The Society of Plastic Surgery at the Czech Medical Association of J. E. Purkyně
The Clinic of Plastic and Aesthetic Surgery at St. Anne's University Hospital
The Faculty of Medicine at Masaryk University in Brno

XI International Congress on Plastic Surgery

under the auspices of

doc. PhDr. Mikuláš Bek, Ph.D.
rector of Masaryk University
and
MUDr. Martin Pavlík, Ph.D., DESA, EDIC
director of St. Anne's University Hospital

7. - 9. 6. 2017

Hotel International, Husova 200/16, Brno
Czech Republic

ABSTRACTS

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Main topics

Microsurgery
Interdisciplinary cooperation
Breast reconstruction
Limb reconstruction
Aesthetic surgery
Head and neck reconstruction
Other topics

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ABSTRACTS

KEY NOTE LECTURE

40 YEARS LIFE WITH THE MICROSCOPE

Veselý J. et al.

Clinic of Plastic and Aesthetic surgery, St. Anne University Hospital Brno,
Medical Faculty of Masaryk's University Brno

The author had great luck to start 1976 to learn microsurgical technique as volunteer student of medical faculty with young physicians in experimental room of the Clinic of Plastic Surgery St. Anne University Hospital. The first successful clinical cases of replantation did at the 1st Surgical Clinic 1982 and first free flap reconstruction on Achilla's tendon did in late 80 at Military hospital in Brno. Later performed several microsurgical reconstructions in Genova, Bologna, Catania, Messina, Roma, Perugia, Sassari being invited as visiting professor between 1989 and 2011 at University La Sapienza Roma, Catania, Perugia, Milano and Sassari.

Great school of more than 100 free flaps reconstructions between 1992-1995 was obtained in the Traumatology Institute in Brno, Ponávka. Long term cooperation with INT and head and neck surgeons from 1989 brought unforgettable experiences and lasts till today.
Hundreds of replantation and interdisciplinary surgical work including breasts reconstructions is the goal of prof. Vesely's surgical life.

MICROSURGERY

THE USE OF MEDICAL LEECHES IN EAR REPLANTATION

Stupka I., Kučerová L., Vondra P., Knoz M.

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Brno, Czech republic

The authors describe the use of medical leeches as an adjunct method of venous drainage in earlobe replantation. The authors report a case of 62 - years old woman whose whole left ear was bitten and amputated by dog. Surgical team managed the ear replantation successfully. After the restoration of the arterial supply, the drainage of the earlobe was secured by A-V shunt and a small vein. A discrete vein congestion was relieved by the usage of medical leeches twice a day for one week. During the treatment, dehiscence was performed artificially retroauricularly due to the collection of coagulated hematoma. There was no presence of infectious complications.

SENTINEL SKIN PADDLE FOR MONITORING OF BURIED MICROSURGICAL FLAPS

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University Hospital and Medical School, Palacky University, Olomouc

The monitoring of microsurgical flaps postoperatively is of same importance than precise microsurgical procedure itself. The failure of monitoring can lead to flap necrosis with all consequences – the failure of reconstruction. For reliable postoperative microsurgical flap assessment there is need for staff erudition and experience and for an appropriate method of flap monitoring.

There are a lot of methods that can be used for monitoring of microsurgical flap viability. Some of them use sophisticated and often expensive devices that are not generally available. Also the interpretation of procured information can be sometime difficult and misleading.

It is generally known that usually the simplest method of solving problem is correct. This is the rule of Ockham's razor or principle of logic economy. This can be used also for monitoring of the microsurgical flap. Evaluation of sentinel skin paddle seems to be the simplest and most reliable method of monitoring the microsurgical flap viability.

Authors in their presentation demonstrate various uses of sentinel skin island for monitoring of buried microsurgical flaps especially in head and neck region.

THERAPEUTIC AND NURSING PROTOCOL FOR MICROSURGICAL PROCEDURES AT DEPARTMENT OF PLASTIC SURGERY IN PILSEN

Richtr P.[1], Galušková S.[1], Podešvová J.[2], Bursa V.[1]

[1] Department of Plastic Surgery Pilsen
[2] Department of Anesthesia and Intensive Care Medicine Pilsen

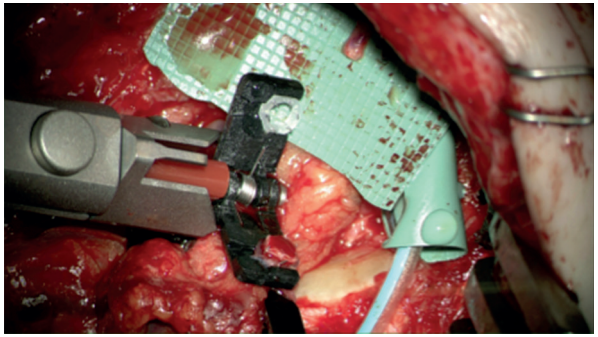
Medical and nursing protocol for microsurgical procedures, which we understand standards of practice in preparing the patient for surgery, the preoperative and postoperative care is not still uniform. The reason is obvious. Every department can create their standards based on historical patterns and the experience brought from different disciplines. The creation of this protocol on an empirical basis is very desirable. The protocol can evolve in time based on the latest knowledge (even from different specializations), can be edited. Thus formed protocol is understandable to other medical specialists who are in contact with the patient during the microsurgery (anesthesiologist, internist, intensivist, etc.). On Plastic surgery department in Pilsen, we have created such a basic protocol and follow it in each patient undergoing microsurgical operation. In our presentation we present it and propose it to other departments.

VENOUS ANASTOMOSIS WITH COUPLER-OUR EXPERIENCE OVER 8 YEARS

Veliky M., Koshy O.

Merseyside Regional Plastic Surgery Centre Liverpool, St.Helens and Knowsley NHS Trust, UK

We are routinely using microvascular anastomotic coupler device in microsurgical venous anastomosis when we are performing breast reconstruction with free flap. Recorded surgical time gives us objective information about average speed and the number of operations gives us proof of reliability of this technique. Since we are using venous coupler in the microsurgical breast reconstruction, we rarely used hand sutured venous anastomosis as done for artery. The biggest advantage we consider the fact that the coupler keeps the anastomotic site patent by distraction. The shortening of the operation time leads to reducing the ischaemic time for flaps and also our incidence of venous congestion requiring operation review decreased to 1-2%.



END-TO-SIDE NEURORRHAPHY IN PERIPHERAL NERVE INJURY

Kaiser R.

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End-to-side neurorrhaphy (ETSN) was re-discovered in the early 1990s. It is based on regeneration of an injured recipient nerve through collateral sprouting of axons, one of the most important manifestations of neuroplasticity of an intact donor nerve. ETSN has been the subject of many theoretical and experimental studies.

It is now generally accepted that a perineurial suture after the creation of a perineurial window is the only possible way to achieve effective reinnervation in large diameter nerves. Successful ETSN takes place via collateral sprouting of intact axons and also through direct growth of some injured axons into the recipient nerve. Without the contribution of the injured axons, the outcome of ESTN would be very poor, since only about 1.4% of motor neurons with intact axons have the capacity to send off collateral branches. The effect of ETSN can be strengthened by various types of neurotrophic factors including VEGF.

Until now, no randomized clinical trials have been performed in order to compare end-to-side coaptation to other reconstructive techniques. However, an obviously increasing interest can be noticed in the application of ETSN especially in small sensory nerves and facial nerve repair. Moreover, few studies describe also its effect in large mixed nerves and brachial plexus. In brachial plexus surgery, this technique can only be performed in patients with an upper brachial plexus palsy with intact lower plexus elements. However, the results of ETSN are similar to neurotization using intercostal nerves as donors of motor nerve fibers (less than 50%).

In conclusion, it can be stated that end-to-side neurorrhaphy with creation of a perineurial window might be performed in peripheral nerve reconstruction only if commonly used methods are not available for end-to-end neurotization.

THE USE OF VASCULARIZED FIBULAR AUTOGRAFT FOR RECONSTRUCTION OF BONE DEFECTS AFTER RESECTION OF BONE TUMORS

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Biological reconstruction of bone defects after resections for bone tumors is an optimal method for younger patients with primary bone tumors and favourable life-expectancy, where benefits outweigh the risks of early complications in the future and the need of limb long-term relief. This relate generally to intercalary reconstructions. In cases of osteoarticular reconstructions endoprosthetic replacement is more common and biological reconstruction is method preferable for children's patiens. Vascularized fibular autograft itself or in combination with solid allograft is one of biological reconstruction possibilities. In comparsion with allograft reconstructions has this method better biological potential for healing, but in weigt- bearing long bones of lower extremity is associated with higher risk of fractures. The combination of solid allograft and vascularized fibular autograft could reduced the risk of both complications.

We routinely use allograft reconstruction as primary solution and vascularized fibular autograft we leave for complications as nonunions, fractures and necrosis. In this indication we performed 8 procedures with using of vascularized fibular autograft. In 3 cases we used vascularized fibular autograft itself for primary reconstruction and in another 2 cases we used primary combination of vascularized fibular autograft with solid allograft. Together we used this procedure in 13 cases, 8 times as a transfer of free fibular flap and 5 times as local translocation. In all cases the reconstruction was healed, in 2 cases after another surgical procedure. One reconstruction failed for fracture, in one patient we had to preformed amputation for local recurrancy and in one case of primary osteoarticulary allograft recnostruction we are planning endoprosthetic reconstruction now.

In a well-functioning interdisciplinary cooperation with plastic surgeons procedure represent an important possibility for primary reconstruction of bone defects after resections of bone tumors as well as a secondary procedure for solution of complications of other types of biological reconstructions.

IMPORTANCE OF PLASTIC SURGEON IN ONCORURGERY OF THORACIC AND ABDOMINAL WALL

Veselý J.[1], Dvořák Z.[1], Stupka I.[1], Novák P.[1], Jedlička V.[2], Peštál A.[2], Žák J.[2], Chovanec Z.[2], Coufal O.[3], Ondrák M.[3]

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Radical oncological resection on thoracic and abdominal wall in those patients, which have no signs of generalization of the process should have good results in long term surviving. From 2001 80 radical thoracic wall resection require in 40 cases our reconstructive collaboration. Thoracic surgeons used Prolen or Hi-Tex mesh as the inner layer of the wall reconstruction and usually the large musculocutaneous flap as latissimus dorsi or pectoral flaps were used. Also TRAM or recharged DIEP flaps were used in the concept to bring on thoracic wall big amount of tissues. According to our experiences is advantage if motoric nerve of muscle part of the flap is preserved to avoid atrophy of the muscle. But in cases where the inferior pedicle of the latissimus was used and 2 cases when intercostal pedicle as main blood supply were not possible to preserve the motoric nerve. In that cases we prefer pedicle flaps to avoid microsurgery procedure and postoperative anticoagulation therapy that should bring postoperative bleeding.

Our interesting experience is that such a large flap as latissimus dorsi can survive on intercostal large perforators. In the first case we added vein microsurgical anastomose but the second case completely survived only on intercostal vessels.

We performed in 2 cases full thickness abdominal wall reconstruction always due to radical resection of desmoid tumor. The concept was always to use omental flap as inner layer covered by large microsurgical musculocutaneous latissimus flap with vessel and nerve anastomoses to the segmental neurovascular lateral pedicles of the rectus abdominis muscle. Muscles were covered by Prolene mesh, in the second case doubled. It is quit necessary that those patient need support of abdominal wall tension permanently by abdominal bandage.

Only in one posttraumatic case was abdominal wall reconstructed using tensor fascia lata flap operated lot of years ago in Sicily with prof. Micali. That case is not involved to our statistic. But nice experience.

FREE FLAPS IN RECONSTRUCTION OF EXTENSIVE DEFECTS AFTER ONCOLOGICAL HEAD AND NECK SURGERY

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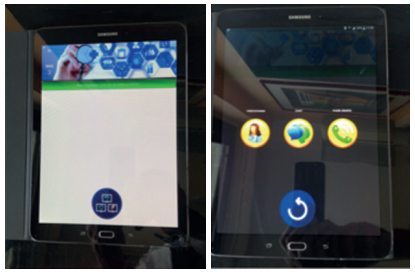
Retrospective analysis of microvascular free flap closure of operative defects at ENT Clinic of St. Anne´s Hospital in Brno in years 2000 -2015 is presented. Free microvascular flaps enables closure of extensive defects after removal of tumor in head and neck. 132 free flaps were transferred with success rate 97,7 %; only three flaps underwent a total necrosis. The most frequent were flaps from m. latissimus dorsi, fasciocutaneous forearm Chinese flaps and lateral arm flap. Postoperative defect closures after previous maxillectomy, surgery in oral cavity and hypopharynx were predominating. 5-year disease specific survival was reached in 53 % of patients with advanced tumors of head and neck. High success rate was reached due to operative precise technique both destructive and reconstructive phase of surgery, diligent monitoring of flap vitality early after surgery, sufficient anticoagulation therapy and preparedness for early revision in case of necessity.

HOME POSTOPERATIVE VIDEO SURVEILLANCE

Santi P. L.

University of Genova Italy – IRCCS San Martino / IST

Patient postoperative management is often a both economic and social problem, A delay in health information can sometimes create complications with healing times and healthcare costs.
Outpatient control also often require a person accompanying or ambulance transport resulting in a rise in social costs.
We've put in place a remote video control feature which through a video or vocal control with a tablet connected to a workstation allows you to verify the situation of a wound.
This method allowed to avoid some access to the hospital in the post operative period, to indicate the correct method of remote dressing, call immediately in case of apparent complication.
A tablet with a dedicated program is given to the patient with which he can connect in real time with the hospital and have the necessary indications.



BIA-ALCL GUIDELINES FOR THE DIAGNOSTIC PROCEDURE IN THE CZECH REPUBLIC

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The authors present the current situation considering BIA-ALCL. They suggest the simplest guidelines for examination and current examinations available in the Czech Republic, specifically FNKV.

The possible causes of Breast Implant Associated Anaplastic Large Cell Lymphoma (ALCL-BIA) are based on two theories- chronic irritation caused by the surface of the implant or chronic inflammation of bacterial biofilm on the surface of the implant.

The basic clinical manifestations include the incidence of a fluid accumulating aroud the implant, appearing more than 1 year after surgery, pain and enlargement of the lymph nodes. The gold standard test for diagnosis is positive CD 30 marker.

ALCL presents in two forms; cutaneous or systematic form. BIA-ALCL presents in the cutaneous form with a significantly better survival rate (90% / 5 years). Unlike in systemic forms, BIA-ALCL is characterized by negative ALK (anaplastic lymphocyte kinase).

A multidisciplinary approach is necessary for diagnosis and treatment.

- Radiodiagnostics (ultrasonography, puncture of the fluid around the implant, core-cut biopsie, vacuum assisted biopsy of the capsule, MRI)
- Pathology (cytology, immunohistochemistry, cytometry, molecular genetics)
- Microbiology (determination of the infectious agent)
- Plastic surgery - (complete capsulectomy, biopsy, send sample of the fluid around the implant)
- Oncology- (radiotherapy, chemotherapy, follow-ups)
- Hematology, oncology- (chemotherapy, follow-ups)

Larger fluid around the implant are associated with pain and enlarged nodes, fibrous capsula a should be examined by ultrasound examination while radiodiagnostic performs sampling of tissue for examination:

- cytology (seroma)
- immunocytochemistry (seroma)
- flow cytometry (FACS) (seroma)
- molecular genetic examination (ALK, TCR rearrangement or IgVH gene clonality) (seroma)
- microbiology (seroma)
- vakuum-assisted biopsy of the capsule (if it is technichally possible- capsule)

In cases of surgical revision, the plastic surgeon removes the seroma and part of the capsule is sent for further examination.

For simplicity, a request form for ultrasound examinations is available to be downloaded with listed required diagnoses:
http://www.fnkv.cz/klinika-plasticke-chirurgie-ke-stazeni.php

VAGINAL RECONSTRUCTION WITH OMENTAL FLAP AND FULL THICKNESS SKIN GRAFTS

Zalesak B.[1], Stehlik D.[1], Halama J.[2], Pilka R.[3]

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Authors present results after surgical tratment of radiation induced vaginal stenosis in patients with gynecological malignancy.

BREAST I

A PROJECT TO A MANAGEMENT OF BREAST IMPLANT INFECTIONS AFTER RECONSTRUCTIVE SURGERY FOR BREAST CANCER: DIAGNOSIS AND TREATMENT

Pesce M.

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Postoperative infection after implant breast reconstruction represents a devastating event with physical and psychological patient discomfort requiring repeated outpatient access, antibiotic treatment and leading to additional surgery up to implant removal with increased hospitalization and costs.

We prospectively monitored from February 1,2009 all patients (n:1293) underwent two stage (expander + prosthesis) immediate or delayed breast reconstruction with at least 6 months of postoperative observation, treated by the same surgical team at the Breast Cancer Surgery and Plastic Surgery Unit of IRCCS San Martino-IST in Genoa (Italy).

According to the literature, we particularly analyze three main areas of uncertainty in clinical practice.

First, definition of breast implant infection may be at times difficult due to the presence of only minor local signs in patients undergoing chemotherapy with dampened acute phase responses, no purulent drainage and to the difficulty -or impossibility- of obtaining samples for microbiological evaluation.

Secondly, timing and incidence of infection during the months/years after surgical implantation; and finally the most successful clinical and surgical treatment for implant pocket salvage maintaining the aesthetic result of reconstruction, in order to contain psychological and physical discomfort of implant loss.

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POST MASTECTOMY BREAST RECONSTRUCTION WITH MESHES

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Background: Today, implant based breast reconstruction is considered the gold standard in post mastectomy reconstruction. The introduction of acellular dermal matrices is one of the most important advancements in alloplastic breast reconstruction, costs and local policy limit their use in Italy. The purpose of this study was to assess short-term outcomes following mesh assisted breast reconstruction.

Methods: A single-center, retrospective, case-control study was performed from January 1, 2015, to December 31, 2016, by enrolling 206 breast reconstructions performed in 196 patients after oncologic (n = 200) or prophylactic (n = 6) mastectomy.

Results: No significant differences occurred for early postoperative complications (p = 0.610), major complications that required surgical revision (p = 0.887), volume (p = 0.498) or width of the prosthesis (p = 0.201), skin-sparing mastectomy (p = 0.315), or axillary surgery (p = 0.265).Prior radiotherapy was the only significant variable for early postoperative complications, whereas body mass index greater than 25 was an independent predictor.

Conclusions: Short-term outcomes of Mesh assisted breast reconstruction are promising. Further studies are needed to evaluate the long-term results of this surgical approach.

PROTECTIVE LIPOFILLING ALLOWS IMMEDIATE BREAST RECONSTRUCTION WITH EXPANDERS AND IMPLANTS IN PATIENTS UNDERGOING PMRT

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Background: Immediate two-stage prosthetic breast reconstruction in the setting of post-mastectomy radiotherapy (PMRT) currently is hardly achieved with the fast-track expander exchange proposed by Cordeiro and colleagues or the delayed-immediate breast reconstruction proposed by Kronowitz and Robb. Each of these techniques has important drawbacks and complications. To overcome these problems, the authors in 2011 described lipofilling on irradiated expanders in patients undergoing unplanned PMRT (Cagliari University Hospital [CUH] protocol) for early breast cancers with specific risk factors. The authors report their experience after expanding the use of such a protocol for any immediate expander/implant reconstruction in a patient undergoing PMRT.

Methods: The timing for advanced breast cancer involves immediate reconstruction with a tissue expander, complete tissue expansion, radiotherapy (RT) after neoadjuvant chemotherapy starting 2-3 months after mastectomy, one or two fresh fat-grafting sessions at least 6 weeks after RT, and an expander-implant exchange with anterior capsulectomy at least 3 months after the completion of fat grafting. The timing for early breast cancers with specific risk factors involves immediate reconstruction with a tissue expander, complete tissue expansion during postoperative chemotherapy, RT 6 months after mastectomy, one or two fat-grafting sessions 6 weeks after RT, and an expander-implant exchange with anterior capsulectomy at least 3 months after the completion of fat grafting. From 2008 to 2012, 16 patients undergoing total mastectomy and immediate expander-implant breast reconstruction with subsequent PMRT were treated according to the CUH protocol.

Results: The results have been extremely encouraging, with rates of ulceration and implant exposure in the radiotreated area dropping to 0 %. These results were retrospectively compared with those for a control group of 16 patients who underwent immediate implantation of an expander. In this latter group, the extrusion rate of the implant in the end was 31.25 %, and this was statistically significant (p < 0.03). The shape and symmetry also were significantly better in the lipofilled patients.

Conclusion: Protective lipofilling on irradiated expanders appears to be a valid technique for avoiding ulceration and implant exposure after PMRT while allowing a complete expansion.

NIPPLE RECONSTRUCTION USING STORED RIB CARTILAGE-OUR TECHNIQUE

Veliky M., Koshy O.

Merseyside Regional Plastic Surgery Centre Liverpool, St.Helens and Knowsley NHS Trust, UK

The reconstruction of the nipple using several types of cartilage was already described few ago. This presentation shows step-by-step our technique using stored rib cartilage improved over the years and tips for easily reproducible performance which we believe is simple, quick and efficient.

GUIDELINES FOR SURGICAL OPTIONS IN GENETICALLY DETERMINED PATIENTS (BRCA)

Sukop A., Zárubová L., Nejedlý A., Schwarzmannová K., Bayer J.

Department of Plastic Surgery
3rd Medical Faculty Charles University in Prague
Královské Vinohrady Teaching Hospital

The authors present guidelines for surgical solutions in genetically determined patients (BRCA). A simple algorithm is used to decide when selecting the optimal method in respect to the shape and size of the breasts and radicality versus the aesthetic outcome.
Essentially, there are two basic approaches: regular follow-ups of the patient or surgical removal of the breast gland.
Patients are offered the choice between radical surgery (often an aesthetically detrimental procedure where essentially the entire breast gland is removed) or a less radical procedure (where significantly more gland preserved) and for a woman, the postoperative aesthetic result is far more acceptable.
It is the doctor´s responsibility to inform the patient of all possible therapies and resulting health and aesthetic outcomes.
The patient always has the final word concerning the following therapy.

MASTECTOMY IN THE FORM OF MASTOPEXY IN GENETICALLY DETERMINED PATIENTS WITH RECONSTRUCTION OF THE NIPPLE-AREOLA COMPLEX

Sukop A., Zárubová L., Nejedlý A., Schwarzmannová K., Bayer J., Kletenský J.

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Královské Vinohrady Teaching Hospital

The authors present one of the possible surgical solutions for genetically determined patients (BRCA). The method is optimal and intended for patients with medium-sized to large breasts. It is categorized among the more radical operations.

It concerns removing most of the mammary gland.

The principle of operation consists of decortication of the areola at the beginning of the operation. The mammary gland is removed from access of an inverted"T", similar as in breast mastopexy where all decorticated tissue distally, medially and laterally to the flap are used.

In most cases, this tissue is enough to create smaller breasts with an aesthetically accptable shape. At the end of the operation, the nipple areola complex is reconstructed using a full-thickness skin graft that was prepared at the beginning of the operation. In cases where there is removal of significantly larger glands and there is lack of soft tissue, it is possible to combine this procedure by creating lost volume with implants or free flaps.

DOES THE CEPHALIC VEIN HARVEST CAUSE UPPER EXTREMITY SWELLING?

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Introduction: Venous congestion is the most common cause of partial or total DIEP flap loss. Anastomoses between superficial vein (SIEV or SCIV) and transposed cephalic vein can be relatively simple solution for venous congestion of DIEP flap.
There is general concern that v. cephalica harvest can cause, in the long term, swelling or even lymphedema of upper extremity.

Aim: To find out if cephalic harvest in DIEP breast reconstruction patients can have any long term consequence like swelling or lymphedema of ipsilateral arm.

Material and method: 52 patients, who underwent unilateral reconstruction with DIEP flap and had measurment of the volume of both arms before and after recontruction. Mean interval of postreconstruction measurment was 11,4 years. 25 patients had recipients vessels intrernal mammary artery and vein plus extra veinouse drainage into transposed v. cephalicae (cephalic patients), meanwhile 27 patients had regular DIEP pedicle anastomose only to internal mammary vessels (non-cephalic patients).
The differences in volumes before and after were statistically correlated with differences on the operated and non operated side.

Results: In both groups occurred occasional both increase and decrease of the volume after reconstruction. Using a paired t-test and values of statistical significance p-0,34 and p-0,40 there were not identified differences between volumes changes in cephalic and non cephalic groups of patiens

Conclusion: The study has not proved that cephalic vein harvest in DIEP breast reconstruction patiens causes swelling of the arm in long postoperative period.
Additional venous drainage of DIEP flaps trough SIEV or SCIV anastomosed into transferred cephalic vein is probably save technique how minimized total or partial necroses of the this flap.

LIMB RECONSTRUCTION

LIMB RECONSTRUCTION WITH FREE FIBULAR FLAP

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Healing of avascular bone transplants is well-advised. After transplantation, the transplant cells die. Necrosis stimulates the local inflammatory reaction with the growth of granulating tissue. Osteoinduction is a process in which osteogenic and bone morphogenic proteins alter mesodermal precursor cells to osteoblasts and chondrocytes. Activated T-lymphocytes produce cytokines and TGF. In the whole process of enhancing the avascular bone graft, we must wait for bone remodeling. In avascular cortical grafts, the smaller bone surface is in contact with the defect bed. The cortical bone must be osteoclastically resorbed. After remodeling, however, avascular interstitial lamellas persist and transplant incorporation is incomplete. Cortical transplants are the weakest 6-12 months after surgery. Their late complications include frequent fractures.

In contrast, vascularized bone transplants have an immediate restoration of physiological blood circulation. Cellular elements survive with minimal bone necrosis. Osteogenic cells begin immediate remodeling and healing of the bone. The incorporation of large cortical transplants is quick and complete

Indications for the use of vascularized bone transplants are defects with poorly vascularized beds, conditions following osteomyelitis, congenital defects, where pathological vascularization is present, extensive skeletal defects, long bone defects of more than 8-10 cm, and whenever a need for a transplant with tensile strength is required.

Vascularized bone transplants are suitable for large defects of long bones, in case of poor vascular supply of the bed. Rapid bone remodeling with almost no resorption is typical and rapid limb burdending is possible.

The results of the free transfer of the fibula in order to reconstruct the defects of the skeletal limbs are presented in the paper.

CONGENITAL PSEUDOARTHROSIS OF THE TIBIA

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Congenital tibial pseudoarthrosis is a rare disease, which etiology is not fully described yet, but in most cases, it is associated with neurofibromatosis type I. Disease clinically demonstrates usually in children below 2 years old by pathological fracture, abnormal bowing and difficulties with healing. Non-union of bones produces many complications and can lead to therapeutic amputation of affected limb. Treatment usually requires surgical intervention; conventional therapy is not successful. In this presentation, we explain pathophysiological background of CPT to make clear, why surgical treatment is inevitable, but on the other hand very complicated. Relevance of clinical symptoms enable us to classify individual patients and assess the impact of disease on their quality of life. Before explaining different surgical

methods of treatment, we must decide aims of therapy, usually with functional, as well as aesthetic outcomes. Cooperation between orthopaedist and microsurgeon is required. In this approach, microsurgical treatment by vascularized fibular graft is used to replace defective part of bone and osteosynthesis is performed. On the sample of 8 patients with CPT, we show its benefits, but also complications raising from the recurring nature of disease. In the end, we discuss various invasive and non-invasive therapies that can be helpful in treatment of different symptoms, linked to congenital pseudoarthrosis of tibia.

SECOND TOE FREE TRANSPLANTATION VS. "CHINEASE THUMB" - CASE REPORT

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Second toe free tranfer is common method of thumb reconstruction on our department in these days. But in past, it used to be other method - "Chinease Thumb", which use bone graft, basically from pelvic bone, and contralateral radial forearm free flap. At the beginning of 2016, we had to perform chinease thumb operation once again due to type of injury and patients wish. Our case report compare the course of healing and final outcome of this patient to another one with second toe free transfer, who was operated at the same time.

SURGICAL TREATMENT OF PERONEAL NERVE PALSY

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Peroneal nerve palsy is the most frequent neuropathy in the lower extremity. It presents with foot drop and resulting walking difficulties. It can be caused by an injury or from other underlying diseases. Authors describe relevant anatomy, etiology, symptoms, diagnosis, nonsurgical and surgical treatment options. Individual cases and our current surgical procedure are presented.

SURGICAL RESTORATION OF FOOT DORSIFLEXION IN PERONEAL NERVE PALSY: MODIFIED POSTERIOR TIBIALIS TENDON TRANSFER

Kubek T.[1,2], Novák P.[1], Veselý J.[1,2]
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Peroneal nerve palsy is the most common lower extremity palsy. It is characterized by foot drop and equinovarus foot deformity. Dynamic tendon transposition is the most frequent surgical procedure for restoration of dorsiflexion of a permanently paralyzed foot. Authors present modification of tendon transfer, in which the posterior tibialis tendon is transferred to the tibialis anterior tendon rerouted through cuneiform bones. This technique provides appropriate direction of tibialis posterior traction and enables normal gait without wearing any orthoses.

SOFT TISSUES RECONSTRUCTION IN PATIENT AFTER HIGF-LEVEL TRAUMATIC AMPUTATION OF UPPER EXTREMITY

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High level traumatic amputation of upper extremity is a rare injury; however, it is classified as a serious trauma. Limb salvage procedure using microsurgical techniques is a first-choice method of treatment.

We would like to present a case report of a 64-year-old man who was seriously injured in the traffic accident. Patient suffered severe soft tissue damage of left forearm and shoulder including open multilevel radial and ulnar fractures, scapular and clavicular fractures and multiple rib fractures. Lesions of all forearm flexor muscles, both arteries (ulnar and radial) and ulnar and median nerves were also observed. Mangled extremity severity score was 9-10 (relative amputation indication). Despite that negative findings it was decided to effort a limb salvage.

During the primary surgical procedure an external forearm osteosynthesis was performed. Reconstruction of median nerve and both arteries with crossing(without using vein grafts) was also feasible. It was not able to restore ulnar nerve. Following dressing changes under general anesthesia were complicated by severe muscle necrosis because of contusion mechanism of injury; and multiple debridement and necrectomies of forearm soft tissues were required to perform. The significant defect of soft tissue did not enable to restore continuity of ulnar nerve and flexor muscles. Because of multiple fractures of radius and deficiency of soft tissues the ulnar bone was also shortened. This simple trick made possible to reconnect the ulnar nerve, repair bone denudation and avoid a microsurgical procedure with tissue harvesting followed by donor site morbidity.

The patient´s active motion range of the elbow joint is 60 degrees nine months after the injury. Treatment protocol described above is an example of that sometimes easier way leads to better results.

TOURNIQUET USE IN HAND SURGERY: BEST PRACTICES AND EVIDENCE BASED APPROACH

Christodoulou P., Zálešák B.
Plastic and aesthetic surgery department, Olomouc Faculty Hospital

Even though most of hand surgery is performed under tourniquet control, there is much dogma and a number of controversial questions surrounding its correct use and best practices. How high should the pressure be? How long can we safely apply tourniquet for? Is it safe to release and reapply the pressure during the same procedure? The list goes on. Complications associated with tourniquet use are scarce, and most of the few complications seen are preventable. Nevertheless, when complications do occur, they can can be particularly unpleasant both for the patient as well as for the surgeon,

The authors of this presentation summarize the safe approach and best practices to preventing complications, based on evidence and personal experience.

BREAST II

LESS COMMON TYPES OF VENOUS ANASTOMOSIS IN BREAST RECONSTRUCTION WITH FREE AUTOLOGOUS TISSUE

Veliky M., Koshy O.

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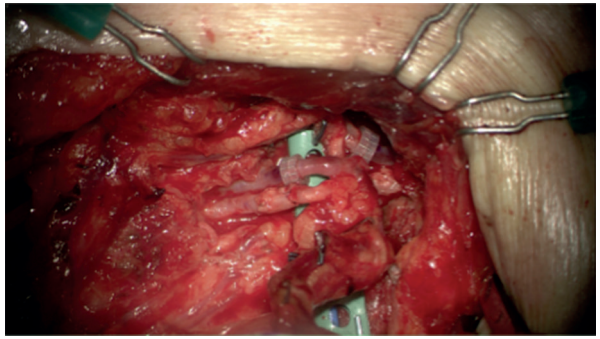
Most usually we perform anastomosis of the flap (DIEP, TUG, GAP) pedicle with the antegrade ipsilateral internal mammary artery and vein. This talk gives the information about less common situations when we have to use also other than antegrade (proximal) internal mammary venous end. The common situation is the dominance of the superficial drainage venous system in harvested DIEP flaps but we will mention also the situations when recipient vein is not available.



RECONSTRUCTION OF BREAST BY FREE FLAPS AT PLASTIC SURGERY DEPARTMENT IN PILSEN

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During the period January 2012 to February 2017 we performed breast reconstruction using a free flap transfer (DIEP - deep inferior epigastric artery perforator) in 24 patients (25 free flaps). In 23 cases we used it for reconstruction after mastectomy for breast cancer, in one case for augmentation (congenital asymmetry). We used perforator flaps -epigastric inferior artery, 20x in lateral line, 3x medial line. Usually we used anastomosis end-to-end (24x), once end-to-side (because of the large disparity of arterial lumen).

Results: 23 flaps vital, 2x complete necrosis with the necessary replacement using pedicled flap m. latissimus dorsi, 2x partial flap necrosis (medial part of flap - zone III), 3x necrosis of middle part of abdominal wound (secondary defect). In five cases, we made a revision for hematoma under the flap, 1x for artery thrombosis. We managed to establish a breast reconstruction using abdominal free DIEP flap into our normal practice. We still continue to analyze our practices and results, and from our failures still deduce the consequences, so that we make the better results in the future.

EXTENDED LATISSIMUS DORSI FLAP WITH INTRAOPERATIVE FAT GRAFTING INTO THE PECTORALIS AND LATISSIMUS DORSI MUSCLES - NOVEL MODIFICATION OF AUTOLOGOUS BREAST RECONSTRUCTION

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Introduction: The latissimus dorsi flap is a reliable and one of the most commonly used methods of both immediate and delayed breast reconstruction. Its disadvantage is the limited volume of transferred tissue. The authors present their experience with the use of extended latissimus dorsi flap associated with immediate fat grafting into the pectoralis and latissimus dorsi muscles for secondary breast reconstruction.

Patients and Methods: From 2013 to 3/2017, 15 patients underwent secondary unilateral total breast reconstruction with extended latissimus dorsi flap associated with primary fat grafting into the pectoralis major and latissimus dorsi muscles. Fat was injected under visual control between muscle fibers. Fat injected into the pectoralis muscle formed an apparent bulging - autoprosthesis.

Results: Mean patient age was 49.2 years (range, 34 to 64 years). Mean injected fat volume was 89 ml (range, 50 to 160 ml) and majority of this volume was injected into the pectoralis muscle. All flaps healed uneventfully and no fat grafting-related complications were observed. The most common complication was donor site seroma, which occurred in 60%. Results of postoperative ultrasound examination were evaluated. Incidence and the size of oil cysts and fat necrosis were significantly lower in muscular layer in comparison with the subcutaneous layer of reconstructed breast.

Conclusion: Immediate fat transfer into the pectoralis and latissimus dorsi muscle increases the breast volume during the reconstruction with extended latissimus dorsi flap avoiding implant-related complications when abdominal tissue is not available. Pectoralis and latissimus dorsi muscles were shown as reliable and safe recipients for fat grafting.

PROFYLACTIC MASTECTOMY IN BRCA MUTATION CARRIERS – EXPERIENCE AND QUESTIONS FROM OUR BREAST CENTER

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Surgical treatment of breast tumors is undergoing inevitable development. In recent years, surgical intervention have been extended to BRCA 1, BRCA 2 mutation carriers that are often recommended to undergo prophylactic mastectomy to reduce the risk of developing breast cancer. Prophylactic mastectomy may have the form of subcutaneous mastectomy, nipple-sparing mastectomy or skin-sparing mastectomy. The issue of prophylactic mastectomy is not easy. The primary requirement is the oncological safety, but it is necessary to consider the indication of the type of surgery, type and timing of the reconstruction phase, technical capabilities, adjuvant therapy, aesthetic result, the patient's wishes, etc. A volume of surgery is rapidly growing in this area. BRCA mutation carrier status changed the surgical approach, however, there are still not defined clear rules of surgical intervention, what type of surgery is actually sufficient, while not excessive, it is not clearly defined the legal aspect of the issue and financing of care for these patients. An integral part of these procedures is breast reconstruction, which is usually carried out as an immediate reconstruction, ie. at one time with mastectomy. This reconstruction may be alloplastic (reconstruction with silicone implant) or autologous (reconstruction with own tissues - most often free flap). Due to the combination of the two methods (mastectomy and breast reconstruction), the surgery may have numerous complications. Incidence of overall complications is 25%. The most frequent complications include skin cover necrosis, necrosis of areola, infection, hematoma, or seroma. Essential for this type of performance is a good indication and the correct selection of well cooperating patient who fully understand the seriousness of performance and post-operative care. Prophylactic mastectomies are nowadays part of the care for BRCA mutation carriers, however, it is necessary to respect the limits and pitfalls of these methods and fully inform patients about the lack of long-term studies. These methods will develop with increasing numbers of surgeries.

The lecture will present our experience with this issue since the year 2013, when we recorded a significant increase in the number of surgeries. Our group consists of 64 patients who underwent in those years prophylactic breast surgery. We introduce the view of our breast center on this issue, we introduce our successes and failures, difficulties of interdisciplinary cooperation and myths that circulate about this issue among other medical specializations and patients.

EXPERIENCE WITH B-LITE - LIGHTWEIGHT BREAST IMPLANTS

Kufa R.

Perfect Clinic Praha

The presentation of practical experiences with the implantation of a new generation of breast implants B-Lite. Implants developed by G & G Biotechnology have a lower weight up to 30% than the equivalent all-silicone implants thanks to the technology which is possible to interact tiny hollow borosilicate microspheres with the cohesive gel. After applying these implants to 30 clients at the Perfect Clinic, I describe the practical experience with the implant application and evaluate the benefits of implants after 6 months.

THE ROLE OF BREAST CONSERVING PROCEDURES IN MODERN PLASTIC SURGERY: PROS AND CONS

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The aim of our presentation is to declare the role of breast conserving procedures within the modern plastic surgery. Masaryk Memorial Cancer Institute is a leader in treatment of breast oncological diagnoses with over 900 surgical patients a year who undergo any type of mastectomy. Thanks to current scientific data many surgeons try to reduce morbidity of breast and enhance a final appearance due to preserving of nipple and healthy cancer-free tissue. This trend is permanent and links across all surgical speciality. This is the reason why plastic surgeons perform nipple sparing mastectomies and even conservative mastectomies with a hope of helping patients but with no oncological background. Breast conserving procedures are of great advantage for patients on one hand but on the other hand surgeons must be aware of risk what these procedures can bring. We present current state of art in the field of breast conserving surgery and point out the main disadvantages in a couple of cases. In our opinion in the beginning of every mastectomy must be stated who is responsible for oncological aspects if these procedures are done at plastic surgery departments.

AESTHETIC SURGERY

CHANGES IN METABOLIC SYNDROME PARAMETERS AFTER LIPOSUCTION

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Liposuction is one of the most frequently performed surgical procedures in plastic surgery. However, the long-term metabolic consequences of the removal of adipose tissue are not yet clear or explained. Prior studies have shown contradictory results, as shown by the recently published meta-analysis. The aim of our study was to analyze the effect of liposuction on the lipid profile and glucose metabolism in healthy women. The study included 12 patients who have undergone liposuction. Before the surgery, and about a year after surgery, blood pressure, body fat percentage and lipid profile were measured. In addition, patients' insulin sensitivity was measured by means of oral glucose tolerance test. Liposuction, in the long run, lead to a slight reduction in the proportion of body fat ($p < 0.05$), but did not affect blood pressure or insulin sensitivity. Total cholesterol and LDL cholesterol levels were reduced, but the decrease was not statistically significant. The results of our study are consistent with some of the published data, which showed a slight decrease in blood lipid levels, but we did not observe any other of the possible changes in our group of patients. Liposuction of smaller volume of lipoaspirate apparently doesn't induce any significant metabolic changes. Further studies with larger numbers of patients and longer follow-up periods are required to evaluate full impact of liposuction on lipid profile.

THE FRONTAL BRANCH OF THE FACIAL NERV ANATOMY

Kurial P., Mařík V., Polák P.

Plastic surgery - Hospital Ceske Budejovice, RRC clinic Hluboka nad Vltavou

The cadaver dissection of the frontal branch of the facial nerv demonstrates the relation between the anatomical course of the nerv and surgical approaches during face-lift and lateral browlift operations.

RUPTURED SILOCONE IMPLANT REMOVAL

Kurial P., Mařík V., Kozáková R.

Plastic surgery - Hospital Ceske Budejovice, RRC clinic Hluboka nad Vltavou

The authors present their experiences with the removal of ruptured breast implants. The suction technique is very simple and effective procedure to eliminate the contamination of the operative site and surgery instruments. Finaly it is time saving operation. The videopresentation included.

BICHECTOMY AND MENTAL IMPLANT – AN EFFECTIVE TOOL FOR FACE CONTOURING

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The face is an aesthetic dominant part of human body and its disharmony can be perceived very negatively. There are several schemas of ideal proportion of human face, none of them, however, can be used generally. The perception of face harmony, is individual with race and geological influence.

In European cultural environment an attractive face should have slender cheeks and appropriately long symmetric chin. These ideal features are quite often disrupted with prominent cheek area and receding chin with relatively short fatty neck.

Authors present their experience with combination of bichectomy (removal of bucal part of corpus adiposum Bichoti) with mental implant. This procedure is suitable for patient with no significant occlusion abnormality that do not require orthognatic surgery. Using proposed combination of surgeries the unfavourable face proportions can be easily and very effectively corrected.

BREAST IMPLANTS – HOW TO APPROACH COMPLICATIONS IN THE CZECH REPUBLIC

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The authors submit available information on „What to do when we encounter adverse events associated with implants."
Also SÚKL, Society of Plastic Surgery, presents a suggested approach.
General recommendations „on what not to forget," including close cooperation between the health care provider (physician, facility) and the distributor are shown in practical demonstrations of the approach and can be found on SÚKL´s website.

It is available to be freely downloaded and an editable version of informed consent when using mammary implants and further discussion on:
http://www.fnkv.cz/klinika-plasticke-chirurgie-ke-stazeni.php

Further development of what and how to report complications will depend on the EU Directive, which should set clear rules for reporting adverse events associated with breast implants.

THE RECONSTRUCTIONS OF AN INFRAMAMMARY FOLD AND AN IMPLANT PROTRUSION WITH THE USE OF PERICAPSULAR FIBROSIS FLAPS

Kydlíček T.

Oddělení plastické chirurgie FN Plzeň

A pericapsular fibrosis regularly accompanies each silicone implant. A Baker grade IV. is a real problem but a capsular the II. and sometimes III. grades can be useful for reconstructions in cases of protrusions of implants or/and displacements of implants. The basis of this technique are two flaps mobilized capsular around a wound, a handling is simple and an implant need not be temporarily removed. This procedure can be use for reconstructions surgery and for esthetics operations too. Two years of the experiences (7 patients) has brought good results without any complications and recurrences.

DIFFERENT TYPES OF LOWER LID DEFORMITIES /DIAGNOSIS AND TREATMENT/

Mařík V., Kurial P., Votruba T.

Oddělení plastické chirurgie Nemocnice České Budějovice

Autoři v prezentaci podtrhují význam správné diagnózy estetického postižení dolních víček a následné přesné zacílení operačního postupu na konkrétního pacienta. V současné době autor provádí více než 80% operací dolních víček z release arcus marginalis s transpozicí tuku. Součástí prezentace je video s technikou této operace, autor prezentuje dlohodobé výskedky jednotlivých typů operačního řešení estetického problému dolních víček. (doba trvání prezentace 10 minut)

700 ABDOMINOPLASTICS WITHOUT SEROMA FORMATION

Mařík V., Kurial P., Kasper J., Votruba T.

Oddělení plastické chirurgie Nemocnice České Budějovice

V průběhu 10 let autoři prošli vývojem z hlediska prevence vzniku seromu u abdominoplastik. Prvním krokem prevence této komplikace bylo 7-14denní ponechání drenáže na podtlaku, daším krokem bylo u pacientek s nadváhou a obezitou zavedení techniky lipoabdominoplastiky. Mnoho let autoři používají techniku Baroudiho stehů, kterou po návštěvě profesora Nahase (Brazílie) ještě zdokonalili – tato technika je prezentována na videu.

HEAD AND NECK RECONSTRUCTION

MULTIDISCIPLINARY APPROACH IN MICROVASCULAR RECONSTRUCTION OF LOWER JAW BY APPLYING 3D MODEL PRINTING

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The most common reason for microvascular reconstructive procedure of lower jaw is malignancies of mandible bone or facial skin cancer. Multidisciplinary approach is essential for sufficient oncological, as well as, functional and aesthetic treatment outcomes. In this study we would like to present our experience with a new method of 3D modeling of mandible applying in mandibular reconstruction with vascularized bone (fibula free flap).

Fibula free flap is a method preferably being used for patients whom insertion of dental implants is planned in the future. Pre-operatively created 3D model of affected mandible enables adaption of titanium plate before the actual surgery and thus shortening the procedure. 3D model of cutting guide placing on removal fibula bone allows for a precise forming of a new mandible.

Multidisciplinary cooperation of plastic and maxillofacial surgeons and specialists in bioengineering is beneficial for patients with serious defects of lower jaw.

RECONSTRUCTION OF MAXILLARY DEFECT WITH ALT FALP AND CHIMERIC VASTUS LATERALIS-ALT FREE FLAP IN ORAL CANCER PATIENTS

Di Lorenzo S., Corradino B., Hubová M.

Chirurgia Plastica e Recostruttiva, Uviversita degli Studi di Palermo, Italy

Abstract not delivered.

USE OF BOTULINUM TOXIN A IN ORAL CANCER PATIENT RECONSTRUCTION TO REDUCE THE INCIDENCE OF ORO-CERVICAL FISTULAS AND COMPLICATIONS RELATED TO SALIVA STAGNATION

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Abstract not delivered.

THE USE OF PROPLAN CMF PLANNING IN RECONSTRUCTION OF MANDIBLE IN ONCOLOGICAL PATIENTS

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The resection of extensive head and neck cancer involving mandible is severely mutilating procedure with functional and aesthetical consequences. It is therefore the aim of surgeons to complete resection of tumour with appropriate reconstruction, if possible in one step surgery. If reconstruction is to be effective, it must be precise and friendly to patient. The safety for patient means, that tumour resection must be adequately radical and reconstruction must be with the best functional and aesthetical result. Surgery also should be as short as possible with minimal donor site morbidity.

Authors present their experience with PROPLAN CMF planning in reconstruction of mandible using free flaps. This method brings several advantages.

Preoperatively constructed cutting guide serves for precise and quick cutting of vascularized bone (fibula, crista iliaca etc.). The custom-made metal splint serves for bone modelling and for connecting of the vascularized bone flap to the mandible stumps.

The method is very precise and quick and it helps to prefabricate vascularized bone and flap before vascular pedicle is divided. This minimizes the time of flap ischemia. The ischemic time, in all cases where PROPLAN CMF was used, was less than one hour. The precision of the method was proved in all patients by exact teeth occlusion after reconstruction. This method was effective in all cases, there was no any failure of planning.

The main disadvantage of using PROPLAN CMF is it's high price with limited support from insurance companies. This makes limitation for general use of this method.

RECONSTRUCTION BY FREE FLAPS IN THE AREA OF HEAD AND NECK IN PILSEN

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Interdisciplinary cooperation is a very important part of reconstructive surgery. Especially the personal involvement of physicians from various specialties to a particular patient. Only in this case it makes sense to develop interdisciplinary cooperation. Fully cooperating ally we found in doctors of Maxillo-facial Surgery Department in our hospital. In collaboration with this department we performed four transfers of free flaps for reconstruction of head and neck surgery until this time. In three cases, we used the free MSAP (Medial Sural Artery Perforator) to cover the reconstruction plate (replacement of a part of the mandible) and to reconstruct the floor of oral cavity. In one case we used DIEP (Deep Inferior Epigastric artery Perforator) to reconstruct the floor of the oral cavity and also cover the reconstruction plate. In one case (cover of reconstructive plate) we lost the flap. In other cases, the flaps completely fulfills its function. On individual cases we present the difficulties and differences from the protocol which we used in reconstructive breast surgery.

OUR CLINICAL EXPERIENCES ON RECONSTRUCTIVE OPTIONS IN PATIENTS WHO UNDERGONE TO NECK DISSECTION

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Introduction: Head and neck reconstruction is one of most comprehensive areas in Plastic and Reconstructive Surgery. And neck dissection is a complicated procedure by itself because of the complicated and delicated anatomy of the neck structures and it may bring morbidities to patient after surgery. Because of diversity of defects after head neck oncologic surgery a plastic surgeon must be very well prepared to take care with any defect. For that reason, not always but in some cases, microsurgical skills is needed for reconstruction. In this study we aimed to share are reconstrcutive options in patients who undergone to neck dissection.

Materials and Methods: In this study we want to share our clinical experiences on reconsructive options in patients who undergone to neck dissection. The study enrolled in 44 patients who undergone neck dissection because of any head and neck malignancy between January 2008 and January 2017.

Results: 24 patients were male and 20 patients female. Mean age of patients was 61,8. Oldest patient was 91 years old and had undergone left free radial forearm flap with left supraomohyoid neck dissection. The youngest patient was 31 years old and had undergone left free fibula bone flap with left functional neck dissection. In 45,45% of patients defects were reconstructed with free flap surgery.

Conclusion: Head and neck dissection and defect reconstruction after a head and neck oncologic surgery is challenging for plastic surgeons. Optimal long term results achieved after proper reconstruction of defect at the very first stage of the surgery.

CRANIOPLASTY AFTER OSTEOCLASTIC DECOMPRESIVE CRANIOTOMY

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Osteoclastic decompressive craniectomy is an acute, life-saving performance. It is used in patients with refractory intracranial hypertension caused by swelling of the brain injury, tumor or vascular etiology. Pilsen neurosurgery is a global promoter of this simple, though neglected method. During this operation the bone plate is completely removed over the affected hemisphere. Oedematous brain tissue can expand outside the intracranial space and than the brainstem is released from compression with subsequental fatal clinical consequences. Oedema of brain tissue is only temporary and after a certain time the bone plate can be re-implant. Repair of bone defect after decompressive craniectomy has curative, protective and aesthetic reasons. Cranioplasty prevents complications related to the influence of atmospheric pressure on the decompressed brain (posttrepanation syndrome, paradoxical herniation, hydrocephalus). Reimplantation, ideally used own, in the previous

operation removed, bone - the method of choice. In some cases (festering wound or bone resorption, mechanical damage of the bone during the accident), it is necessary to use for reimplantation allogenic implant. In our presentation we show the historical development, advantages, disadvantages and difficulties of the various materials used for reimplatation.

LENGTHENING TEMPORALIS MYOPLASTY FOR FACIAL PARALYSIS REANIMATION

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Introduction: The ultimate goal of complex surgical treatment for facial paralysis is to restore normality of the paralyzed hemi-face with symmetry at rest, or even to achieve a spontaneous symmetrical smile. A reanimation is a dynamic restoration of motion in facial paralysis. The most common approaches for facial reanimation in the Czech Republic are direct facial nerve repair with or without grafting, nerve transfers, cross-facial nerve grafting, and muscle transfer. Static techniques are often adjunctive maneuvers performed in conjunction with dynamic techniques to enhance facial symmetry. The aim of the paper is to present results of lengthening temporalis myoplasty for facial paralysis reanimation.
Patients and Methods: From 2015 to 2017, 5 patients underwent lengthening temporalis myoplasty for serious peripheral monolateral facial paralysis (House-Brackmann grade V or VI). The lengthening temporalis myoplasty is performed from the coronal incision. The coronoid tendinous insertion is transferred onto the lips. The temporalis muscle is separated from the temporal fossa, which allows for lengthening by redistribution of muscular fibers. The physiotherapy was initiated four weeks after surgery.

Results: Mean patient age was 61.8 years (range, 48 to 71 years). We have achieved considerable static improvement at rest immediately after the surgery. The recovery of facial movement was apparent approximately 3 months after the surgery. This improvement in functional outcomes was demonstrated using the House-Brackmann facial nerve function grading system and by the comparison of preoperative and postoperative photographs. This improvement in quality of life was demonstrated by means of a questionnaire (FPD score).

Conclusion: Facial reanimation using lengthening temporalis myoplasty is a save and reliable reconstructive technique that allows for consistent improvement in facial functions soon after the surgery even in older patients.

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USAGE OF THE ROTATION FLAP FOR SCALP DEFECTS

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Introduction: The principle of a rotation flap is covering of a triangular defect by a semicircular flap rotated around the pivot point into the defect. The flap nutrition is based on the subdermal plexus on a random pattern of vascular supply. The ideal rotation flap should have the smallest closing tension and should be ideally performed with primary closure of a defect without formation of any secondary defects. These conditions seem to be met by the modified rotation flap that was published by Radjiv Ahuja in the Plastic & Reconstructive Surgery in 1988.

Method: The retrospective study of 11 patients (5 males and 6 females) who underwent a reconstruction of scalp or forehead defect by a modificated rotation flap by Ahuja at KPECH of St. Anna`s University Hospital in Brno between 1 June 2009 and 31 January 2017.

Results: The etiology of scalp and forehead defects was defects after tumor excision in 7 cases (3x basal cell carcinoma, 2x congenital intradermal verrucous nevus, 1x metastasis of the small cell lung carcinoma to a forehead, 1 x cylindroma), exposed skull bone after split thickness skin graft loss in 2 cases, exposed bone after wound infection in 1 case and one case of a traumatic skin loss. The 14 flaps were designed in 11 patients – 8 unilateral and 3 bilateral. The average age of the patients was 65 years, the defect was always solved in 1 operation, the healing period was about 15 days. There was only one complication – the primary wound closure was not possible due to the scarring of tissue after repeated excision in 1 patient.

Conclusion: A modified Ahuja`s rotation flap combines elements of the rotation and transposition flap and allows reliable primary closure of scalp defects without the need for back-cut or the need for skin transplantation of the secondary defects by strict compliance with the rules for the construction of the flap.

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MULTIDISCIPLINARY APPROACH TO EVALUATING TREATMENT OUTCOMES IN CHILDREN WITH OROFACIAL MALFORMATIONS

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Introduction: The comprehensive treatment of orofacial congenital malformations requires multidisciplinary approach from neonatal (prenatal respectively) period to adulthood. The most common orofacial malformation is cleft lip and/or palate. Cleft lip and/or palate (CL±P) treatment protocol differs from center to center worldwide. In the Department of Pediatric Plastic Surgery University Hospital Brno cleft lip repair is performed mostly in neonatal period and palatoplasty is recommended at the end of the sixth month of age at the earliest. The aim of the study is to assess primary reconstructive surgeries, speech outcomes and dental arch relationship in children with CL±P.

Material and methods: Out of 706 children with orofacial clefts who underwent primary surgery at University Hospital Brno between 2005 and 2016, 433 children were diagnosed with CL±P. The remaining ones (273 patients) were children with all forms of isolated cleft palate. A subgroup of 23 5-year-old patients with unilateral cleft lip and palate was evaluated based on standardized speech audio recordings, photo documentation and dental models. Speech outcomes were assessed by applying three universal speech parameters (hypernasality, articulation and speech intelligibility - each rated on the 5-point scale scoring system) and dental arch relationship were scored by the GOSLON Yardstick.

Results: Moderate hypernasality was present in most cases, the mean value for articulation and speech intelligibility was 2.07 and 1.93, respectively. 63% of patients were scored GOSLON 1 and 2, no patient were scored GOSLON 5. GOSLON mean score was 2.35. Interrater agreement was very good, represented by kappa value of 0.867 (GOSLON), and kappa value from 0.786 to 0.808 for speech outcomes.

Conclusion: Over the past twelve years the treatment protocol, containing early primary cleft lip and palate surgery and subsequent multidisciplinary comprehensive care, shows very good functional and aesthetic preliminary outcomes.

PERIOPERATIVE COMPLICATIONS OF ANESTHESIA IN NEWBORNS WITH CLEFT LIP

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Introduction: Orofacial clefts are the most common congenital malformation. At the University Hospital Brno cleft lip surgery is mostly performed in neonatal period. The aim of the study was to review a frequency of perioperative anesthesia complications in children during neonatal clef lip surgery.

Material and methods: Between 2010 and 2015, a total of 202 non-syndrome neonates underwent cleft lip closure under general anesthesia. Following parameters and their impact on the course of anesthesia were observed: patient´s age at the time of surgery, birth weight, child maturity and incidence of perioperative complications (artificial extubation, episode of bronchospasm, hypotension or desaturation). Statistical analysis was carried out using Fisher exact test while assessing statistically a significant level at $p \leq 0.05$.

Results*:* Perioperative complications were observed in 6.9% of patients. Artificial extubation was in 6 children, episode of bronchospasm occurred in 4 patients, episode of hypotension in 2 and desaturation in 2 neonates. None of the perioperative complications was considered as a serious one. Despite expectations, children with bilateral cleft lip and palate had no complications at all. The incidence of perioperative complications was statistically significantly related to birth weight (differences between the children with birth weight less and more than 3 000 grams were statistically significant, $p=0.025$) and to degree of maturity (limit of maturity was defined as 38th week of gestation, $p=0.041$). On the contrary, perioperative complications were not statistically significantly related to the age at the time of surgery.

Conclusion: Our results suggest that anesthesia in newborns with cleft lip is a safe method. The occurrence of anesthesia complications in neonatal cleft lip surgery is very low. An experienced pediatric anesthesiologist and adequate technical equipment contribute to the smooth course of anesthesia.

POSTOPERATIVE COMPLICATIONS AND NUTRITION MANAGEMENT AFTER NEONATAL CLEFT LIP REPAIR

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Introduction: In recent decade there has been a diversion from cleft lip repair in 3th month of age and conversely, neonatal cleft lip surgery has become a routine procedure in the Czech Republic. Early cleft lip closure is considered controversial but sometimes criticized unsubstantially. The aim of the study was to assess postoperative complications and nutrition management in newborns after primary cleft lip surgery at the University Hospital Brno.

Material and methods: Out of 210 patients who underwent neonatal cleft lip surgery (both unilateral and bilateral cleft lip/ cleft lip and palate) between 2010 and 2015, 202 were included in the study. The remaining ones were excluded because of diagnosis of syndromes associated with orofacial clefts. Postoperative complications, as a wound dehiscence and infectious complications, and enteral feedings following surgery (including possibility of breast-feeding and need of nasogastric tube) were evaluated.

Results: A total of 93.6% of patients had no complications following neonatal cleft lip surgery. A wound dehiscence was observed in 2 patients (1% of patients), both with a wide bilateral cleft lip and palate. An incidence of neonatal infection requiring antibiotics was 2.5% (4 patients). Seven patients (3.5%) had a respiratory insufficiency rectified by applying oxygen mask (1.5%) or performing unplanned reintubation (2%). Severity of cleft was not directly related to respiratory and infectious complications. Enteral feeding was able to resume in 7.9 hours in average after the surgery and only 7.4% of children needed short-term nasogastric tube placement. While being released from hospitalization, 66% of children with cleft lip only were breastfed. The mean duration of hospital stay was 7.1 days.

Conclusion: This study shows that the neonatal cleft lip repair is a safe surgical method based on a rare occurrence of wound healing problems. A high percentage of breastfed children with cleft lip and, on the contrary, a low percentage of nasogastric tube usage indicates minimal impact on enteral feeding after neonatal surgery.

RECONSTRUCTION OF ORAL COMMISSURE IN CHILDREN

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Reconstruction of oral commissure is considered a difficult task for plastic surgeons. Malignant process (squamous or basalioma cell carcinoma) is most commonly observed, affecting this area of the lip, following trauma injury or congenital malformations (associated with or without syndrome). The aim of surgical oral commissure reconstruction is both functionality and aesthetics.

In this short communication we would like to show one surgical principle of oral commissure reconstruction with using a Z-plasty. This approach is demonstrated in 2 pediatric patients with different initial condition. The first one is a girl who suffered an oral burn injury at the age of two, resulting in a two thirds lips adhesion. The second one is a boy with a diagnosis of unilateral transverse cleft lip (Tessier 7) associated with Goldenhar syndrome. The Z-plasty method has proven to be sufficient in reconstruction of both findings - microstomia and macrostomia.

Postoperative management is more demanding because of less compliance of children. A need of secondary reconstruction during growing up is presumed in majority of pediatric patients.

FREE-STYLE PEDICLED PERFORATOR FLAP - CASE REPORT AND RECOMMENDATIONS

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Perforator flaps are becoming very popular technique in reconstructive surgery. Their use is not only as free flaps, but they are also very useful as a pedicled local flaps. Thanks to the possibility of localising suitable perforator basically anywhere on the body with respect to given angiosomes it is possible to design “tailor-made” flap. Pedicled perforator flaps can also in some indications replace microsurgical techniques.

We present a case report where we used pedicled perforator flap in a patient with large chronic skin defect on the back in thoracolumbar area that lasted at least two years. The defect itself probably developed as a result of radiotherapy of recurrent basocellular carcinoma, which was in the regional hospital evaluated as inoperable.

Our patient also underwent chemotherapy and repeated necrectomies, often while dealing with septic complications. Residual carcinoma cells were repeatedly detected in the defect margins.

Within our treatment strategy repeated necrectomies were performed and after cleaning the defect, edges of the defect were excised to achieve histologically verified clear margins. Afterwards negative pressure therapy was applied. Resulting defect was about 15 x 15 cm large and was covered with propeller pedicled perforator flap. Secondary defect was covered with skin graft. Perforators were preoperatively identified with MRI, ultrasound and Doppler probe. Their quality was evaluated during surgery, the best one was chosen and final shape of the flap was designed.
In our opinion pedicled perforator flaps, thanks to their universality, have great use in covering various defects of soft tissues around whole body. With proper surgical technique, identification of appropriate perforator and with respect to the anatomy it is reliable and versatile reconstructive technique with low morbidity.

Perforátorové laloky se postupně stávají velmi populární technikou v rekonstrukční chirurgii. Využití mají nejen jako volné laloky, ale velmi vhodné jsou i jako stopkované místní laloky, kdy lze téměř kdekoliv na těle nalézt v blízkosti defektu vhodný perforátor na jehož základě a s respektem k daným angiosomům navrhnout lalok „na míru“. Stopkované perforátorové laloky mohou také v některých indikacích nahradit mikrochirurgické techniky.

Zde prezentujeme kazuistiku, kdy jsme stopkovaný perforátorový lalok využili u pacienta s dva roky trvajícím rozsáhlým chronickým kontaminovaným defektem kůže zad v oblasti thorakolumbálního přechodu. Defekt vznikl pravděpodobně jako následek radioterapie recidivujícího bazocelulárního karcinomu kůže zad, který byl na regionálním pracovišti zhodnocen jako dále inoperabilní. Pacient podstoupil i chemoterapii a posléze opakované nekrektomie, často v rámci septických komplikací. Opakovaně byla zjišťována rezidua bazocelulárního ca v okrajích defektu.

V rámci léčebné strategie byly nejdříve provedeny opakované nekrektomie, po vyčištění defektu byl indikován ke kontrolované excizi reziduí karcinomu a po bioptickém ověření clear margins nasazena podtlakové terapie. Výsledný defekt cca 15x15cm byl kryt perforátorovými propeller lalokem s autotransplantací sekundárního defektu v druhé době. Perforátory byly předoperačně identifikovány na základě MRI, ultrazvuku a tužkového Doppleru, ale až peroperačně bylo možno posoudit jejich kvalitu, vybrat nejvhodnější z nich a poté i navrhnout konečný design laloku.

Stopkované perforátorové laloky mají dle našeho názoru velké využití při krytí různých defektů měkkých tkání na celém těle právě s ohledem na jejich univerzalitu. Při správné operační technice, identifikaci vhodného perforátoru a s respektem k anatomickým poměrům se jedná se spolehlivou a univerzální rekonstrukční techniku s nízkou morbiditou.

EVIDENCE OF WOUND HEALING ACCELERATION BY USING PLATELET-RICH PLASMA

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Introduction: Nowadays, there are significant advances and many possibilities how to accelerate wound healing. One of the possibilities is utilisation of platelet-rich plasma (PRP) locally applied. The authors present results obtained by using PRP in healing of donor site, to prove that PRP is responsible for better healing.

Patients and methods: The randomised prospective single-centre study included patients with two donor sites on both thighs, after taking of split-thickness skin graft. Autologous PRP was applied on one thigh. We compared healing with contralateral thigh which was treated by our standard method without PRP.

Results: The total number of patients included in the study was 24. Average time for healing of donor site with using PRP was faster (17,8% of the time-interval) comparing to donor site healed by the standard method. Thanks to a simple wound-model we proved that using PRP accelerates wound healing.

Conclusion: There is clear evidence that application of platelet-rich plasma (PRP) as the source of growth factors accelerates healing process. Several groups of patients can profit from the method using PRP, especially severely burned patients requiring multiple split thicknes grafting from one donor side, patients with problematic wound healing and chronic wounds by whom conventional methods have failed.

SESTERSKÁ SEKCE

TRANSSEXUALISMUS - OŠETŘOVATELSKÁ PÉČE PŘED A PO REKONSTRUKCI PENISU

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KPECH, FN U sv. Anny, Brno

Cílem prezentace je seznámit auditorium s problematikou pacientů s dg Transexualismu. Obsahem přednášky je etiologie,léčba (psychoterapie,hormonální,chirurgická). Dále přednáška pojednává o přípravě pacienta k operaci, o pooperační péči a následného zapojení se do života.

GIGANTOMASTIE

Běhávková R.

KPECH FN U sv. Anny v Brně

Cílem prezentace je seznámit posluchače s problematikou hypertrofie prsou a jejím chirurgickým řešením.
Představuje nejčastější operační techniku používanou na KPECH – redukční mammoplastiku na dolní a centrální stopce - op. dle Hestera.
Popisuje cestu pacientky od první konzultace u plastického chirurga, přes hospitalizaci, operační zákrok, pooperační péči až po zlepšení fyzického i psychického stavu po úspěšné operaci.
Součástí prezentace je bohatá fotodokumentace a zajímavá kazuistika.

XE-DERMA

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Xe-Derma je bezbuněčný biologický kryt určený k léčbě akutních či chronických kožních defektů. Jedná se o acelulární matrix vyrobený ze štěpů prasečí kůže, jejíž strukturu tvoří původní matrix tvořená sítí kolagenních a elastických vláken, je sterilní, biokompatibilní, imunologicky inertní, je adhezivní, tvarově přizpůsobivý a vhodný na všechny části těla. Xe-Derma je na našem oddělení používána při léčbě popálenin II. stupně, po nekrektomii u III. stupně, ke krytí odběrových ploch po autotransplantaci kůže, s úspěchem jí lze použít i při léčbě bércových vředů, rozsáhlých odřenin, diabetické nohy a jiných kožních ztrát s cílem defekt připravit k definitivní eradikaci, či dokonce ke konzervativnímu zhojení.

Naše zkušenosti jednoznačně potvrzují, že Xe-Derma ve správné indikaci urychluje hojení rány, zkracuje dobu léčby, snižuje náklady a zvyšuje komfort léčby

INFORMACE PRO PACIENTKY - REKONSTRUKCE PRSU

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V přednášce prezentuji problémy pacientek před rekonstrukcí prsou:

- konzultace
- účel rekonstrukce
- vnímání defektu
- doporučení operačního postupu
- kritéria

REKONSTRUKCE PRSU PO MASTEKTOMII

Sýkorová B.

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Prezentace je zaměřena na představení komplexní problematiky rekonstrukce prsu, zabývá se indikacemi, vybráním metody rekonstrukce, přípravou, operačními technikami, pooperační péčí a průběhem následné rekonvalescence včetně potřeby následných korekčních či finalizačních operací.

PRÁCE AMBULANTNÍ SESTRY U PACIENTA S DIAGNÓZOU SYNDROM KARPÁLNÍHO KANÁLU

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Syndrom karpálního kanálu patří mezi úžinové syndromy. Postihuje již několik století muže i ženy všech věkových kategorií. Klinika plastické a estetické chirurgie se chirurgické léčbě tohoto onemocnění věnuje již desítky let.

Cílem přednášky je seznámit posluchače s touto diagnózou a přiblížit jim péči o pacienty na klinice plastické a estetické chirurgie v Brně.

Ambulantní sestra se stává od první návštěvy do vyléčení pacientovým
„Dobrým andělem“.

TECHNIKY PŘÍPRAVY TUKU PRO LIPOMODELING

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V rámci prezentace budou představeny techniky přípravy tuku pro lipomodeling z dosavadní praxe našeho oddělení z pohledu instrumentářky. Jedná se především o uzavřené techniky přenosu tuku, kdy využíváme centrifugace nebo filtrace systémem Puregraft. Zmíněna bude i technika nanograftu. Zaměřím se na potřeby instrumentária pro jednotlivé techniky a také na materiálové vybavení k těmto technikám. Zhodnotím výhody a nevýhody jednotlivých technik z pohledu instrumentářky. V závěru budou uvedeny postřehy, jenž jsme získali víceletou zkušeností.

ČASNÁ REHABILITACE PO TENOLÝZÁCH FLEXORŮ

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Adheze šlach jsou přirozeným projevem hojení sešité šlachy. Objevují se velmi často po suturách šlachy, po zhmožděninách spojených s frakturami skeletu, po replantacích prstů. Mohou omezovat hybnost prstu jak do flexe, tak i do extenze.

Tenolýza je uvolnění šlachy z adhezí bránících prstu v aktivním pohybu. Jednou z podmínek úspěšnosti tenolýzy je výrazný rozdíl mezi aktivním a pasivním pohybem a spolupráce pacienta.

Po tenolýzách je nutná časná aktivní rehabilitace, protože uvolněný flexor je opět ohrožen vznikem adhezí.

Velkou výhodou je možnost konzultace fyzioterapeuta s chirurgem ke konci operace ještě na operačním sále, kde vidíme, jakým způsobem je pacient schopen aktivní flexe prstu, zda je plná či zůstává deficit. Současně jsme instruovány o kvalitě šlachy a případných rizicích či kontraindikacích cvičení z hlediska operatéra.

Začínáme cvičit hned po ukončení operace. Provádíme nejprve pasivní rozhýbání prstů od špičky, přes tzv. háček až do dlaně. Poté pacient provádí 3 až 5 aktivních pohybů do flexe s dopomocí nejprve v distálním kloubu, poté do tzv. háčku, kdy cvičíme současně flexi v DIP i PIP kloubech a nakonec plnou flexi celého prstu do dlaně. Na konci každého pohybu děláme vteřinovou výdrž. Snažíme se o maximální flexi s návratem do plné aktivní extenze.

Cvičíme v pravidelných intervalech. Minimálně cvičí pacient 4x denně pod dohledem fyzioterapeuta a 5 – 6x za den, z toho 1x v noci, cvičí pacient sám. Je nutné pečlivě dodržet doporučenou intenzitu cvičení. Při snížení intenzity může dojít opět k adhezi uvolněné šlachy, naopak při zvýšené intenzitě může dojít k jejímu přetížení a následnému vzniku zánětu šlachy.

Při velkém deficitu aktivní flexe, nebo pokud se aktivní flexe nelepší, používáme metodu vyvazování do dlaně. Jednou až dvakrát denně se na hodinu operovaný prst zaváže obvazem do plného pokrčení. Poté se znovu udělá 5 aktivních pohybů do flexe, tentokrát z plné flexe postupně do plné extenze.

Aby bylo možné cvičení, je třeba fixovat operovaný prst co nejmenším množstvím obvazů.

Krátce po operaci potřebujeme brzké převazy, protože prokrvácené obvazy ztvrdnou a neumožňují pohyb v potřebném rozsahu.

Na oteklé prsty doporučujeme polohování nad úroveň srdce a nošení ruky na šátku, nenechávat končetinu svěšenou. Současně doporučujeme chladit přikládáním mražených obkladů, eventuelně užívat Aescin v tabletách.

Časná rehabilitace po tenolýzách trvá tři týdny, pokud šlacha adekvátně táhne, intenzita ani délka cvičení se během této doby nemění. Po třech týdnech rehabilitace pokračuje a snažíme se docílit maximálního aktivního pohybu s minimálním funkčním deficitem.

OPERACE PILONIDÁLNÍHO SINU POMOCÍ LIMBERGOVA LALOKU

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Sinus pilonidalis je benigní onemocnění sacrococcygeální oblasti. Vyskytuje se ve fázi akutní s tvorbou abscesu a chronické s tvorbou intermitentně secernujících píštělí a infiltrátů. Postihuje převážně jedince mezi 15. a 35. rokem věku. Jedná se o vleklé a pro nemocného obtěžující onemocnění, kdy konzervativní i různé metody chirurgické léčby mají vysoké procento recidiva komplikací.

Na chirurgických klinikách v České republice nadále převládá řešení pilonidálních sinů pomocí radikální excize a prosté sutury. Vzhledem k vysokému procentu pooperačních komplikací (tj. hlavně dehiscence a ranná infekce) bylo naše oddělení osloveno ke spolupráci při této operativně. Rozhodli jsme se pro využití lalokové plastiky. Byla provedena rhomboická excize sinu a uzávěr defektu pomocí transpozičního distálně stopkovaného Limbergova laloku a následná dispenzarizace nemocných.

Podle našich dosavadních zkušeností můžeme jednoznačné doporučit využití Limbergova laloku při operaci pilonidálního sinu. Jedná se o řešení, které je jednoduché, efektivní, spolehlivé, zajišťuje rychlé hojení, snižuje dobu hospitalizace a četnost převazů, umožňuje rychlý návrat pacienta do pracovního procesu.

PIGMENTOVÉ NÉVY U DĚTÍ

Večeřová D., Laziová P., Válková V.

KPECH FN U sv. Anny v Brně

Přednáška pojednává o problematice pigmentových névů u dětí a možnostech jejich chirurgického řešení.

Obsahem přednášky je teoretická část a zajímavá kazuistika doplněná bohatou fotodokumentací.

S touto diagnózou se na našem pracovišti setkáváme velmi často, její prezentaci považujeme za důležitou.

PÉČE O PACIENTA PŘI HIRUDOTERAPII

Pinkavová H., Synková I.

Fakultní nemocnice u sv. Anny v Brně, Klinika plastické a estetické chirurgie – JIP

Co to je hirudoterapie

Historie

Druhy pijavic a jejich získávání

Indikace x kontraindikace

Péče, přiložení, likvidace

Využití na KPECH

POSTERS

THE SOLUTION OF PENILE CARCINOMA IN COOPERATION WITH PLASTIC SURGEON AND UROLOGIST

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Background: The aim of this study is presentation possibilities and advantages of interdisciplinary cooperation between plastic surgeon and urologist in a surgical approach to the penile carcinoma

Methods: From March 2015 to March 2017 six cases from PeIN to the invasive carcinoma were solved.

Results: The role of plastic surgeon in interdisciplinary approach involves surgical removal of the tumor lesion by urologist, and subsequent immediate reconstruction of skin defect by plastic surgeon. Split-thickness skin grafts taken from the ventral surfaces of the thighs were used for reconstruction of skin defects on the penis. Patients were hospitalized on urology department and checked by plastic surgeon.

Conclusion: The direct form of cooperation between plastic surgeon and urologist in the operating room and postoperative wound care has been proven and confirmed by uncomplicated wound healing and favorable postoperative outcomes for all patients operated on in our group, including the evaluation of the long term postoperative cosmetic results.

PREVALENCE OF SUBMUCOUS CLEFT PALATE IN CHILDREN WITH INITIAL DIAGNOSIS OF ISOLATED CLEFT LIP

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Introduction: Cleft lip with or without cleft palate (CL±P) is one of the most frequent types of orofacial congenital malformations, ranging from 3.4-22.9 per 10,000 births. On the other hand, submucous cleft palate (SMCP), in overt or occult form, belongs to one of the rarest forms of facial clefts. The incidence of CL +SMCP is not exactly known, however, the rate of SMCP is higher when a cleft of the alveolar ridge occurred with the cleft lip (CLA – cleft lip and alveolus). A retrospective study was designed to 1/determine the prevalence of overt and occult form of SMCP in patients with cleft lip only; 2/ determine if there are differences in the prevalence of SMCP in CL and CLA; 3/ if the patients with occult form of SMCP underwent a surgery in later age then patients with overt form of SMCP.

Material and methods: Out of 324 patients, registered for cleft lip ±palate with the cleft team of the University Hospital Brno between 2006 and 2015, 144 were diagnosed with isolated cleft lip. 15.3% of these patients were included in the study because of associated submucous cleft palate. Following parameters were recorded and evaluated: patients' age at the time of surgery, presence of classic submucous cleft palate triad (bifid uvula, a bony notch in the posterior hard palate, and a furrow along the midline of the soft palate – zona pellucida) and its correlations with Smyth´s grading system.

Results: Twenty two children (15 boys and 7 girls) were included in the study. The mean age of the patients at the time of palatal surgery was 3.6 years (min-max 0.5-6.8yr). Twelve patients (54.5%) have been diagnosed as overt form of SMCP, the remaining ones as occult form of SMCP. All patients diagnosed as occult form of SMCP correspond to clinical grade I of Smyth´s grading system. 63.6 % of patients has alveolar ridge affected by cleft and the finding of CLA wasn´t in correlation with overt or occult form of SMCP (p=0.75). The patients with occult form of SMCP underwent a surgery in later age then patients with overt form of SMCP, respectively, at age of median value 2.25 years for overt form and 5.5 for occult form (p=0.016).

Conclusion: Cleft lip associated with submucous cleft palate (in overt or occult form) occurs in the prevalence of 15.3%. All patients with cleft lip ± alveolus should have been examined for soft palate on a regular basis.

FLAP RECONSTRUCTION AFTER TEMPORAL REGION DEFECT WITH LIQUORRHEA - CASUISTRY

Kluka T., Turkin O.

Department of Plastic, Reconstruction and Aesthetic Surgery UN LP Košice and LF UPJŠ Košice

The authors presents so thankless temporal area reconstruction for patient after multiple operations. Patient had operations on the face, eye and also intracranial operations for skin cancer of the external auditory canal, after resection of the temporal bone and cervical nodes and also partial lesion of the n. VII., condition after enucleation of the right side, after chemotherapy, radiotherapy, wound dehiscence and necrosis with liquorrhea and also skin and temporal bone reconstruction with palacos, then fistulation occurred. The patient came to our hospital with two small defects on the temporal area in the range of 2x1 and 1x1 cm, when she underwent a complete classical attempts of local reconstruction, but still with a secondary wound dehiscence. After the previous neurosurgery was also present permanent liquorrhea with positive cultivation of Staph. aureus, MRSA and MLSB/c. We considered several reconstructive options. First we made angio - MRI, where we found complete closures of the main arteries in the right side of the head - finding right a. occipitalis aplasia, defect partially supplied by filiform STA. Massive supply of the occipitoparietal area by tortuous branches of STA and a. occipitalis on the left side, so microsurgical reconstruction was not the right choice. Therefore, we first chose an easier method to cover the defect with distant tubular flaps, where however, we have also been limited by inappropriate scar tissues in the area - for example, SCM, so we chose the alternative tubular flaps from different areas, which unfortunately after time necrotized. The actual defect was progressively enlarging and pushing out the artificial bone. Therefore,

we finally decided to extract the artificial bone and covered the defect with classical rotation flap from the temporoparietal region together with skin graft, with later excess reduction of the skin. There was a complete cease of liquorrhea and complete healing in the capilitium after this surgery until now. Fotodocumentary include pre – intra – postoperative pictures.

COMBINATION OF MICROSURGERY AND CLASSICAL BREAST AUGMENTATION AFTER MASTECTOMY - CASUISTRY

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The authors are demonstrating a combination of the classical and microsurgical breast augmentation after mastectomy with different surgical approaches. The patient had been diagnosed with lobular breast cancer on the right side – T2, N1, Mx, IIB staging. On the Department of Oncogynaecology was performed a complete mastectomy on the right side followed by chemotherapy and radiotherapy. In our hospital was performed a complete reconstruction with latissimus dorsi flap + silicon implant 350 ccm. For the left side we chose a different approach, where the patient was positive for the BRCA I-II. This patient underwent a preventive subcutaneous mastectomy with immediate breast reconstruction with microsurgicall latissimus dorsi flap + silicon implant 350 ccm. Fotodocumentary include pre – intra – postoperative pictures.

ZDVOJENÁ KAPSULA JAKO KOMPLIKACE AUGMENTACE PRSU

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Centrum plastické chirurgie a chirurgie ruky FN Ostrava

Úvod: Prsní implantáty patří mezi nejčastěji používané typy permanentních implantátů v moderní medicíně s výbornou biokompatibilitou. Zdvojení kapsuly a pozdní seromy jsou relativně nová komplikace spojovaná s implantáty s texturovaným povrchem Biocell. Její etiologie není zatím plně objasněna. Histologické nálezy naznačují, že delaminace dvojté kapsuly je mechanického původu.

Podle této teorie posuvné síly způsobují podráždění, tvorbu seromu a uchycení buněk na povrchu implantátu – mikroskopické vyšetření prokázalo vysoký výskyt mikroflory na texturované straně kapsuly naléhající na implantát. Výrazně nižší množství mikroflory bylo nalezeno na hladké straně kapsuly.

Infekční etiologie nebo etiologie v důsledku vytvoření biofilmu nevysvětluje, proč k této komplikaci dochází pouze u těchto výrazně texturovaných implantátů.

Když se traumaticky oddělí pouzdro od implantátu, může se objevit zvětšující se serom, který se nemusí vstřebat a může si vyžádat akutní chirurgický zákrok.

Kazuistika: 31-letá pacientka vyšetřena v ambulanci PCH FNO dne 27.2.2017.
Anamnéza: V prosinci 2014 augmentace prsou texturovanými implantáty Polytech uloženými pod prsní sval, kojí 6 měsíců, od ledna 2017 zvětšování levého prsu, v posledních dnech

i bolestivost prsu, zimnice, CRP 35mg/l. Bez anamnézy zjevné nebo zdokumentované infekci po implantační operaci.

Na MR nález objemné tekutinové kolekce v okolí implantátu bez známek jeho ruptury. (obr.1, 3). Za hospitalizace provedena punkce s aspirací hemoragického obsahu, následně operační revize s nálezem dvojité kapsuly kolem implantátu a kolikvovaného hematomu. Provedena kapsulektomie, evakuace hematomu, reimplantace, drenáž. Pooperační průběh bez komplikací.

Histologický nález buněčně poměrně chudého kolagenního vaziva, na povrchu fibrinové sraženiny.

Cytologické vyšetření z punktátu: Buněčně chudé preparáty s přítomností nečetných lymfocytů, ojedinělých polynukleárů a sporadických histiocytů.

Kultivace z punktátu negativní.

Diskuse a závěr: Dvojitá kapsula a pozdní seromy jsou relativně nová komplikace v chirurgii augmentace prsou. Tento problém nebyl pozorován u hladkých prsních implantátů plněných fyziologickým roztokem nebo silikonovým gelem, nýbrž pouze u výrazně texturovaných implantátů - jak u kulatých, tak u tvarovaných implantátů a ve všech třech umístěních kapsy (subglandulární, subfasciální a subpektorální).
Převážná většina pozdních seromů se zdá být idiopatická, bez jasných důkazů svědčících o infekci nebo zhoubném nádoru. Zřídkavým případem je s implantáty asociovaný anaplastický velkobuněčný lymfom.


ZDVOJENÁ KAPSULA JAKO KOMPLIKACE AUGMENTACE PRSU

EXPERIMENTAL STUDY OF NEW BIOPOLYMERIC NANOSTRUCTURED IMPLANTS ENRICHED WITH GROWTH FACTORS APPLIED IN RECONSTRUCTIVE SURGERY

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21st century is a real challenge for advanced nanotechnology application in the field of clinical medicine. Along with higher demands on the quality of treatment is increasing demand for new technological solutions. The vision of current clinical practice in the treatment of chronic skin defects and acute wounds caused by high-energy force such as mechanical trauma or burn trauma is not just mere survival, but also improving the quality of life. Overall goal is to suppress the pathological processes arising from wound healing, i.e. mainly uncontrollable pathological healing in dermis while missing skin cover. To control wound healing, the artificial skin substitutes are applied for driving maturation of scars and improving viscoelastic properties of the newly formed skin. The purpose of this project is to utilize a new dermal bilayer substitute based on nanotechnologies and protein engineering with favorable vascularization, migration and proliferative potential of cell response in clinical cases of full thickness skin loss in burned or otherwise traumatized patients. The aim is to obtain more information about regeneration of injured skin tissue in full thickness skin defect that would lead to further suitability assessment of preclinical testing and further utilization in clinical study.

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USING OF BILOBED FLAP IN FACIAL RECONSTRUCTION

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Introduction: The Bilobed flap was first described by Esser in 1918. He used it to reconstruct the defects of the nose. It has been used in the reconstructions of trunk and feet defects by many authors since then. Its principle is also advantageous in reconstructions of larger facial defects. Successful reconstruction of problematic suborbital area by using the bilobed flap was reported by Yenidunya in 2007. The design of flap can be successfully used in other atypical facial defects.

Material and Methods: The Bilobed flap used to cover the facial defects of 199 patients who underwent 203 tissuereconstructions from January 1st 2007 to December 31st 2016 at KPECH Brno.

Results: The flaps were equally distributed between the genders, men 101 and women 98. Ages of patients ranged from 38 to 98 years (mean 76 years). It was used in reconstruction of the tip and alars defects of the nose 159 times, in reconstruction around orbital defects 16 times and in other atypical facial area 28 times. The states after excision of malignant tumors of the face (basal cell carcinoma, spinocellular carcinoma, SSM) were usually the causes of the defects (89,7 %). In 80 cases, the defects of nasal tip and ala appeared to men and 79 cases to women.

Complications occured 41 times of all reconstructions (20,2 %). The most common complication was abundance of flap (4,9 %). The postoperative results were favorable to the maintenance of color, texture and function of reconstructed areas.

Conclusion: Bilobed flap in different modifications should always be considered in the reconstruction of extensive defects of the face, because unlike other techniques maintains a good texture and color of facial skin with minimal donor site morbidity.

ŘEŠENÍ CHRONICKÉHO HOJENÍ PORANĚNÉ DOLNÍ KONČETINY POMOCI VAKUUM ASISTOVANÉ TERAPIE

Krajcová A.

Klinika plastické chirurgie, Nemocnice na Bulovce, Praha

Abstrakt nedodán

PREEXPANDED FULL THICNESS SKIN GRAFT - WAY TO MAXIMAZE FUNCTIONAL AD AESTHETIC RESULTS AND MINIMIZE DONOR SITE MORBIDITY

Zalesak B., Christodoulou P., Podkalská-Sommerová K.

OPECH FN Olomouc

Expanded skin flaps are difficult to use to reconstruct skin defect after excission of large lesions in extremities, ears and eylids. Full thickness skin graft are more approprite to use in these situations. Amount of harvested skin is limeted. Tissue expansion of donor site skin provides sufficient amount of skin with primary closure of donor site defect. Authors present results of preexpanded full thicness skin grafs and evaluate functional and aesthetic results and donor site morbidity.

CASE REPORT: ASPERGILLUS INFECTION IN A DEFECT OF FRONTAL BONES AFTER EXTIRPATION OF NON-HODGKIN LYMPHOMA

Stehlík D.[1], Svobodová L.[2], Hamal P.[2], Zálešák B.[1]

[1] Department of Plastic and Aesthetic Surgery, University Hospital Olomouc,Czech republic
[2] Department of Microbiology, Faculty of Medicine and Dentistry, Palacky University, Olomouc, Czech Republic

A case report about mycotic infection in post-operative defect caused by *Aspergillus fumigatus* in a patient with non-Hodgkin lymphoma is described . Although its source could not have been found, microsurgery treatment in combination with effective voriconazole therapy led to rapid elimination of etiological agent.

Poznámky

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1.5% Rotation in primary augmentation [1]		

4. Not a head to head comparison. Based on core clinical study reported data of CPG™ Gel Breast Implants, NATRELLE™ 410 TruForm™II Gel Breast Implants, NATRELLE™ Round TruForm™I Gel Breast Implants, and MemoryGel™ Breast Implants. These core clinical studies DID NOT include NATRELLE™ Inspira Round TruForm™I Gel Breast Implants, NATRELLE™ 410 TruForm™II Gel Breast Implants, or NATRELLE™ 510 Dual Gel Anatomical Breast Implants.

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