

Abstract til DSPRs Forårsmøde 2022.

Authors

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The next step in customized surgery? 3D-printed, patient-specific interventions for surgical outer ear management—a systematic review

Aim/background:

3D-printing is generally considered a promising technology, which can provide patient-specific equipment for surgical interventions. Nevertheless, literature on the clinical utility of 3D-printing in plastic surgical management of the outer ear is scattered. Understanding these new treatment options is essential for clinical implementation, which might improve patient outcomes. This systematic review aims to explore applications of 3D-printed patient-specific interventions for managing the ear, including state of evidence, strengths, limitations, and future possibilities.

Material and Method:

According to the PRISMA guidelines, relevant studies were identified from four databases (Pubmed, EMBASE, the Cochrane Library, Web of Science). Data on interventions (and related 3D-printing processes) were extracted independently by two reviewers. Study quality was assessed using Joanna Briggs Institute's critical appraisal tools.

Results:

Literature search yielded 590 studies; 46 were eligible and included in the study. 3D-printed interventions were used as guides, templates, implants, and devices. Positive opinions on the 3D-printed interventions were reported: increased surgical precision and confidence, faster manufacturing and operation time, and reduced costs and complication rates. However, study quality was low as most studies failed to use relevant objective outcomes, compare new interventions with conventional treatment, or adequately describe manufacturing.

Discussion/Conclusions:

Several interventions utilizing patient-specific 3D-printing for outer ear management are considered promising. However, due to lacking comparison with conventional methods and low levels of evidence it remains unclear whether the interventions actually improve patient outcomes. Finally, the reproducibility of the 3D-printed interventions—an essential aspect of 3D-printing—is limited by insufficient reporting. Future research should pivot on objective, comparative outcomes evaluated in large-scale studies and include sufficient details to allow for reproduction of the described interventions.

Titel: Enhanced recovery after microvascular reconstruction in head and neck cancer – a prospective clinical study

Forfattere: JH Højvig, LT Jensen, J Nyberg, N Mayman-Holler, BW Charabi, I Wessel, H Kehlet, CT Bonde.

Baggrund: Patienter, der får foretaget mikrokirurgisk rekonstruktion efter hoved- og halskræft, oplever typisk lange postoperative hospitalsforløb, der besværliggøres af kirurgiske såvel som medicinske komplikationer. Som et resultat af dette er opstået stigende interesse for introduktionen af *Enhanced Recovery After Surgery* (ERAS) forløb for denne patientgruppe de seneste år. ERAS er et peri- og postoperativt plejekoncept, der gentagne gange har vist lovende resultater for en lang række kirurgiske procedurer under forskellige specialer – herunder andre mikrokirurgiske procedurer. Det følgende studie præsenterer resultaterne af introduktionen af et ERAS forløb for mikrokirurgisk rekonstruktion efter hoved- og halskræft på Rigshospitalet

Materiale og metoder: Vi introducerede vores ERAS-protokol i juni 2019 og behandlede 30 patienter i perioden frem til og med December 2020. Vi sammenlignede resultaterne med en retrospektiv kohorte behandlet med vores *Traditional Recovery After Surgery* (TRAS) protokol. Vores ERAS-protokol er baseret på de følgende principper: *Forbedret patientinformation, målrettet væsketerapi, minimalt invasiv kirurgi, multimodal opioid-besparende smertedækning, tidlig mobilisering og præ-definerede udskrivningskriterier.*

Resultater: Grupperne var sammenlignelige i forhold til demografiske data. ERAS-gruppen havde kortere indlæggelsestid (LOS) 13,1 mod 20,3 dage, $p < 0.001$), kortere tid til mobilisering (3,0 vs. 6,4 dage, $p < 0.001$), kortere tid med nasogastrisk sonde (13,3 vs. 22,7 dage, $p = 0.05$) og færre fik foretaget trakeostomi (10% vs. 90%, $p < 0.001$). Der var ingen forskel i komplikationer eller genindlæggelser mellem de to grupper.

Konklusion: Indførsel af en ERAS-protokol for mikrokirurgisk rekonstruktion af hoved- og halskræftpatienter reducerede indlæggelsestid uden øget risiko for patienterne.

Superomedial reduction mammoplasty affects patient's ability to breastfeed in a distinct manner: a multicenter study on 303 patients

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Background: Breast reduction using the superomedial technique can relieve symptoms related to breast hypertrophy; however, as the lateral and inferior portion of the breast parenchyma is removed and displaced, reduction mammoplasty may lead to an impaired ability to breastfeed.

Objective: To assess the patient's ability to breastfeed after superomedial reduction mammoplasty.

Methods: This was a cross-sectional study including patients treated with superomedial reduction mammoplasty between January 2009 and December 2018 at two tertiary hospitals in Denmark. Patients were stratified into two cohorts, depending on whether they had childbirth before or after their reduction mammoplasty. Alive patients were sent specific questionnaires regarding maternity, breastfeeding before and after reduction mammoplasty, nipple sensitivity, and current demographic information. Operative details were retrieved from electronic medical records.

Results: We identified 303 patients eligible for this study (37 patients giving birth after and 266 before reduction mammoplasty). Fewer patients were able to breastfeed exclusively for the recommended six months after reduction mammoplasty ($2/37 = 5.41\%$) compared to before ($92/266 = 34.59\%$, $p < 0.05$). Also, fewer patients were able to breastfeed at all after reduction mammoplasty ($18/37 = 48.64\%$) compared to before mammoplasty ($241/266 = 90.60\%$, $p < 0.001$). Patients unable to breastfeed after reduction mammoplasty had less nipple sensitivity and more breast tissue excised ($p < 0.05$).

Conclusion: Superomedial reduction mammoplasty seems to impair the patient's ability to breastfeed exclusively for the recommended six months. Patients of childbearing age considering reduction mammoplasty should be made aware that reduction mammoplasty reduces their breastfeeding capacity.

Indocyanine Green Lymphangiography Staging is Superior to Clinical Staging in Breast Cancer-Related Lymphedema: a blinded outcome study

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Background:

Precise staging of breast cancer-related lymphedema (BCRL) is important to guide treatment-decision making. Recent studies have suggested staging of BCRL using indocyanine green lymphangiography (ICG-L) based on the extent of lymphatic injury and dermal backflow patterns. Currently, the benefits of ICG-L compared to conventional clinical staging are unknown.

Methods:

For this study, we included 200 patients with unilateral BCRL. All BCRL patients were staged using ICG-L and clinical exam. The amounts of excess arm volume, fat mass and lean mass were compared between stages using Dual Energy X-Ray Absorptiometry. Multivariate regression models were used to adjust for confounders.

Results:

For each increase in the patient's ICG-L stage, the excess arm volume, fat mass and lean mass was increased by 8, 12 and 6.5 percentage points respectively ($p < 0.001$). For each increase in the patient's clinical ISL stage, the volume was increased by 3.5 percentage points ($p < 0.05$), however no statistically significant difference in the lean and fat mass content of the arm was observed for ascending stages. However, the residual plots showed a high degree of variance for both ICG-L and clinical staging.

Conclusion:

This study found that ICG-L staging of BCRL was superior to clinical staging in forecasting BCRL excess arm volume, fat mass, and lean mass. However, there was a high degree of variance in excess arm volume, fat mass, and lean mass within each staging system, and neither the ICG-L nor clinical staging forecasted perfectly.

New treatment guideline: Simplified dressings on skin grafts stimulate healing, prevents infections, and gives pain relief to patients

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Introduction:

In Denmark, skin graft treatment is led by the wound healing principles of moisture and close contact surface over the grafted skin and defect. Although this method with multi-layer has proven efficient, constant exudate formation during increases the risk of graft loss by the shear forces during dressing changes. The objective of this study was to evaluate the polymeric membrane dressing (Polymem) and its impact on graft attachment, pain level and overall ease to use.

Materials and methods

For 18 months, all patients scheduled for skin cancer excision, and able to participate, were included. To examine benefits of the Polymem as a single-layer dressing, questionnaires, which included both patient's and clinicians' experience of application and treatment, were carried out.

The study was not funded.

Results:

100 patients were included. The graft sites included the head, ears, face, hand/fingers, torso, and extremities. Patients were between 24 – 97 years of age. We found following results.

At day 7, 80-100 % graft attachment were seen at 78 out of 100 patients.

5 out of 100 patients reported no graft attachment.

6 out of 100 patients reported signs of clinical infection.

On average, patients reported VAS pain scores of maximum 2.

And the overall easy-to-use percentage was 99 %.

Conclusion:

The clinical experience with Polymem as skin graft bolsters, increased graft attachment, reduced pain during changes and was easy to use in both operation theatre as well as the outpatient clinic. Our department changed their treatment guidelines as a result. The next step in evaluating this method's significance, would be to create a randomized, multicenter, comparative study with other hospitals in Denmark that compared the standard skin graft treatment against Polymem.

Stadiespecifik risiko for recidiv og død efter melanom i Danmark fra 2008-2021: Et nationalt kohortestudie af 25.860 melanompatienter

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Baggrund

Kendskab til stadiespecifikke recidiv- og mortalitetsrater er afgørende for planlægning af opfølgning og optimal prioritering af sundhedsvæsenets ressourcer.

Studiets formål var at beskrive stadiespecifikke recidivmønstre, recidiv- og mortalitetsrater og recidivfri overlevelse ved 1, 3, 5, og 10 år, samt at prædiktere den justerede stadiespecifikke absolutte risiko for recidiv og død.

Materialer og metode

Vi inkluderede 25.860 patienter registreret med første-gangs invasivt melanom i Dansk Melanom Database (DMD) i årene 2008-2019 og fulgte dem fra endt primærbehandling til 31. december 2021. Vi indhentede demografiske og kliniske baseline-data fra DMD, data vedr. vitalstatus og dødsårsager fra CPR og Dødsårsagsregisteret og recidiv-data fra DMD suppleret med data fra Patologiregisteret og Landspatientregisteret.

Vi estimerede den kumulative incidens af recidiv og død af melanom med Aalen-Johansen estimation og identificerede relevante risikofaktorer og prædikterede absolut stadiespecifik risiko med Cox regression.

Resultater

Median opfølgningstid var 5,9 år og patienter i stadium IIB-IIC og IIID-IV var signifikant ældre og mere komorbide.

I studieperioden fik 2.890 patienter (11,2%) mindst ét recidiv; 8,8% havde mindst ét fjernrecidiv, 6,3% mindst ét lokoregionalt recidiv og 2,3% mindst ét recidiv, som ikke kunne typebestemmes. Ved fem år spændte recidivraterne fra 1,8% til 81,4% (IA og IIID), recidivfri overlevelse fra 9,3% til 92,5% (IIID og IA) og melanom-specifik mortalitet fra 0,8% til 51,6% (IA og IV). Stadium IIIA og IIIB havde signifikant højere recidivfri overlevelse end stadium IIB (75,3% og 58,2% vs. 47,4%). De stadiespecifikke risiko-forskelle persisterede efter justering for øvrige risikofaktorer.

Konklusion

Vores resultater støtter det danske stadiedifferentierede opfølgningsprogram, men viser at stadium IIIA patienter formentlig kan følges mindre intensivt. Resultaterne viser at ældre og komorbide patienter ofte debuterer med tykke tumorer eller udbredt spredning. Måltrettet forebyggelse med hudkontrol i primærsektoren, kunne være gavnlig for denne gruppe.

Betingede stadiespecifikke recidiv- og mortalitetsrater kan belyse den optimale timing og varighed af opfølgning yderligere.

Abstract til DSPR Maj 2022

Forfattere:

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Institution arbejdet udgår fra:

Afdeling for plastikkirurgi og brandsårsbehandling, Rigshospitalet

Titel:

Using image AI to analyze the relative importance of Clinical Information to successful recognition of melanoma

Formål/Baggrund:

The main objective of this project is to bring new AI image recognition capabilities into a real clinical setting, to determine if they could play a role in improving the patient experience when using the healthcare system. The incidence of melanoma is increasing worldwide, and we must seek to better understand the factors involved in recognizing the disease to help catch cases early. To that end, we conducted a preliminary study to further analyze the correlation between specific personal characteristics, the appearance of skin elements and the diagnosis of melanoma. In this specific study, data was gathered from 100 patients with a skin element that was observed to be potentially malignant and therefore referred to a plastic surgery division. Factors like preoperative evaluation, age, sex, location of element, and prior history of melanoma and dysplastic nevi syndrome were recorded. Using a combination of image recognition (via pre-trained deep neural networks) and traditional models, we built a model from the diagnosis data, the image of the skin element, and related information from patient history. It was no surprise that the image of the element itself had the strongest feature importance contribution in the diagnosis of melanoma, followed by the preoperative evaluation of the surgeon, and age and the location of the element.

Diskussion/Konklusion:

This is a preliminary study but it carries the prospect of using combined image recognition plus traditional modeling techniques to investigate the contribution of the appearance of the element, compared with the contribution of other patient-specific characteristics toward the risk of getting diagnosed with melanoma.

Aterom vs. lymfom, en kasuistik

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Introduktion

Et aterom er en forstørret talgkirtel som forekommer med stor hyppighed, og kan oftest fjernes uden videre ubehag for patienten (1) Operationen er enkel og det tilstræbes at sende vævet til histologisk undersøgelse for verificering af diagnose, omend det jævnligt overvejes af ressourcemæssige hensyn, når den kliniske diagnose er oplagt. Herefter afsluttes patienten som regel.

Sygehistorie

35-årig sund og rask herre med en udfyldning i nakken igennem 6 måneder. Egen læge mistænkte aterom og behandlede med peroral antibiotika. Grundet manglende effekt fik patienten en henvisning til privatpraktiserende dermatolog, som foretog excision. Histologien viste helt normalt hud og subcutis. En måned senere møder patienten igen til dermatolog grundet recidiv. Opstartes i antibiotika og henvises til subakut re-excision i plastikkirurgisk regi pga. den hastige fremvækst.

På operationsdagen finder man en palpabel subkutan udfyldning på ca. 4 x 2 x 2 cm i nakken. Man mistænker fortsat aterom og den subkutane udfyldning eksstirperes in toto. Histologisk undersøgelse viser overraskende en lymfeknude, hvori der findes diffust storcellet B-celle lymfom. Patienten henvises i kræftpakkeforløb til hæmatologisk afdeling hvor han opstarter i kemobehandling.

Diskussion

Ateromer har som regel ingen klinisk betydning, medmindre de bliver inficeret. De kan dog genere både kosmetisk og funktionelt, hvorfor man kan vælge at fjerne dem. Malign transformation i ateromer er utroligt sjældent, og vil i så fald ofte være til epidermale karcinomer, som spinocellulært karcinom (2).

Den 35-årige herre havde ingen B-symptomer, og det var uventet at den subkutane udfyldning var en lymfeknude, endsige at der var tale om en malign sygdom. Det er essentielt at følge sin faglige fornemmelse og sørge for en subakut operationstid, hvis hastigheden i udviklingen af en hudtumor ikke stemmer overens med det forventede. Denne case understreger desuden vigtigheden ved histologisk bestemmelse af selv oplagte benigne fund, da svaret kan have afgørende betydning for patienten.

- 1: Fra sundhed.dk: <https://www.sundhed.dk/sundhedsfaglig/laegehaandbogen/hud/tilstande-og-sygdomme/noduli-cyster-polypper/aterom-i-huden/>
- 2: Gargya, V., et al., *Is Routine Pathologic Evaluation of Sebaceous Cysts Necessary?: A 15-Year Retrospective Review of a Single Institution.* Ann Plast Surg, 2017. **78**(2): p. e1-e3.

Forfattere: Linnea Bøgeskov Schmidt, Alessandro Venzo, Christian Lyngsaa Lang

Institution arbejdet udgår fra: Afdeling for Plastikkirurgi og Brandsårsbehandling, Rigshospitalet

Titel: Eruptive planocellulære karcinomer med Koebner fænomen

Baggrund:

Planocellulært karcinom (PCC) og keratoakantomer (KA) er relativt hyppige keratiniserende neoplasmer. Trods forskelle i naturforløbet, beskrives de histopatologisk som en del af samme spektrum. Begge tumores præsenterer sig typisk som en solitær tumor/sår, men KA er også beskrevet med en eruptiv natur og at opstå umiddelbart efter hudtraumer. Vi præsenterer her en sygehistorie, hvor nye PCC'er bryder frem både svarende til excision af primærtumorer og donorsted.

Kasuistik:

En 57-årig kvinde kendt med psoriasis og tidligere radikalt opereret coloncancer præsenterede sig med en hurtigt voksende tumor på højre håndryg. Biopsi viste KA og tumoren blev excideret og dækket med et fuldhudstransplantat. Endelig histologi viste PCC grundet ekstensiv infiltrativ vækst i dermis. Over de næste uger vokser nye tumores frem i randen af transplantatet, modsidige fossa poplitea og postaurikulært. Alle excideres, men der vokser igen nye tumores frem inden for få uger, både svarende til håndryg, fossa poplitea og donorsted for delhudstransplantat. Man forsøger afventende regime på mistanke om KA, men ser ikke remission af tumores. Slutteligt excideres alle tumores snævert og der behandles efterfølgende med Acitretin. Histopatologi har ved størstedelen af tumores vist højtdifferentieret PCC, mens enkelte er klassificeret som KA. Efter ca. 1,5 år falder tilstanden til ro og pt. har ikke frembudt yderligere i løbet af nu knap 2 års kontrolforløb. Patienten er diskuteret på MDT samt undersøgt for infektion, immundefekt og genetisk lidelse (inkl. Muir-Torre syndrom og Ferguson-Smith) uden fund af årsag.

Diskussion/Konklusion:

Der er kun meget få beskrevne cases, hvor PCC opstår umiddelbart efter kirurgisk traume, og da typisk kun et enkelt sted og ikke som i nærværende sygehistorie, hvor der ses et Koebner-lignende fænomen. Patienter med atypisk forløb af hudkarcinomer kan tages op på tværfaglig konference mhp. både udredning og alternative behandlingsmodaliteter.

Danish advanced translation and linguistic validation of the LIMB-Q KIDS: A new patient-reported outcome measure (PROM) for children living with limb deformities

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Aim/background: Lower Limb deformities is a term that includes many conditions such as: Lower limb deficiency, leg length discrepancy, rotational and angular deformities of the hips, knees, ankles, and feet. Pain and physical limitations are often a part of the lives of children with these deformities. The ideal way to assess the impact of these deformities impact on a child's health-related quality of life, is by using a Patient Reported Outcome Measure (PROM). Such a disease-specific PROM is currently under development, called LIMB-Q Kids. The aim of this study was to perform an advanced translation and cultural adapt (TCA) of the LIMB-Q Kids for use in Danish children.

Material and Method: To undertake a TCA of the LIMB-Q Kids, the guidelines from World Health Organization and the Professional Society for Health Economics and Outcomes Research were used. This process can be divided into: Two independent Forward translations, a reconciliation meeting, a Backward translation, assessment of the Backward translation, an expert meeting, Cognitive interviews with patients and a proof reading. As it is an advanced translation, results from this translation process will influence the development of the original LIMB-Q Kids.

Results: The different steps of the TCA process contributed to the Danish version of LIMB-Q Kids. The reconciliation meeting resulted in a Danish version, with no major discrepancies between the two forward translations. The revision of the backward translation compared with the original version resulted in 12 corrections to the Danish version and the expert meeting resulted in 26 changes. The cognitive interviews are still ongoing and will be presented at the meeting.

Discussion/Conclusion: The rigorous advanced translation process has led to a linguistically validated and cultural adapted Danish version of LIMB-Q Kids. Next step is international field-testing and using this data to look at the psychometric properties of LIMB-Q Kids.

3D Frozen Section Histology - A Technique for Perioperative Complete Evaluation of Surgical Margins in Non-Melanoma Skin Cancer

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Abstract

Background: Basal Cell Carcinoma (BCC) is a highly prevalent skin malignancy often requiring surgical excision. Tumors are frequently located on facial subunits where tissue sparing is a priority. Traditional treatment with excision and bread loaf histology, without frozen sections, samples the surgical margins sparingly, leaving a risk of false negative resection margins. 3D histology is an array of methods aimed at ensuring examination of the entire surgical margin. We present a modified 3D method for BCC on high-risk facial localizations, allowing complete margin control perioperatively, which is practicable in a standard hospital setting without requiring extensive training of personnel.

Methods: The tumor borders are defined and marked. A double-bladed scalpel is used for excision of a circular surgical margin around the entire tumor, and a single blade is used for excision of the tumor. Both are dyed and cryostat sectioned in the pathology lab and examined by the histopathologist.

Cases: Three cases are presented, illustrating the method.

Conclusions: 3D histology techniques have shown high rates of sensitivity, reducing the occurrence of false negative margins and ultimately recurrence rates of BCC, thus reducing the morbidity for patients. Most carcinomas are completely excised in one surgical intervention with this method. The method uses vertical incisions, creating a surgical bed optimized for reconstructive surgery. This 3D histology technique ensures microscopical examination of the entire surgical margin, ensuring the smallest possible defect with radically excised tumor, and is feasible in a standard hospital setting.

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Microsurgical replantation of a total scalp avulsion.

Total scalp avulsion is a rare and potentially life-threatening injury. If possible, microsurgical replantation of the scalp is the preferred treatment. Free flap reconstructions are an alternative but often result in less aesthetic results.

In this case we describe the microsurgical replantation of a total scalp avulsion in a 64-year-old female. The avulsed scalp involved all the hair, the forehead, the eyebrows, and the cutaneous upper half of the left ear.

The pre-hospital management of the patient and scalp was very effective. The scalp was transported in the correct packing and at the optimal temperature. The combination of the pre-hospital and our university hospital set-up made it possible to attach the scalp with an ischemia time of approximately 5 hours.

Good form and function of the completely avulsed tissues was achieved due to sufficient arterial and venous anastomosis of the temporal vessels.

The patient was discharged six days post-operative with a vital scalp and no complaints except partial necrosis of the ear.

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Institution: Research Unit for Plastic Surgery, Odense University Hospital, Odense, Denmark

Title: The impact of Body Mass Index (BMI) on Satisfaction with Work Life: An International BODY-Q Study

Background

Obesity is a global health issue known to have a major influence on health-related quality of life (HR-QOL). HR-QOL is a concept evaluating physical and psychological health. Work life can impact HR-QOL in people with obesity. The aim of this study was to measure the association between Body Mass Index (BMI) and satisfaction with work life.

Method

This study included participants from an international multicenter field-test study of BODY-Q scales. Recruitment took place at hospitals in Denmark, The Netherlands and USA between June 2019 and January 2020. The BODY-Q Work Life scale was used to measure work life satisfaction. The difference between BMI groups and work life satisfaction was examined using one-way ANOVA. Multivariable linear regression analysis was used to examine the association between BMI and work life satisfaction, adjusted for significant confounders.

Results

Of 4123 participants, 2515 completed the BODY-Q Work Life scale. BMI groups showed significant difference in work life satisfaction ($p < 0.0001$). The Work Life scale mean score was 77.6 for the normal BMI group, 78.5 for the overweight group and 75.0, 68.9 and 63.8 for class 1, 2 and 3 obesity, respectively. Furthermore, BMI was significantly associated with satisfaction with work life (adjusted regression coefficient -0.962 , $p < 0.0001$).

Conclusion

Higher BMI was associated with lower work life satisfaction. This finding suggests that a reduction in BMI may have a positive influence on work life satisfaction in people with obesity.

Comparison between Stromal Vascular Fraction and Adipose Derived Stem Cells in a Mouse Lymphedema Model

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Background: Lymphedema is one of the most common complications following breast cancer. Axillary lymph node dissection and radiotherapy are two well-known risk factors resulting in either removal or damage to the lymph nodes. As stem cells are known for their regenerative capabilities, they could theoretically repair/restore the damaged lymph vessels leading to a decrease in lymphedema. **Methods:** We evaluated the treatment of SVF and ASC on a mouse lymphedema model. Forty-five mice were allocated into three groups containing 15 mice each. The SVF group was injected with 100 µl containing 1*10⁶ SVF, the ASC group with 100 µl ml containing 1*10⁶ ASC and the NS with 100 µl ml of NS. Volumes of the mice were assessed weekly by µCT hindlimb volumetry for a total of eight weeks. Lymph vessel morphometry was assessed by cross-sections of both hindlimbs stained for Lyve-1. Lymphatic function was assessed by lymphatic clearance. **Results:** The volume change between the groups was non-significant throughout all eight weeks. The immunohistochemistry showed a statistically significant difference between the hindlimbs in ASC vs. NS group P=0.032, 95% CI [-2121, -103]. **Conclusion:** The volume of the hindlimbs showed that treatment with SVF or ASC yielded very similar results compared to the control group when assessed after eight weeks. In week two the biggest difference between ASC and NS was seen but the difference diminished during the eight weeks. The secondary outcomes showed that the lymph vessel lumen decreased when treated with ASC compared to the control group. Lymphoscintigraphy yielded non-significant results.

Versatility of composite grafts for nasal defects – a case series

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Background: Reconstruction of defects involving the nasal alar and soft triangle or correction of collapse of the nostrils and alar retraction may be challenging due to the complex three-dimensional anatomy of the nose. The chondrocutaneous (composite) graft, harvested from the auricle, is a versatile reconstructive option for management of these functional and aesthetical reconstructive demands.

Methods: This retrospective study describes the technical details and evaluates the results of patients who underwent nasal reconstruction performed with composite grafts at the Department of Plastic Surgery at Herlev and Gentofte Hospital, Copenhagen University, Denmark, between July 2017 to February 2022.

Results: Twenty patients had composite grafts performed, of which most were performed under local anaesthesia after oncological resection or to improve functional and aesthetical outcome after previous surgery. The mean maximal size of the defects was 14 mm (range 6-25 mm) with the mean maximum size of the full-thickness defects of 8 mm (range 2-25 mm). The donor site was closed directly or with local flaps (preauricular advancement, rotation flap or Antia-Buch flap). Complete loss of tissue was experienced in two cases (10%). Revision surgery was performed in two patients (10%).

All cases were reviewed and categorized as whether a composite graft would have been chosen, with our current knowledge, again, which it would have in 20 cases (91%). The outcomes were, furthermore, categorized as good or excellent in 19 cases (86%).

Conclusions: Composite grafts are versatile one-stage reconstructive options, well-tolerated by patients , with no additional midface scars, and may be carried out under local anaesthetics, for defects < 1-2 cm of the lower third of the nose after oncological resection, to correct collapse of the nostrils and alar retraction. This method is particularly useful in reconstruction of small full-thickness defects and superficial defects bordering or involving the alar rim.

Development and Pilot testing of a Patient-Reported Outcome Measure for Gender-Affirming Care: The GENDER-Q

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Aim / Background

Patient-reported outcome (PRO) is crucial in understanding outcomes of gender-affirming care and the unique needs and concerns of transgender and gender diverse (TGD) individuals. Consequently, a patient-reported outcome measure (PROM) that is specific to individuals seeking gender-affirming care is urgently needed. The aim of this project was to develop a comprehensive, rigorous PROM to assess outcomes of gender-affirming care.

Material and Method

The development of the GENDER-Q followed a mixed-methods, multiphase approach. First, in-depth qualitative interviews were conducted with adults seeking gender-affirming care from 4 countries (Canada, Denmark, Netherlands, US). Data were used to develop a conceptual framework and an item pool, to develop preliminary scales. Second, iterative feedback was sought from an international group of clinician experts and patient-participants. New scales were added, and existing scales refined. Finally, a pilot field-test was performed. The pilot data were summarized using descriptive statistics and psychometric properties were tested using Rasch measurement theory (RMT).

Results

In-depth interviews with 84 TGD adults (34±14years; transmen, n=42, transwomen, n=37) resulted in a conceptual framework with 4 top-level domains of appearance, HRQL, experiences of care and devices. Preliminary versions of 42 scales were developed covering most of the concepts in the conceptual framework. Iterative feedback was obtained from 50 clinician experts (response rate, 67%) and 7-14 patient participants (depending on scale). All scales were refined, and 15 new scales were developed, resulting in 57 scales in the field test version of the GENDER-Q. A total of 511 (25±6 years) TGD individuals participated in the pilot field test, providing overwhelmingly positive feedback related to the content of the scales.

Discussion / Conclusion

The GENDER-Q was developed using extensive input from TGD individuals and clinician experts and represents the most comprehensive set of independently functioning, unidimensional scales that are available to-date.

Dermal papil-areola kompleks lap metode ved kønsbekræftende mastektomi

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Introduction:

Subcutaneous mastectomy (SCM) plays a major role in female-to-male (FtM) gender affirming surgery, and obtaining a flattering chest contour remains a challenge to the surgeon. We present a novel operative method using a dermal flap, with the aim to create a naturally masculine appearance, while reducing the risk of nipple-areola-complex (NAC) complications by maintaining sufficient neurovascularisation.

Materials and methods:

Through a horizontal incision superior to the NAC, a thoracic full skin flap was elevated at the dissection plane for mastectomy. SCM was continued inferiorly, creating an inferior dermal flap including the NAC. The skin surrounding the NAC was de-epithelialised, allowing the inferior flap to be inserted beneath the superior flap. A circular defect was created in the superior flap, into which the NAC was interpolated.

Results:

The surgery delivered satisfactory results with an aesthetically pleasing masculine appearance and a high level of contentment in our patient. We were able to place the residual scars inferiorly along the pectoral muscles, allowing some camouflage. The dermal NAC flaps provided a uniform filling effect to the chest, further contributing to the male aesthetic. There were no NAC complications.

Conclusion:

The dermal NAC flap method could possibly be applied as an alternative to the traditionally performed free nipple graft technique in FtM chest contouring. The technique is simple, provides an aesthetically appealing outcome, and presumably poses a low risk of NAC complications. Intraoperatively, it allows for good exposure and a uniform removal of breast tissue, as well as repositioning and/or reduction of the NAC where required.

Malign adnextumor vs kutan karcinom metastase. Case report.

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Introduktion

Maligne adnextumorer er en gruppe yderst sjældne heterogene maligne tumorer, med en estimeret årlig incidens på 2,7/million indbyggere (1). Det kan være vanskeligt at adskille maligne adnextumorer fra de benigne udgaver, ligesom visse maligne adnextumorer kan ligne kutane karcinommetastaser. Én af de beskrevne undergrupper er svedkirtelderiveret karcinom.

Sygehistorie

44-årig kvinde henvises til mammakirurgisk vurdering pga. vækst og kløe i ateromlignende forandring ved venstre areola. Forandringen fjernes og viser noget overraskende karcinom. Det er dog umuligt at afgøre om der er tale om kutant svedkirtelderiveret karcinom eller en mammacancer metastase.

En MR-skanning viser små tumorsuspekterede forandringer i brystet, men der ses ingen forandringer på UL-skanning, og en biopsi er uden tegn til malignitet. Genetisk udredning uden tegn til forandringer i brystkræftgener.

Patienten opereres igen med re-excision samt excision af nyopstået suspekt område nedadtil i brystet. Histologi viser fortsat karcinom, og nu også metastaser. Hun tilbydes mastektomi, alternativt ny re-excision og SN-biopsi. Går igennem sidstnævnte, men pga. spredning til skildvagtlymfeknuden ender det alligevel med aksilrømning og mastektomi. Der er fortsat usikkerhed om diagnosen, og patienten får nu valget mellem at lade sig afslutte, eller fortsætte i kemobehandling under mistanke om brystkræft. Hun takker ja til det sidste, og henvises derfor til onkologisk afdeling.

Diskussion

Det er histologisk yderst vanskeligt at skelne mellem malign adnextumor og kutan metastase fra mammacancer, og man må således lade sig vejlede af klinikken (2). I dette tilfælde sad alle patientens forandringer i mamma, og det var derfor en kompliceret differentialdiagnostisk udfordring. Udredning med billeddiagnostik og biopsier er nødvendig for at komme diagnosen nærmere, men det lykkes ikke altid. Denne case understreger dermed vigtigheden af grundig patientinformation når man har at gøre med en kompliceret diagnose. Selvom der har været utryghed omkring den manglende diagnose, har patienten alligevel følt sig tilstrækkeligt informeret til at træffe en beslutning vedrørende sin behandling.

1: Fra Ugeskrift for Læger: <https://ugeskriftet.dk/videnskab/maligne-adnekstumor-i-huden>. 2016;178:V03160163

2: Toledo-Pastrana, T., et al., *Case report: differential diagnosis between primary cutaneous apocrine adenocarcinoma versus extramammary or metastatic breast adenocarcinoma*. Am J Dermatopathol, 2014. 36(10): p. e175-8.