymphocytic infiltrate. No epithelial lining, cyst wall remnants, or malignant cells were identified, confirming idiopathic scrotal calcinosis. The patient underwent surgical excision of 12 nodules under local anesthesia, with meticulous dissection to preserve scrotal tissue integrity. Intraoperatively, nodules appeared as well-circumscribed, chalk-white masses adherent to the dermis. Postoperative recovery was uncomplicated, with primary wound healing and no signs of infection. At a 6-month follow-up, the patient reported a complete resolution and high satisfaction with the cosmetic outcome. No recurrence observed, consistent with literature indicating low recurrence rates (<5%) after complete excision.

Conclusion:

This case underscores a rare but important differential diagnosis for chronic scrotal nodules. Key conclusions include:

Diagnostic Vigilance: Idiopathic scrotal calcinosis should be suspected in patients with painless, progressive nodules after excluding metabolic disorders and malignancies. Histopathology remains indispensable to confirm diagnosis and rule out

²faculty of medecine and pharmacy, Rabat

cyst-derived calcification or neoplasms.

Therapeutic Efficacy: Surgical excision is the gold standard, offering both diagnostic confirmation and therapeutic relief from significant psychological distress due to cosmetic concerns, necessitating patient-centered management.







Tension analysis model in operative wounds in different shapes of surgical incisions

Victor Dos Reis¹, Helio Miot¹, Anna Carolina Miola*¹

¹UNESP, Botucatu, Brazil

Introduction & Objectives:

In dermatologic surgery, reducing tension on the edges of a surgical wound typically leads to better cosmetic outcomes and minimizes complications, such as hypertrophic scarring, infection, or wound dehiscence. These factors are especially significant for larger incisions or those located in body areas of dynamic movement. (1,2)

Linear incisions tend to have more evenly distributed tension, but if the incision is long or placed across tension lines, the force on the wound edges increases, which may result in worse aesthetic outcomes. On the other hand, curved incisions are often employed to redirect tension along natural skin creases or reduce overall wound tension, improving cosmetic results.(3) To date, no experimental studies have evaluated the tension promoted by an incision based on its length and shape, therefore, we developed an experimental model to assess the tensions at the margins of incisions with varying formats and lengths.

Materials & Methods:

We performed a study in a non-human model, using latex elastic bands to simulate human skin and its elasticity when submitted to tension. Straight, L-shape and S-shape incisions of 1 to 5 cm were made, with intervals of 0.5 cm between each incision, for the three shapes of incision (fig 1). Immediately after the incision, length extremities were submitted to a known force of 1 kgf to simulate skin distention. Then, pictures were taken with Canon® Rebel T5i and distances between edges were measured through pixels with ImageJ®. Considering that Hooke's Law on elastic force indicates that the distance and the tension force at the edges are directly proportional, the curves of the incision models were compared, and the estimated differences in tension at the center of each incision were established.

Results:

Although smaller incisions behave similarly, our results showed that incisions superior to 2.5 cm seems to be submitted to more tension with linear incisions when compared to L-shape and S-shape incisions (fig 2), which may interfere in aesthetic results, since the tension in a surgical wound is one of the factors which influence on the healing, along with the suture, the type of thread, and surgical technique. This study is based on a non-human model. Studies involving humans in real-life surgeries should be performed to reinforce our results.

Our results suggest that S-shape, a less conventional incision shape, promotes less tension on surgical edges when compared to a conventional linear incision, which may lead to a decreased chance of wound dehiscence, better aesthetic results and earlier mobilization of surgical site, specially in incisions larger than 2.5 cm.

Conclusion:

This model effectively illustrates the varying tension exerted at the edges of wounds based on the shape and length of the incisions. This approach is well-suited for exploring innovative surgical techniques for wound skin closure.

References:

- 1. Hom DB, Bernstein JD. Reducing Risks of Facial Scarring. Facial Plast Surg Clin North Am. 2023;31(2):195-207.
- 2. Shockley WW. Scar revision techniques: z-plasty, w-plasty, and geometric broken line closure. Facial Plast Surg Clin

North Am. 2011;19(3):455-63.

3. Shockley WW. Scar revision techniques: z-plasty, w-plasty, and geometric broken line closure. Facial Plast Surg Clin North Am. 2011;19(3):455-63.



Figure 1: Straight, L-shape and S-shape incisions in elastic bands to perform the non-human model

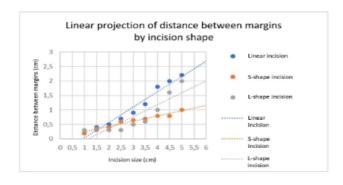


Figure 2: Linear projection of distance between margins by incision shape







Advanced Dermotosurgery, the Bolognese experience

Laura Miccio*¹, Emi Dika²

¹Azienda USL di Bologna - Sede Legale, Bologna, Italy

Introduction & Objectives: Dermatosurgery is a branch of dermatology that deals, in the oncological field, with the radical removal of benign and malignant tumors of the skin and subcutaneous tissue, as well as surgical reconstruction aimed at preserving the function and aesthetics of the affected area. The reconstructive aspect is therefore an essential part of dermatosurgery, especially when areas of particular aesthetic significance, such as the head and neck region, are involved. Reconstruction can be performed directly or, in the case of larger tumors, through the use of skin grafts and flaps.

Materials & Methods: 30 cases of skin tumors in the head and neck region were selected, where the size and location required reconstruction using skin flaps or grafts.

Results: Results are shown through the presentation and discussion of pre-surgical appearance, the outcome at the end of the surgical procedure, and the follow-up at 2 and 4-6 weeks.

Conclusion: The purpose of this report is to present several cases of advanced dermatosurgery from the Bolognese experience, offering various insights into the best therapeutic choices based on the needs and characteristics of both the tumor and the patient.

²Alma Mater Studiorum - Università di Bologna, Bologna, Italy







Cutaneous Cancers in Photo-Exposed Areas: Epidemiological, Diagnostic, and Therapeutic Insights from a Retrospective Study

Khediija Bennani¹, Ouiame El Jouari¹, Meryem el Bakkali¹, Salim Gallouj¹

¹University Hospital Mohamed VI, dermatology department, Tangier, Morocco

Cutaneous Cancers in Photo-Exposed Areas: Epidemiological, Diagnostic, and Therapeutic Insights from a Retrospective Study

Introduction & Objectives:

In recent years, humans have been increasingly exposed to sunlight, either due to occupational requirements or personal preference. While tanned and radiant skin is often considered aesthetically pleasing, excessive sun exposure carries significant health risks. Ultraviolet (UV) radiation is the primary risk factor for developing cutaneous cancer.

This study aims to outline the different stages in the management of patients with cutaneous cancer in photo-exposed areas, focusing on diagnosis, treatment, and follow-up.

- Emphasize the importance of a thorough clinical examination.
- Describe various surgical techniques used in cutaneous cancer treatment.

Materials & Methods:

We conducted a retrospective study of patients diagnosed with cutaneous cancer in photo-exposed areas, managed at the Dermatology Department of CHU Med VI in Tangier.

A total of 45 patients were included in the study, and we analyzed their epidemiological, clinical, dermoscopic, therapeutic, and follow-up characteristics.

Results:

Among the 45 patients diagnosed with biopsy-confirmed cutaneous cancer:

- 59% were female, with a mean age of 60 years.
- All patients had at least three hours of daily sun exposure, and 13% had outdoor occupational activities.
- Tumor localization: 78% on the face, 9% on the scalp, and 3% in the retroauricular area.
- Diagnosis: Clinical dermatological examination using a dermatoscope, with further systemic assessment revealing lymph node involvement in 12% of cases.
- Histopathology:
 - 62% had basal cell carcinoma (BCC)
 - o 29% had melanoma
 - 9% had squamous cell carcinoma (SCC)

Patients with melanoma underwent staging investigations. ### Surgical Treatment - 59% underwent complete tumor

excision with clear margins followed by simple suturing. - 5% required local flap reconstruction, 5% underwent guided wound healing, and 5% received skin grafting. - Postoperative care included bi-weekly wound dressing changes. - Mean wound healing time: 25 days, with some patients benefiting from LED-assisted healing. - Patients with lymph node involvement received multidisciplinary oncological management.

Conclusion:

- Cutaneous cancers in photo-exposed areas represent a growing public health concern, largely attributed to cumulative ultraviolet (UV) radiation exposure. Our study highlights the predominance of basal cell carcinoma, the importance of early diagnosis through clinical and dermoscopic evaluation, and the role of surgical excision with appropriate margins as the primary treatment approach.
- While most cases are effectively managed with surgery, advanced or metastatic lesions may require multidisciplinary
 intervention, including chemotherapy or radiotherapy. Photoprotection remains the cornerstone of prevention,
 emphasizing the need for public awareness campaigns and routine dermatological screening, particularly for at-risk
 populations. Early detection and timely management remain the best strategies to reduce morbidity and improve
 patient outcomes.







Sebaceoma - The Vital Role of Early Recognition in Lynch syndrome

Kimberley Pallourios¹

¹Colentina, dermatologie 1, Bucharest, Romania

Introduction & Objectives:

Muir-Torre syndrome (MTS) is a variant of Lynch syndrome, which is responsible for approximately 3% of newly diagnosed colorectal and endometrial cancers. The most specific marker of MTS is sebaceous adenoma (sebaceoma), which is also the most common associated skin tumorSebaceoma is a rare, benign sebaceous neoplasm characterized by basaloid cells with scattered mature sebocytes, typically presenting as a yellowish papule or nodule on the head and neck. Accurate diagnosis is crucial for appropriate management

Materials & Methods:

We present the case of a 56-year-old female who was referred for a skin-colored, ovular-shaped facial lesion, 5 mm in diameter, with a small pigmented area on the surface, localized to the right infrapalpebral region. It had developed over a few months and was aesthetically bothersome. We considered fibroma, basal cell carcinoma, and dermal nevus as clinical diagnoses. From the patient's family history, we noted that her mother and brother were diagnosed with colon cancer, with the latter occurring before age 40.

Results:

A shave biopsy was performed, and histopathology confirmed the diagnosis of sebaceoma. Considering the patient's family history and the fact that she had two pairs of twins, we considered immunohistochemistry. It revealed the loss of MSH2 and MSH6 expression in tumoral nuclei, indicating microsatellite instability, strongly suggestive of MTS, and genetic testing was recommended.

Conclusion:

This case highlights the significance of a small facial papule as a clinical clue. A benign tumor, when considered alongside family history, led to the diagnosis of Muir-Torre syndrome—a hereditary condition associated with visceral malignancies. Given the patient's two pairs of twins, regular screenings and genetic evaluation are essential for early detection and prevention of malignancies in at-risk individuals







Giant and Multiple Pilomatricomas: A Rare Case Report

Younes Tamim¹, Yassine Berrada², Mariame Meziane¹, Ismaili Nadia¹, Benzekri Laila¹, Senouci Karima¹

¹Ibn Sina University Hospital, dermatology, rabat, Morocco

Introduction & Objectives:

Pilomatricomas, also known as calcifying epitheliomas of Malherbe, are relatively uncommon benign skin tumors. They usually present as firm, subcutaneous nodules in children and young adults. Multiple pilomatricomas account for less than 3% of cases and may be associated with conditions such as myotonic dystrophy, Rubinstein-Taybi syndrome, and Gardner syndrome. Giant pilomatricomas, typically defined as lesions exceeding 5 cm in diameter, are extremely rare. Here, we report a case of giant and multiple pilomatricomas in an otherwise healthy individual.

Materials & Methods:

A 45-year-old male with a history of psychiatric disorders and hypertension presented with five firm, painless, slowly enlarging nodules that had been present for approximately 20 years. The largest lesion, located on the anterointernal aspect of the left arm, was a firm, flesh-colored mass measuring approximately 5 cm in its longest axis. Dermoscopic examination revealed areas of red and white coloration, as well as zones of calcification. The remaining lesions, located on the upper and lower limbs, were subcutaneous and measured approximately 3 cm in their longest axis.

Three of the lesions, including the largest tumor, were surgically excised. Histopathological examination confirmed the diagnosis of pilomatricomas. The two remaining lesions have not yet been excised. The patient denied any family history of similar lesions or associated syndromic features. Genetic testing was not performed.

Results:

Giant pilomatricomas are an uncommon variant of pilomatricomas that can pose diagnostic challenges due to their size and similarity to malignant tumors. While multiple pilomatricomas are rare, they can sometimes be associated with genetic conditions, though sporadic cases have also been reported. The pathogenesis is linked to mutations in the CTNNB1 gene, which disrupts β -catenin signaling. Clinically, distinguishing giant pilomatricomas from malignant tumors like pilomatrix carcinoma or cutaneous sarcomas can be difficult, with imaging techniques such as ultrasound or MRI helping to assess deep tissue involvement, but histopathology remains essential for diagnosis. Dermoscopic features, such as red-white areas and calcifications, assist in differentiating these lesions. Syndromic conditions like myotonic dystrophy, Gardner syndrome, and Rubinstein-Taybi syndrome are often associated with multiple pilomatricomas, but no such association was found in our patient. Genetic testing is not routinely performed in sporadic cases but may be considered in atypical or familial cases. Surgical excision is the preferred treatment, with rare recurrence or malignant transformation after complete removal. Recurrence or incomplete excision may increase the risk of malignant transformation, although this is infrequent.

Conclusion:

We report a rare case of giant and multiple pilomatricomas in an otherwise healthy patient. Although usually benign, recognition of multiple and large lesions should raise suspicion of genetic syndromes or atypical presentations. Further studies are needed to better understand the pathophysiology of giant and multiple pilomatricomas and their potential syndromic associations.

²Ibn Sina University Hospital, rabat, Morocco