

VIERING  
50-JARIG BESTAAN VAN  
DE BELGISCHE VERENIGING  
VOOR PLASTISCHE,  
RECONSTRUCTIEVE EN  
ESTHETISCHE CHIRURGIE

CELEBRATION DU  
50ÈME ANNIVERSAIRE  
DE LA SOCIETE BELGE  
DE CHIRURGIE PLASTIQUE,  
RECONSTRUCTRICE  
ET ESTHETIQUE

Vrijdag 6 mei 2005 - Vendredi le 6 mai 2005  
Zaterdag 7 mei 2005 - Samedi le 7 mai 2005  
Brussel - Bruxelles

# Friday 6th May, 2005

**08:30** Registration

**09:30** Academic session

Presentation of the Commemorative Book

**10:30** Handing-over of the Patent of  
Royal name by Mrs Paulus de  
Châtelet, Governor of Brussels-  
Capital.

**10:45** Coctail

Sponsored by Ethicon

**11:30** A LANCET AND A MICRO-  
SCOPE FOR THE KING

B. LENGELE

Brussels, *Belgium*

**12:30** Lunch in the Cloister

Sponsored by Ethicon

## SESSION 1: HEAD & NECK

Moderators: B. Lengelé, K. Van Landuyt

**14:00 A LIFE WITH MANY FACES**  
**D. MARCHAC**

*Paris, France*

**14:40 ANTHROPOMETRIC**  
**EVALUATION OF COMPLETE**  
**BILATERAL NASOLABIAL**  
**CLEFTS CORRECTED BY THE**  
**MULLIKEN'S TECHNIQUES IN**  
**THE NEONATAL PERIOD.**

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B. BAYET, H. BENATEAU, P. PENDEVILLE,  
X. BLAIZOT, R. VANWIJCK

*Cliniques Universitaires St Luc,  
Brussels, Belgium*

**14:50 3-D FACIAL SOFT TISSUE**  
**ANALYSIS: 3-D CT VERSUS 3-D**  
**STEREO PHOTOGRAM-METRY.**

page 16

G.R.J. SWENNEN<sup>1</sup>, F. SCHUTYSER,  
N. CUYLITS, A. DE MEY

*1. Department of Plastic Surgery,  
University Hospital Brugmann (ULB),  
Brussels, Belgium.*

*2. Medical Image Computing (Radiology*

*– ESAT/PSI), Faculties of Medicine  
and Engineering, University Hospital,  
Gasthuisberg, Leuven, Belgium.  
Department of Maxillofacial Surgery,  
Children Hospital (HUDE), Brussels,  
Belgium.*

**15:00 LONG TERM RESULTS OF EARLY**  
**SIMULTANEOUS LIP AND PALATE**  
**REPAIR IN COMPLETE CLP.**

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A. DE MEY, G. SWENNEN,  
E. HERION

*Children Hospital Reine Fabiola,  
Brussels, Belgium.*

**15:10 INVOLVEMENT OF IRF6**  
**IN VAN DER WOUDE SYN-**  
**DROME (VWS), POPLITEAL**  
**PTERYGIUM SYNDROME**  
**(PPS) AND ISOLATED CLEFT**  
**LIP AND PALATE (CL/P).**

page 18

M. GHASSIBÉ<sup>1</sup>, B. BAYET<sup>2</sup>,  
N. REVCU<sup>1,3</sup>, K. DEVRIENDT<sup>4</sup>,  
L. VAN MALDERGHEM<sup>5</sup>, G. MORTIER<sup>6</sup>,  
D. GENEVIÈVE<sup>7</sup>, O. BOUTE<sup>8</sup>, M. LEES<sup>9</sup>,  
M. BOUMA<sup>10</sup>, Y. GILLEROT<sup>3,5</sup>, C. VERELLEN-  
DUMOULIN<sup>3</sup>, PH. PELLERIN<sup>11</sup>,  
R. VANWIJCK<sup>2</sup>, M. VIKKULA<sup>1</sup>.

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Genetics, Christian de Duve Institute  
of Cellular Pathology and Université  
Catholique de Louvain, Brussels,  
Belgium*

*2. Centre Labiopalatin, Division of*

*Plastic Surgery, Cliniques Universitaires  
St Luc, Brussels, Belgium*

*3. Center for Human Genetics,  
Cliniques Universitaires St Luc and  
Université Catholique de Louvain,  
Brussels, Belgium*

*4. Center for Human Genetics,  
Leuven, Belgium*

*5. Centre de Génétique Humaine,  
Institut de Pathologie et de Génétique,  
Gerpinnen (Loverval), Belgium*

*6. Centrum voor Medische Genetica,  
Universitair Ziekenhuis, Ghent, Belgium*

*7. Service de Génétique Médicale,  
Hôpital Necker – Enfants Malades,  
Paris, France*

*8. Consultation de Génétique Clinique,  
Hôpital Jeanne de Flandre, Lille, France*

*9. North East Thames Regional  
Molecul Genetics Laboratory, London,  
United Kingdom*

*10. Departement of Clinical Genetics,  
Groningen University Hospital,  
Groningen, The Netherlands*

*11. Service de Chirurgie Plastique,  
Reconstructrice et Esthétique, Hôpital  
Roger Salengro, Centre Hospitalier et  
Universitaire de Lille, Lille, France.*

**15:20**  
page 20 **EAR RECONSTRUCTION  
FOR TRAUMATIC EAR LOSS  
IN INFANCY.**

**F. THIESSEN, B. OELBRANDT, D. GAULT**  
*Great Ormond Street Hospital for  
Children, London, United Kingdom*

**15:30** **Coffee**  
Visit to the exhibit

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**SESSION 2: AESTHETIC SURGERY**  
**Moderators: J.L. Nizet, A. Verpaele**

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**15:50**  
page 21 **FACE LIFTING IN THE  
ELDERLY: THE NEED OF  
LIPOFILLING AND  
ANCILLARY PROCEDURES.**  
H. COOLS  
*A.Z. Jan PALFIJN, Ghent, Belgium*

**16:00**  
page 22 **GLYMATRIX™ – A  
REVOLUTIONNARY CROSS-  
LINKING TECHNOLOGY FOR  
COLLAGEN-BASED INJECTABLE  
FILLER – CLINICAL EXPERIENCE.**  
S.J. MONSTREY<sup>1</sup>, M. HAMDI<sup>1</sup>, T.  
TONDU<sup>1</sup>, J.SHIRI<sup>2</sup>, A. GOLDLUST<sup>3</sup>,  
D. SHOSHANI<sup>3</sup>  
1. Departement of Plastic Surgery,  
University Hospital, Gent, Ghent,  
Belgium  
2. Esthetic Dermatology Unit, Sheba  
Medical Center, Ramat-Gam, Israel  
3. ColBar LifeScience, Herzliya, Israel

**16:10** **PYODERMA GANGRENOSUM AND AESTHETIC SURGERY: CASES STUDIES AND REVIEW OF LITERATURE.**

page 23

B. OUAZZANI<sup>1</sup>, G. DEDOBBELEER<sup>2</sup>,  
J. VAN GEERTRUYDEN<sup>1</sup>,  
J.V. BERTHE<sup>1</sup>, S. DE FONTAINE<sup>1</sup>

*1. Departement of Plastic and Reconstructive Surgery, Erasme University Hospital, Brussels, Belgium*

*2. Departement of Dermatology, Erasme University Hospital, Brussels, Belgium*

**16:20** **VERTICAL MAMMAPLASTY WITH REPAIR OF THE ANTERIOR BREAST FASCIA.**

page 24

G. MULLIE, B. CASAER

*Department of Plastic Surgery, AZ St.-Jan AV Brugge, Bruges, Belgium*

**16:30** **MICROPOLYURETHANE-FOAM SURFACED SILICONE GEL BREAST IMPLANTS: FACTS AND FICTION**

page 25

A. VERPAELE, P. TONNARD

*Coupure Centrum voor Plastische Chirurgie, Ghent, Belgium*

**16:40** **A SIMPLE METHOD FOR EXACT POSITIONING OF THE NIPPEL-AREOLA COMPLEX IN**

page 26

**BREAST REDUCTION SURGERY: AN UPDATE.**

G. KINSBERGEN

*Eeuwfeestkliniek, Antwerp, Belgium*

**16:50** **JUVENILE BREAST HYPERTROPHY.**

page 27

M. MERTENS

*Department of Plastic Surgery, ZNA – Campus Middelheim, Antwerp, Belgium*

**17:00** **GENERAL ASSEMBLY**

**19:00** **Departure of the buses to the Reception**

**19:30** **RECEPTION (Coudenberg, place Royale, 10 - Brussels)**

**20:30** **Banquet (Atrium of the Bellevue Museum)**

Saturday 7th  
May, 2005

**SESSION 1: HAND / UPPER  
EXTREMITY**

**Moderators: C. Van Holder,  
J.P. Moermans**

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**09:00 JOINT AND NAIL PRESERVING  
TECHNIQUES FOR  
ASYMMETRIC WASSEL TYPE  
I THUMB DUPLICATION IN  
CHILDREN AND ADULTS.**

B. OELBRANDT, F. THIESSEN,  
P. SMITH

*Great Ormond Street Hospital for  
Children, London, UK*

**09:10 FASCICULAR GRAFTS AND  
page 29 SELECTIVE NERVE TRANSFERS:  
ACTUAL MICROSURGICAL  
STRATEGY IN OBSTETRIC  
BRACHIAL PLEXUS PALSY.**

J. BAHM, C. OCAMPO

*Euregio Reconstructive Surgery Unit,  
St Franziskus Hospital, Aachen,  
Germany*

**09:20 5 YEAR RESULTS AFTER  
page 30 CONTRALATERAL  
C7-TRANSFER IN ADULT  
BRACHIAL PLEXUS LESIONS**

R. HIERNER, A. BERGER

*Department of Plastic, Reconstructive  
and Aesthetic Surgery, Hand- and  
Microsurgery, Burn Center University  
Hospital Gasthuisberg, Catholic  
University of Leuven, Leuven, Belgium*

**09:30 THE EXTENSOR  
page 31 RETINACULUM AS A  
LIGAMENT REPLACEMENT  
FOR CHRONIC INSTABILITY OF  
THE METACARPOPHALANGEAL  
JOINT OF THE THUMB:  
A PRELIMINARY REPORT**

N. CHAHIDI, K. DROSSOS

*Clinique du Parc Léopold, Brussels,  
Belgium*

**09:40 HAND PALM AND FINGER  
page 32 LIPOMAS: 4 CASE REPORTS.  
TWO YEAR RETROSPECTIVE  
ANALYSIS**

J.I. GARCIA CEBALLOS, P. WYLOCK

*Department of Plastic Surgery,  
Academisch Ziekenhuis, Vrije  
Universiteit Brussel, Brussels, Belgium*

**09:50** **NECROTIZING FASCIITIS OF THE HAND CAUSED BY GROUP A STREPTOCOCCUS AFTER A MINOR LESION OF THE THUMB.**  
page 33  
J. LESAFFER, C. VAN HOLDER, W. SIOEN, C. SOMMELING, L. HAECK  
*Department of Traumatology, OLV van Lourdesziekenhuis, Waregem, Belgium*

**10:00** **CHANGING DONORSITES IN FREE FLAP RECONSTRUCTIONS.**  
page 34  
W. BOECKX, R. VAN DER HULST, L. NANHEKHAN, J. SAWOR  
*Department of Plastic Surgery, University Hospital Maastricht, Maastricht, The Netherlands*

**10:10** **MOVING ANATOMY OF THE FACE AND HAND**  
Mc GROUTHER  
*London, UK*

**10:40** **Coffee**  
Visit to the exhibits

## SESSION 2

**Moderators: P. Wylock,  
D. Goldschmidt**

**11:10** **LESSONS IN SIMPLICITY AND HUMILITY.**  
page 35  
J.C. VAN DER MEULEN  
*Department of Plastic Surgery, Erasmus M.C., Rotterdam, The Netherlands*

**11:40** **RECONSTRUCTION OF THE ENTIRE FACE AFTER SEVERE BURN SCARRING WITH THE USE OF INTEGRA,**  
page 36  
S. COLPAERT, P. MASSAGE, M. VAN BRUSSEL, B. VAN DEN HOF  
*Department of Plastic Surgery, University Hospital Gasthuisberg, Leuven, Belgium*

**11:50** **PLASTIC SURGERY AT HUE CENTRAL HOSPITAL**  
page 37  
PHAM DANG NHAT  
*Huê, Vietnam*

**12:10** **COVERAGE OF LARGE POSTRADIATION DEFECTS OF THE ANTEROLATERAL**  
page 40

## **THORAX WALL.**

C. WEVER<sup>1,1</sup>, DE WEVER<sup>2</sup>, D. VAN RAMDONCK<sup>3</sup>, R. HIERNER<sup>4</sup>

1. *Department of surgery*
2. *Department of oncological surgery,*
3. *Department of thoracic surgery,*
4. *Department of Plastic, Reconstructive and Aesthetic Surgery, Hand- and Microsurgery, University Hospital Gasthuisberg Catholic University of Leuven, Leuven, Belgium*

## **12:20 BASAL CELL CARCINOMA IN PREVIOUSLY IRRADIATED AREAS.**

page 41

E. VANDEWYER<sup>1</sup>, N. RENARD<sup>2</sup>

1. *Plastic Reconstructive and Aesthetic Surgery.*
2. *Pathology Department, Clinique L. Caty, Baudour, Belgium*

## **12:30 Lunch in the Cloister**

Sponsored by Bruco

## **SESSION 3: HISTORY**

**Moderator: M. Depoorter**

### **14:30 DR. COELST, A BELGIUM PIONEER IN STRUCTIVE SURGERY.**

page 42

P. WYLOCK

*Department of Plastic Surgery, Academisch Ziekenhuis, Vrije Universiteit Brussel, Brussels, Belgium*

### **14:50 A PICTORIAL HISTORY OF THE BELGIAN SOCIETY.**

G. MATTON

*Ghent, Belgium*

### **15:10 J.F.S. ESSER**

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M. DEPOORTER

*AZ Sint Jan AV Brugge, Brugge, Belgium*

### **15:30 Coffee**

Visit to the exhibits

## SESSION 4: MISCELLANEOUS

**Moderators: S. Monstrey,  
O. Heymans**

**16:00** **CIRCULAR EXCISION OF  
HEMANGIOMA AND  
PURSE-STRING CLOSURE.**

page 44

L. BOON, R. VANWIJCK  
*Center of Vascular Anomalies, Plastic  
Surgery Department, Cliniques  
Universitaires St Luc, Brussels, Belgium*

**16:10** **FREE NIPPLE GRAFT IN  
BREAST REDUCTION. AN  
OVERLOOKED TECHNIQUE.**

page 45

D. ROSSILLON<sup>1</sup>, C.C. DUPUIS<sup>2</sup>  
1. *C.H. Nivelles, Nivelles Belgium,  
C.H. Jolimont, La Louvière, Belgium*  
2. *Clinique Saint Jean, Brussels  
St Pierre, Ottignies, Belgium*

**16:20** **HISTOLOGICAL EVALUATION  
OF INTERNAL MAMMARY  
VESSELS USED AS RECIPIENT  
VESSELS IN BREAST  
RECONSTRUCTION.**

page 46

B. DE FRENE<sup>1</sup>, M. HAMDI<sup>1</sup>, PH.  
BLONDEEL<sup>1</sup>, K. VAN LANDUYT<sup>1</sup>,  
R. FORSYTH<sup>2</sup>, P.M. PRAET<sup>2</sup>,  
S. MONSTREY<sup>1</sup>

1. *Department of Plastic and Recon-  
structive Surgery, University Hospital  
Gent, Ghent, Belgium*

2. *N. Ghoomaghtig Institute of  
Pathology, University Hospital Gent,  
Ghent, Belgium*

**16:30** **FAT NECROSIS IN DEEP  
INFERIOR EPIGASTRIC  
PERFORATOR LAPS:**

page 47

**A REVIEW OF 202 CASES.**

W. PEETERS<sup>1</sup>, M. VANDEVOORT<sup>1,2</sup>,  
G. FABRÉ<sup>1,2</sup>, R. CHRISTIAENS<sup>3</sup>,  
C. VAN ONGEVAL<sup>4</sup>

1. *Department of Plastic and Recon-  
structive Surgery, University Hospital  
Leuven, Leuven, Belgium*

2. *Department of Plastic and  
Reconstructive Surgery, Heilig Hart  
Roeselare, Roeselare, Belgium*

3. *Department op Senology, University  
Hospital Leuven, Leuven, Belgium*

4. *Department of Radiology, University  
Hospital Leuven, Leuven, Belgium*

**16:40** **MODEL 510, A PRELIMINARY  
EXPERIENCE.**

page 48

K. LAGEY

*Dodoens Ziekenhuis Mechelen en  
Willebroek, Belgium*

*Velthuis Kliniek, Eindhoven,  
The Netherlands*

**16:50** **PHALLOPLASTY: BEST AVAILABLE TREATMENT FOR 46 XY BOYS WITHOUT A PENIS.**

page 49

M. BUNCAMPER, P. HOEBEKE,  
E. VAN LAECKE, P. CEULEMANS,  
S. MONSTREY

*University Hospital Gent, Ghent,  
Belgium*

**17:00** **MERCKEL CELL TUMOR UP-DATED**

page 50

F. GAEDE, O. DE LATHOUWER,  
J.V. BERTHE, J. VAN GEERTRUYDEN,  
S. DE FONTAINE

*Department of Plastic and  
Reconstructive Surgery, C.H.U.  
Erasme, Brussels, Belgium*

**17:10** **PSYCHOLOGICAL EFFECTS OF AESTHETIC SURGERY**

page 51

S.ULENS<sup>1</sup>, P. TONNARD<sup>2</sup>,  
A. VERPAELE<sup>2, 1</sup>, MERVIELDE<sup>3</sup>,  
S. MONSTREY<sup>1</sup>

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*2. Coupure Centrum voor Plastische  
Chirurgie, Ghent, Belgium*

*3. Department of Psychology,  
University Hospital Gent, Ghent,  
Belgium*

**17:20** **VIBROLIPOSUCTION: THE ULTIMATE STEP IN SUCTION LIPECTOMY.**

page 53

O.Heymans, D.VanZeLe, X.Nelissen  
*Department of Maxillo-Facial, Plastic  
and Hand Surgery, CHU Sart Tilman,  
Liège, Belgium*



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1955  
2005



# ANTHROPOMETRIC EVALUATION OF COMPLETE BILATERAL NASOLABIAL CLEFTS CORRECTED BY THE MULLIKEN'S TECHNIQUES IN THE NEONATAL PERIOD

**B. BAYET, H. BENATEAU, P. PENDEVILLE, X. BLAIZOT, R. VANWIJCK**

*Cliniques universitaires St Luc, 10 av. Hippocrate, 1200 Brussels Belgium*

## **Introduction:**

In 1985, Mulliken described a protocol for the correction, at 18 months, of the nose in bilateral nasolabial cleft based on the paradigm "*The columella is in the nose*".

We present the anthropometric evaluation of complete *simultaneous* correction of the lip and the nose, *in the neonatal period*, of bilateral nasolabial clefts by the Mulliken's techniques.

## **Material and Methods:**

From 1995 to 2003, the same surgeon has operated 15 neonates by the Mulliken 1 and 11 by the Mulliken 2 techniques. 32 children with incomplete or syndromic bilateral nasolabial clefts were excluded from the study. Non caucasian were not included. The results of the nasolabial plasties were evaluated according to L.Farkas quantitative assessments.

8 measurements were made on the lip and nose of the operated children. The results were compared to the measurements made by Farkas on 2326 healthy caucasian individuals aged from 0 to 25 years.

## **Results:**

Nasal, vermillion and upper lip height were comparable to normality criteria without significant difference. Nasal tip projection and nasal width were too high with significant difference; columella was slightly too short and too broad. These results are similar to those reported by other authors.

When comparing the 8 measurements in our two groups of patients (Mulliken 1 and 2), no significant difference was observed.

## **Conclusion:**

Our study demonstrates that neonatal correction of nasolabial deformity in bilateral complete cleft by the Mulliken's technique is feasible with anthropometric results similar to other techniques. The Mulliken's 2 technique has to be advocated.

# 3-D FACIAL SOFT TISSUE ANALYSIS: 3-D CT VERSUS 3-D STEREO PHOTOGRAMMETRY.

**G. R.J. SWENNEN<sup>1</sup>, F. SCHUTYSER<sup>2</sup>, N. CUYLITS<sup>1</sup>, A. DE MEY<sup>1</sup>**

<sup>1</sup> *Dept of Plastic Surgery, University Hospital Brugmann (ULB), Place A. Van Gehuchten 4, 1020 Brussels, Belgium*

<sup>2</sup> *Medical Image Computing (Radiology - ESAT/PSI), Faculties of Medicine and Engineering, University Hospital, Gasthuisberg, Leuven, Belgium*

*Dept of Maxillofacial Surgery, Childrens Hospital (HUDE), Avenue J.J. Crocq, 1020 Brussels Belgium*

## **Introduction:**

The purpose of this study is to evaluate accuracy and reliability of three-dimensional facial soft tissue measurements using 3-D CT and 3-D stereo photogrammetry.

## **Material and Methods:**

3-D CT soft tissue measurements and 3-D stereo photogrammetry measurements were performed on a control group of 20 patients. A total of 29 angular, 62 linear measurements and 120 (40 horizontal, 40 vertical and 40 transversal) orthogonal measurements were performed on each patient by two investigators using the Maxilim™ (version 1.3.0) software.

## **Results:**

3-D stereo photogrammetry showed a high accuracy and reliability ( $r^2 > 0.9$ ), except for bony related landmarks (go, zy, or). 3-D CT soft tissue measurements showed a high accuracy and reliability ( $r^2 > 0.9$ ) except for hairline (tr), eyebrow (sci, ft) and eyelid (ps, pi) related landmarks.

## **Conclusion:**

Combination of 3-D CT and 3-D stereo photogrammetry facial soft tissue analysis could overcome problems in bony and hair related soft tissue landmarks.

# LONG TERM RESULTS OF EARLY SIMULTANEOUS LIP AND PALATE REPAIR IN COMPLETE CLP

**A. DE MEY, G. SWENNEN, E. HERION**

*Children Hospital Reine Fabiola, Brussels, Belgium*

This prospective study was designed to test the hypothesis that early simultaneous lip and palate repair doesn't result in more midfacial growth disturbance than a 2 stages repair.

A consecutive series of 56 patients, operated for non syndromic UCLP, were included in this study. Standardized lateral cephalometric RX were analysed at 10 years and 15 years in two groups of patients.

In group 1, patients were operated according to Malek with closure of the soft palate at 3 months and hard palate with the lip at 6 months. 26 patients of this group were evaluated at 10 years and 24 at 15 years. In group 2, patients were operated at 3 months for closure of the lip, hard and soft palate.

30 patients of this group were evaluated at 10 years and 8 at 15 years.

Statistical analysis shows no difference of antero posterior growth between the 2 groups but a difference in vertical height of the mid face between the operated children of both groups and a group of 40 unoperated children matched to age. However, a significant difference in the inclination of the maxillary plane was observed between group 1 and the normal group, but not between group 2 and the normal group. At 15 years, the same growth pattern was observed.

**In conclusion:**

simultaneous early cleft lip and palate repair doesn't impair antero posterior growth of the mid face more than a 2 stages technique. Moreover, a better inclination of the maxillary plane is observed in the one stage group.

## INVOLVEMENT OF IRF6 IN VAN DER WOUDE SYNDROME (VWS), POPLITEAL PTERYGIUM SYNDROME (PPS) AND ISOLATED CLEFT LIP AND PALATE (CL/P)

**M. GHASSIBÉ<sup>1</sup>, B. BAYET<sup>2</sup>, N. REVENCU<sup>1,3</sup>, K. DEVRIENDT<sup>4</sup>, L. VAN MALDERGEM<sup>5</sup>,  
G. MORTIER<sup>6</sup>, D. GENEVIÈVE<sup>7</sup>, O. BOUTE<sup>8</sup>, M. LEES<sup>9</sup>, M. BOUMA<sup>10</sup>,  
Y. GILLEROT<sup>3,5</sup>, C. VERELLEN-DUMOULIN<sup>3</sup>, PH. PELLERIN<sup>11</sup>, R. VANWIJCK<sup>2</sup>,  
M. VIKKULA<sup>1</sup>.**

<sup>1</sup> *Laboratory of Human Molecular Genetics, Christian de Duve Institute of Cellular Pathology and Université catholique de Louvain, Brussels, Belgium*

<sup>2</sup> *Centre Labiopalatin, Division of Plastic Surgery, Cliniques universitaires St Luc, Brussels, Belgium*

<sup>3</sup> *Center for Human Genetics, Cliniques universitaires St Luc and Université catholique de Louvain, Brussels, Belgium*

<sup>4</sup> *Center for Human Genetics, Leuven, Belgium*

<sup>5</sup> *Centre de Génétique Humaine, Institut de Pathologie et de Génétique, Gerpennes (Loverval), Belgium*

<sup>6</sup> *Centrum voor Medische Genetica, Universitair Ziekenhuis, Gent, Belgium*

<sup>7</sup> *Service de Génétique Médicale, Hôpital Necker- Enfants Malades, Paris, France*

<sup>8</sup> *Consultation de Génétique Clinique, Hôpital Jeanne de Flandre, Lille, France*

<sup>9</sup> *North East Thames Regional Molecular Genetics Laboratory, London, United Kingdom*

<sup>10</sup> *Department of Clinical Genetics, Groningen University Hospital, Groningen, The Netherlands*

<sup>11</sup> *Service de chirurgie plastique, reconstructrice et esthétique, hôpital Roger Salengro, centre hospitalier et universitaire de Lille, Lille, France*

Normal development of lips and palate is a highly regulated and complex process. From murine models, human syndromes, association and expression studies, a wide range of proteins, such as transcription factors, growth factors and signaling molecules are shown to be involved in this process. When the structure or expression of one or more of these genes is modified, a cleft of the lip with or without a cleft of the palate may occur. Despite recent investigations on the mode of inheritance and interaction of different factors, genetics of orofacial clefts remains controversial.

An important approach to study CL/P genetics is to evaluate genes known to contribute to syndromic forms of CL/P. They may be useful to demonstrate a significant overlap between syndromic and non-syndromic CL/P. Thus, we initiated our study on van der Woude syndrome (VWS, MIM #119300), an autosomal dominant disorder in which pits of the lower lip and occasional hypodontia are the only features distinguishing the

disorder from isolated clefts. *Interferon regulatory factor-6 (IRF6)* gene, localized on *1q32.2*, was recently shown to harbor mutations in patients with van der Woude and/or popliteal pterygium syndrome (PPS, MIM #119500). We screened *IRF6* for possible mutations in several families with VWS or PPS. Causative mutations identified in 24 families confirm that *IRF6* is the major VWS/PPS gene.

In addition, we investigated the role of *IRF6* in non syndromic CL/P by genotyping two variants, intragenic and 3' of the gene, in a cohort of 353 families. Strong transmission distortion was found for one of the variants and for the haplotype made of the common alleles of the 2 variants. This confirms that *IRF6* is a modifier for isolated cleft lip and palate. (<http://www.icp.ucl.ac.be>) (Michella.Ghassibe@bchm.ucl.ac.be)

# EAR RECONSTRUCTION FOR TRAUMATIC EAR LOSS IN INFANCY.

**F. THIESSEN, B. OELBRANDT, D. GAULT**

*Great Ormond Street Hospital for Children, London*

## **Introduction:**

We report the use of an autologous costal cartilage framework to reconstruct ears lost in infancy.

## **Material and Methods:**

Ears, reconstructed by one surgeon, were identified from the records of the senior author.

Data on the patients were collected by chart review and by physical examination during the last outpatient appointment.

## **Results:**

Seven ears were reconstructed with an autologous costal cartilage framework. The ear loss resulted from extravasation injury (1), arterial thrombosis (1), capillary haemangioma (2), pressure necrosis due to use of a pulse-oxymeter (1), caesarian section (1) and a burn injury(1).

Six of the children were aged between 9 and 13 years at the time of reconstruction. Only one patient waited until adulthood for reconstruction.

In 5 out of the 7 reconstructions the post-operative period was uneventful and the overall outcome was very satisfactory.

In the 2 reconstructions for capillary haemangioma a rescue flap was needed to cover an area of extensive skin loss.

The self-confidence of the 7 children improved remarkably.

## **Conclusions:**

- 1) Four of the 7 children lost their ears in a hospital environment due to technical procedures.
- 2) It is beneficial to delay reconstruction until the age of ten years, in order to have enough cartilage to carve a framework.
- 3) Ear loss due to capillary haemangioma is more difficult to reconstruct.
- 4) Successful autologous ear reconstruction improved self-confidence.

# FACE LIFTING IN THE ELDERLY: THE NEED OF LIPOFILLING AND ANCILLARY PROCEDURES

**H. COOLS**

Achilles MUSSCHE straat 41 - 9000 GENT - A.Z. Jan PALFIJN GENT

Face lifting procedures under local anaesthetic give very satisfying results in the non geriatric age group. But also really older patients consult us to know what can be achieved for them; they are very good candidates for local anaesthetic face lifting as they are reluctant or unable to undergo major operations under general anaesthesia.

However in the 65 + population (which in the nearby future will become very important in Europe) better results are often achieved with a combined lipofilling procedure at the same time. Volume restoration may be more important than the total disappearance of wrinkles. Laser resurfacing, requiring general anaesthesia is mostly declined in this age group.

Simple straightforward techniques like blepharoplasty, browlifting, interpore or implant placement, etc. can be performed in short 2 to 3 hour sessions under local anaesthetic, seperately or together with a MACS lift.

Cases of 65+ women and men are presented.

## GLYMATRIX™- A REVOLUTIONARY CROSS-LINKING TECHNOLOGY FOR COLLAGEN-BASED INJECTABLE FILLER - CLINICAL EXPERIENCE

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<sup>3</sup> ColBar LifeScience, Herzliya, Israel

Glymatrix™ technology is based on ribose induced cross-linking of atelopeptide porcine type I collagen, namely collagen from which the most antigenic ends were removed.

This technology mimics the natural cross-linking pathway of collagen in the body known as glycation. Unlike many other cross-linking technologies, the Glymatrix™ technology does not require the use of potentially toxic chemicals, and achieves cross-linked collagen with a long lasting effect, and which closely resembles natural collagen in the skin.

EVOLENCE™ is a new product, based on the Glymatrix™ technology. In the first clinical trial of EVOLENCE™30 (EVOLENCE™ 30 mg/ml), the biocompatibility and persistence of EVOLENCE™30 were tested; the safety and efficacy were compared with those of Zyplast® (bovine cross-linked collagen), following a treatment for nasolabial folds in 12 volunteers. Participants were tested for hypersensitivity to porcine and bovine collagen and received an EVOLENCE™30 injection in the posterior auricular fold to evaluate histopathology and adverse reactions. If these tests were negative, participants were randomly assigned to receive an injection of EVOLENCE™30 into one nasolabial fold and Zyplast® on the contralateral side. Safety assessments included physical examination and evaluation of injections sites, punch biopsies for histopathology assessment, adverse events and blood sample analysis. The 7-grade Modified Fitzpatrick Wrinkle Scale (MFWS) was used by 3 independent blinded assessors to assess efficacy. Initially, EVOLENCE™30 and Zyplast® improved wrinkle severity to a similar extent. However, for an average of 18 months after treatment, wrinkle severity was inferior on the Zyplast®-treated folds (mean MFWS score 1.14) than on the EVOLENCE™30-treated folds (mean MFWS score 0.73). Assessment by the blinded assessors showed that the treatment effect was superior on the EVOLENCE™30-treated side in 9 of the 11-treated participants (p=0.022). No treatment-related adverse events were reported, only mild and transient erythema was observed in both treatment sides and there was no hypersensitivity or abnormal laboratory findings.

In conclusion, EVOLENCE™30 enables safe and effective correction of age-related defects in the nasolabial area which lasts significantly longer than the one related to Zyplast®.

# PYODERMA GANGRENOSUM AND AESTHETIC SURGERY: CASES STUDIES AND REVIEW OF LITERATURE

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J.-V. BERTHE<sup>1</sup>, S. DE FONTAINE<sup>1</sup>**

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Pyoderma Gangrenosum (PG) is a rare cause of ulcerative cutaneous lesions.

PG may occur at any localisation, after minor trauma, surgery or spontaneously. Initially, the lesions begin as vesicles, papules or papulopustules, and these will evolve to an ulcerative defect. After surgery, fresh scars will evolve to non-healing ulcerations in the case of PG, leading to complex diagnostic situations.

Associated disease is found in 70% of the cases of PG appearing spontaneously or after a minor trauma. Inflammatory bowel disease, seropositive or seronegative arthritis, vascular diseases and malignancy are the more frequent.

PG is a diagnosis of exclusion, and is based mainly on the clinical history and the evolution of the skin lesions. Laboratory and histopathologic findings are non-specific.

The treatment of PG is systemic corticotherapy. A surgical debridement is contraindicated, as it may produce severe exacerbations of lesions. These patients must be closely monitored to prevent treatment toxicity, and to detect the possible occurrence of an associated disease.

We report three cases of PG, all arising rapidly on the fresh scars of the previous aesthetic procedure: one appeared bilaterally after a breast reduction, one appeared after a bilateral breast augmentation, and one appeared after an abdominoplasty.

We review the cases of PG associated with aesthetic surgery reported in the literature.

# VERTICAL MAMMAPLASTY WITH REPAIR OF THE ANTERIOR BREAST FASCIA

**G. MULLIE, B. CASAER**

*Department of Plastic Surgery, AZ St.-Jan, Brugge*

**Purpose:**

Presenting the technique of repair of the anterior breast fascia. Comparing the outcome of breast reductions with and without repair of the anterior breast fascia

**Methods:**

100 consecutive breast reductions performed by the same surgeon between 2000 and June 2003 were reviewed for pre- and postoperative measurements. Complications were recorded and pictures analyzed. An inquiry was sent to the patients to measure patient satisfaction. 50 patients with more than 2 years of follow-up were clinically evaluated by the junior author.

**Results:**

The outcome of breast reductions with repair of the anterior breast fascia is superior to those performed with a classical vertical scar mammoplasty.

**Conclusion:**

Repair of the anterior breast fascia is simple and enhances the shape of a vertical breast reduction, especially in heavy breasts and after bariatric surgery without adding any complications. On the contrary it reduced the need for secondary surgery of excess infra mammary skin correction. But most important it prevents bottoming out .The technique could be used in other breast reduction types.

# “MICROPOLYURETHANE-FOAM SURFACED SILICONE GEL BREAST IMPLANTS: FACTS AND FICTION”

**A. VERPAELE, P. TONNARD**

*Coupure Centrum voor Plastische Chirurgie, Gent*

## **Background:**

In the choice of breast implants for both aesthetic and reconstructive augmentation there has ever been a struggle between aesthetic appearance and natural feeling on the one hand, and safety on the other hand. After many types of implant shells and contents the Micro PolyUrethane Covered Silicone Gel implant proves its unmatched safety and pleasing results. A review of the history concerning the safety of these implants is given.

## **Technique:**

The implants are placed through a hemicircular periareolar or inframammary incision, and positioned in the retroglanular or partial retromuscular plane. Due to the high friction coefficient of the polyurethane cover a meticulous placement of the prostheses is of utmost importance.

## **Experience:**

Since January 2001 402 Micro PolyUrethane Covered Cohesive Silicone Gel implants of the Silimed® brand were placed in 202 patients, the majority being aesthetic indications. 198 were round implants, 204 anatomical. 232 were placed in a retropectoral position, 170 prepectorally. In 28 patients a mastopexy was associated.

Initially the augmented breasts show a slightly firmer consistency due to the inflammatory response to the polyurethane, but after 6-8 months the implants become impalpable.

No major complications were encountered, and so far no capsular contracture was reported. Early in the series, 6 revisions, performed after 3-6 months, were necessary for correction of a high riding position or a fold in the prosthesis.

## **Conclusion:**

Micro PolyUrethane Covered Silicone Gel implants have an unmatched safety and allow the highest quality of aesthetic and naturally feeling breast augmentation. A meticulous placement technique is mandatory. They are now used in all of our aesthetic and reconstructive breast augmentations.

# A SIMPLE METHOD FOR EXACT POSITIONING OF THE NIPPLE-AREOLA COMPLEX IN BREAST REDUCTION SURGERY AN UPDATE

**G. KINSBERGEN**

Eeuwfeestkliniek, Antwerpen

4 years ago, I gave a presentation stating that in breast reduction surgery the nipple should be positioned pre-operatively at the level of the inframammary fold and that the lateral end of the inframammary fold an easy guideline is to do so.

Long term follow-up results (up to 10 years) are shown to confirm this statement.

## JUVENILE BREAST HYPERTROPHY

**M. MERTENS**

*Department of Plastic Surgery, ZNA – Campus Middelheim, Antwerp*

A case of virginal macromastia in an 12 year old girl with gigantic proportions and physical and psychological disability will be presented.

Types of surgery & endocrinological follow-up will be discussed.

1955  
2005

# JOINT AND NAIL PRESERVING TECHNIQUE FOR ASYMMETRIC WASSEL TYPE I THUMB DUPLICATION IN CHILDREN AND ADULTS.

**B. OELBRANDT, F. THIESSEN, P. SMITH**

*Great Ormond Street Hospital for Children, London, UK*

We describe the management of Wassel type I thumb duplication in the young adult and in the child. The utilized techniques will depend on three variables: the presence or absence of symmetry of the two distal phalanges, the presence of a normal or an abnormal interphalangeal joint, and the presence of an open growth plate in the terminal phalanx.

The Bilhaut procedure is used for the symmetrical cases. In the asymmetrical cases i.e. those with a discrepancy in size and alignment of the two phalanges, and open growth plates, the radial phalanx, which is normally smaller, can be excised, and an opening wedge osteotomy of the remaining ulnar terminal phalanx will be performed. In asymmetrical cases presenting after closure of the growth plates, the radial phalanx can be resected while retaining its base, the ulnar phalanx will be shifted onto this base and the proximal phalanx will be reduced to the appropriate width. If the proximal phalanx is a delta phalanx, then this will need a separate osteotomy to correct the angular deformity in the IP joint.

# FASCICULAR GRAFTS AND SELECTIVE NERVE TRANSFERS: ACTUAL MICROSURGICAL STRATEGY IN OBSTETRIC BRACHIAL PLEXUS PALSY

**J. BAHM, C. OCAMPO**

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## **Material:**

Between 1997 and 2004, some 150 microsurgical reconstructions of severe obstetric lesions of the brachial plexus were performed and followed. Surgery includes complete plexus exploration and neurolysis, resection of neuroma, interfascicular grafting on available and healthy proximal root stumps and eventually associated extraplexic nerve transfers.

## **Methods:**

We describe the most frequent lesion patterns with increasing severity and the evolution of our reconstructive strategy. We focus on details about surgical quality and strategic choices among intra- and extraplexic nerve donors.

## **Results:**

The outcome obviously depends on the timing for primary surgery, the lesion severity (especially the number of root avulsions), the histologic quality of proximal root stumps, the number, quality and coaptive precision of the grafts and the postoperative reeducation protocol able to enhance cortical reintegration of the impaired limb.

## **Conclusion:**

Microsurgery offers various techniques to enhance the functional outcome of severely impaired upper limbs after obstetric brachial plexus palsy. Improvement is still possible when indications and details of the reconstructive surgery are discussed among colleagues in an open and constructive way.

## 5 YEAR RESULTS AFTER CONTRALATERAL C7-TRANSFER IN ADULT BRACHIAL PLEXUS LESIONS

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**Introduction:** Since 1995 contralateral C7-Transfer become a new source of axon donor in complete brachial plexus lesions in our institution.

**Material and Method:** Between 1995 and 2001 18 adult patient were treated. As shown by GU we are using a two stage procedure with exploration and extraplexuell neurotization of the suprascapular neve using ½ spinal accessory nerve. Depending on the intraoperative findings the musculocutaneous nerve is neurotized by the phrenic nerve at the time of primary moperation or secondarily neurotized by the contralateral C7 root. If the musculocutaneous nerve could be neurotized by the phrenic nerve C7-transfer is used to reinnervate the median nerve. If ever possible the vascularized ulnar nerve graft or if not availabe two sural nerves are used. Neurotization of the musculocutaneous nerve was carried out in 8 , and of the median nerve in 10 patients. There are 6 patients in the MC group and 4 patients in the Median group with more than 3 years of follow-up. Criterias for evaluation used are, donor site morbidity, classification), time for recovery, time for autonomization, and functional result. Successful elbow flexion is achieved if muscle power > M3, successful median nerve motor function is achieved if a primitive power grip pattern is achieved.

**Results:** All patients were complaining of paresthesia in the dorsal part of P3 of the thumb, index and middle finger. There was complete sensory at the 3 month postoperative examination. There was no clinical evident motor loss at the donor extremity.

A successful elbow flexion, i.e. muscle power > M3 was achieved in all 6 patients after 9 to 15 months. 4 of 6 patients are able to use this function individually. In the other two patients a start command must be given voluntarily from the contralateral side (contraction of the latissimus dorsi muscle).

A functional primitive grip pattern could be achieved in 1 out of 4 patients after 18 months. In three patients although there is movement this mouvement must be judged "academic" at the present state.

**Discussion:** The C7-transfer prooved to be a save transfer if at the time of operation no fascicles innervating wrist and finger extension are taken. Provided adequate biceps muscle organ function active elbow flexion can be reconstructed in most of the patient. However for median nerve reinnervation motor results are moderate up to now.

**Conclusions:** Active elbow flexion is necessary for minaual work. Knowing the different possibilites of nerval reconstruction and secondary tendon transfers should make reconstruction of active elbow flexion possible in almost every partial brachial plexus and in most complete brachial plexus lesions.

# THE EXTENSOR RETINACULUM AS A LIGAMENT REPLACEMENT FOR CHRONIC INSTABILITY OF THE METACARPOPHALANGEAL JOINT OF THE THUMB: A PRELIMINARY REPORT

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**Background:** A variety of surgical procedures for chronic instability of the MCP joint of the thumb have been described: simple suture, static or dynamic ligamentoplasty or arthrodesis of the MCP joint . We are reporting our clinical experience using the extensor retinaculum as a ligament replacement at the MCP joint of the thumb.

**Patients & methods:** The indication for this procedure is a chronic symptomatic instability of the MCP joint caused by a insufficient ulnar or radial collateral ligament without any arthritic lesion of the MCP joint . The procedure is performed under Bier bloc . The MCP is exposed as for a simple suture of the ligament, the remnants of the ruptured ligament are excised and the proximal and distal insertions of the ligament are prepared by exposing the bone .

A strip of extensor retinaculum is harvested through a transversal incision over the wrist and used as a graft . The distal end of the graft is inserted into the base of the phalanx by a Mini-Mitek anchor and proximal end is fixed by a second Mini-Mitek anchor precisely at the point of origin of the collateral ligament .The stability of the joint and the full flexion of the MCP are tested passively. The adductor pollicis aponeurosis is closed . The MCP joint is immobilized in position of function for 4 weeks .

Four patients with chronic MCP instability were treated using the described technique . Three patients with ulnar and one with radial instability. The mean age is 49y(43-59y), three females one male . The interval between the trauma and surgery is 3,5 months (2-6M).

**Results:** The mean follow up is 3,5 months (3-4M). All MCP joints are stable .The mean key pinch strength is 80% (95-58%) of the unharmed thumb . The mean MCP flexion is 55°(50-60°) with no lack of extension. The Kapandji score of mobility is in average 9/10 .

Two patients are complaining of a swollen joint after 4 months .

**Conclusion:** Despite our short experience, we consider this technique simple and reproducible with excellent clinical results for the treatment of chronic instability of the MCP joint .

## HAND PALM AND FINGER LIPOMAS: 4 CASE REPORTS. TWO YEAR RETROSPECTIVE ANALYSIS\*.

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*Department of Plastic, Reconstructive and Aesthetic Surgery, Academisch Ziekenhuis, Vrije Universiteit Brussel*

Lipomas occur anywhere in the body but are rarely found in the fingers. Lipomas in the deep palmar space of the hand are also unusual tumors.

Two hand lipomas, one in the deep palmar space and another in the thenar eminence, and two finger lipomas are reported in this article. A retrospective overview in our practice between Jan 2002 to January 2004 of this pathology is illustrated.

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# NECROTIZING FASCIITIS OF THE HAND CAUSED BY GROUP A STREPTOCOCCUS AFTER A MINOR LESION OF THE THUMB.

**J. LESAFFER, C. VAN HOLDER, W. SIOEN, C. SOMMELING, L. HAECK**

*Department of traumatology, OLV van Lourdesziekenhuis Waregem*

## **Introduction:**

Necrotizing fasciitis is a rapidly spreading and life-threatening infection of the fascia with secondary skin necrosis and general toxicity. The outcome of patients with necrotizing fasciitis depends on early diagnosis, aggressive surgery, appropriate antibiotic therapy and intensive supportive therapy. Necrotizing fasciitis caused by group A streptococcus tends to occur in individuals with no known risk factor.

## **Materials and methods:**

A 54-year-old woman was admitted with symptoms of pain, erythema and swelling of the thumb four days after a small injury of the thumb. 48 hours after initial incision and drainage the patient developed a skin necrosis with erythema of thumb and thenar. Diagnosis of necrotizing fasciitis was made on Gram stain and peroperative frozen-section biopsy and an aggressive debridement was performed which resulted in amputation of the thumb at the level of the MCP joint. The patient was admitted at the ICU. The wound was covered with a reverse radial forearm flap two weeks postoperatively. Four months after initial presentation a toe-to-thumb was performed using a modified wraparound procedure using the right first toe.

## **Results:**

The patient utilizes the thumb in daily activities. The donor site causes no walking difficulties.

## **Discussion:**

Necrotizing fasciitis of the hand is a rare life-threatening clinical entity. Despite urgent surgery the functional consequences are frequently devastating. In this case a delay was noticed between injuring the thumb, the initial debridement and developing a full blown necrotizing fasciitis of the hand. Although there is a palmar aponeurotic system of the thumb, a continuous muscle covering fascia is lacking. This could explain a delay before the bacteria reach the thenar fascia at the base of the thumb resulting in a rapid evolution of destruction.

## CHANGING DONORSITES IN FREE FLAP RECONSTRUCTIONS.

**W. BOECKX, R. VAN DER HULST, L. NANHEKHAN, J. SAWOR**

*Department of Plastic Surgery, University Hospital Maastricht, The Netherlands.*

Since our first microvascular Free Flap transfer in 1973 I have performed more than 2000 Free Flaps . 35 years of microsurgery at the KUL and AzM have seen a change in donorsite selection.

The Mc Gregor Groin flap and Shaw and Payne SIEA flap were the first .

The technical difficulty was high and the dissection tedious. More robust Myo(cutaneous) flaps increased the reliability and popularity of free Flap surgery. The Latissimus dorsi, Rectus Abdominis and Gracilis Free Flap were the workhorses for Lower leg reconstructions. A muscle without skin island but covered with a split skin graft provided the adequate thickness and lack of bulck. The Scapular free Flap proved to be reliable but turning the patient for flap harvesting decreased it's popularity. The Tensor Fascia Lata Free Flap was only used for a short period of time due to it's unavoidable muscle bulkiness near the pedicle. In the Head + Neck area the radial forearm flap was the flap of choice . However donor site healing problems brought us to prefer the mini Latissimus FF , later followed by the Lateral Arm free flap and more recently the Anterolateral Thigh Free flap . Here the anterograde dissection of the transmuscular course of the perforator can be tedious and difficult.

For Breastreconstruction the Microvascular TRAM flap has been used since 1988, anastomosed by preference on the Internal mammary vessels.

Since our experience with the DIEP Free Flap in 2001 we have improved the reliability by harvesting an average of 5 perforators with a minimuscle fragment of rectus abdominis muscle and reduced bulging. The S-Gap perforator Free Flap is used when insufficient volume is available on the abdomen. Increasing donor site aesthetics, decreasing donorsite morbidity and improved simplicity allowed us to bring down the breast reconstruction operation time to 4 hours.

Simplicity and reliability with standardized post op flap monitoring have made free flap reconstructions to be well accepted routine surgery in our department.

# LESSONS IN SIMPLICITY AND HUMILITY

**J.C.VAN DER MEULEN**

*Department of Plastic Surgery, Erasmus M.C. Rotterdam*

This presentation concerns the basic principles used and results obtained in a series of palpebral and nasal reconstructions



## RECONSTRUCTION OF THE ENTIRE FACE AFTER SEVERE BURN SCARRING WITH THE USE OF INTEGRA®

**S. COLPAERT, P. MASSAGE, M. VAN BRUSSEL, B. VAN DEN HOF**

*Department of Plastic Surgery, University Hospital Gasthuisberg, Leuven*

The best way of preventing hypertrophic scarring after deep dermal burns of the face is adequate excision and resurfacing, combined with silicone and pressure therapy. However, occasionally one comes across cases where deep facial burns have been left to heal by themselves, without proper aftercare.

In treating hypertrophic scarring in the face several reconstructive options are available from dermabrasion to grafts, flaps and even facial transplantation.

We present 2 cases, where reconstruction of the entire face was performed with an artificial dermal template (Integra®) and split thickness skin grafts.

The final results show good skin quality without scar hypertrophy. There was return of facial expressions. Skin color match was dependent on the skin graft donorsite. The risk of infection of the artificial dermis could be prevented in both cases by careful preparation of the wound bed with cadaveric skin.

In our opinion, the results obtained in these two patients are better than we could have achieved using more complex techniques. Moreover, this technique has minimal donorsite morbidity and few complications. Has tissue-engineering finally found its place on the reconstructive ladder ?

# PLASTIC SURGERY AT HUE CENTRAL HOSPITAL

## Pham Dang Nhat

### **Introduction:**

Hue Central Hospital is the oldest Hospital in Vietnam. It was founded in 1894 as a polyclinic hospital. Surgeons of the Department of Surgery had to perform all kinds of surgery until the 1990ies when the specialization started. Since then plastic and reconstructive surgery has really become a specialty and developed.

### **Background:**

- Start point: At the end of the 60ies and early 70ies, the first real plastic surgery procedures were performed in Hue by Dr. Christian Charles Dupuis, a Belgian plastic surgeon, who came and worked as an Associate professor at the Faculty of Medicine of Hue. He is the one who gave the first knowledge in the field of plastic surgery to our surgeons at that time, so we consider him the father of plastic surgery of Hue.
- Latent period: From 1974 to 1992, orthopedic surgeons were responsible for most of the work of reconstructive surgery in Hue. We could only do skin graft, some kind of random local skin flaps, and emergency hand surgery. The need of reconstruction for burn patients, congenital disorders and the victims of war accidents became urgent at our place. In 1988 Hue Central Hospital began to send some surgeons to Hanoi and then to the U.S.A. to be trained in plastic and reconstructive surgery.
- After finishing their training in 1993, the trainees came back to promote plastic surgery in Hue. One team was responsible for cleft lip, cleft palate and maxillo-facial reconstruction; the other was responsible for general plastic surgery and limb reconstruction. Since then we have had many opportunities to improve our knowledge and skills as well as to gather experience from our daily work and through the assistance of many guest teams of plastic surgeons coming from all over the world.
- It was a wonderful coincidence that Dr. Dupuis came back to visit Hue in 1994, when we were starting again our plastic surgery. Since then he has come back almost every year to help us and to establish the cooperation between the Belgian Society of Plastic, Reconstructive and Aesthetic Surgery and Hue. The 5 International Courses in Plastic Surgery from 1998 to 2002 that the Belgian professors and doctors have organized in Hue have been the corner stone in developing plastic surgery not only in Hue, but also in the whole of the Central Area of Vietnam.

### **Actual activities:**

The number of operations as well as the number of techniques used has been growing from year to year.

We hope that the following statistic of the procedures that we have performed in 2004 can give an overall idea about the activity of plastic and reconstructive in Hue - Vietnam.

• **Coverage: 315 procedures**

Procedure	□	
Skin graft	□	102
Local skin flaps	□	
Fascio-cutaneous flaps: 78 cases	Supra malleolar flap	19
	Sural flap	29
	Medial plantar flap	4
	Chinese flap	9
	Posterior interosseous flap	12
	Becker flap	5
Muscular flaps: 29 cases	Gastrocnemius flap	15
	Soleus flap	14
Musculo-cutaneous flap (Gluteus maximus)		5
Microvascular free flaps: 36 cases	LD free flap	10
	Gracilis free flap	6
	TFL free flap	4
	Parascapular free flap	6
	Radial ante-brachial free flap	3
	Free fibular transfer	5
	Free Iliac crest transfer	2
Tissue expansion	□	4

• **Burn reconstruction: 38 procedures**

• **Hand surgery: 332 procedures**

Procedure	□	
Hand coverage: 68 cases	Cross-finger flap	21
	V-Y flap	29
	Kite flap	12
	Dorso commissural flap	6
Tendon surgery: 142 cases	Primary repair:	102

	Two stage reconstruction	13
	Tendon transfers	16
	Radial transfer	4
	Riordan - Bunnel transfer	5
	Trapezius transfer	2
	Flexoplasty	12
Congenital hand: 27 cases	Polydactily	8
	Syndactily	5
	Ring constriction	2
	Club hand 2	33
Burn hand reconstruction:		5
Replantation:		40
Nerve: 55 cases	Micro repair	15
	Nerve graft 15	

- **Cleft lip and cleft palate: 154 cases**
- **Breast reconstruction: 5 cases**
- **Cosmetic: 113 procedures**, in which:
  - 39 Blepharoplasties for aging eyelids and 14 for single eyelids.
  - 41 Rhinoplasties: mostly augmentation with silicone implants.
  - 5 Face-lifts.
  - 3 Micro liposuctions.
  - 21 Scar revisions

### **Conclusion**

Hue Central Hospital has officially started its plastic surgery department in 1994. Since then the number of operations as well as the number of techniques has been growing up year by year. Up to now the total number of procedures of plastic and reconstructive surgery is about 900 per year with an acceptable result. The Belgian Society of Plastic, Reconstructive and Aesthetic Surgery has played an important role in the development of Plastic surgery at our place. We, however, still need assistance to develop the scope of our surgery and invite our international colleagues to come and work with us on specific problems, such as breast reconstruction or microsurgical thumb reconstruction.

## COVERAGE OF LARGE POSTRADIATION DEFECTS OF THE ANTEROLATERAL THORAX WALL

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**Objective:** Radiotherapy may lead to chronic tissue break down with disturbed wound healing, chronic wounds and ultimately development of malignant carcinoma. Treatment of such large defects does require a multidisciplinary approach with adequate resection of the irradiated tissue and immediate coverage by viable tissue.

**Methods:** In a retrospective clinical study 12 patients who underwent a combined procedure were reviewed. The age ranged from 54 to 85 years. In all patient significant bone damage (ribs and sternum) existed, therefore 2 or more ribs had to be resected partially. In addition a partial sternectomy had to be carried out in 3 of them. Defect coverage was carried out using a unilateral pectoralis major flap<sup>(1)</sup>, bilateral pectoralis major flap<sup>(1)</sup> and a pedicled myocutaneous latissimus dorsi flap in 10 patients. Study criteria were: length of operation, length of postoperative intubation, occurrence of postoperative pneumonia, wound conditions and complications.

**Results:** Length of operation took 3.20 to 6.50 h. In 2 patients immediate postoperative extubation was possible. Length of postoperative intubation took 1 to 24 days. In 4 of 12 patients postoperative pneumonia occurred. In 4 patients wound healing problems occurred, making a secondary operation necessary. 1 patient died because of fulminant respiratory failure. In 4 of 12 patients histological examination of the chronic wound revealed a squamous cell carcinoma.

**Conclusions:** Operative care of large thoracic wall defect after radiotherapy is very often done in elderly patients with reduced general health. Because of longstanding chronic defects, squamous cell carcinoma must be anticipated especially in large wounds with sudden rapid tissue break down. The adequate debridement is the basis of successful treatment. For defect coverage a variety of pedicled flaps is available, thus free tissue transfer is the rare exception. If ever possible extubation should be carried out as soon as possible, as the incidence of pneumonia does increase with the number of days of intubation. By using a multidisciplinary approach morbidity and mortality can be significantly reduced.

## BASAL CELL CARCINOMA IN PREVIOUSLY IRRADIATED AREAS

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<sup>2</sup> *and Pathology department, Clinique L. Caty, Rue L. Caty 136, 7331 Baudour, Belgium*

Basal cell carcinomas are really common skin cancer. Chronic sun exposure is considered as the main etiologic factor for its development but it does not explain all observed lesions. Chronic exposition to low dose of radiation therapy has been reported as a possible causative factor. Here is presented a serie of 32 patients with 48 basal cell carcinomas developing in previously irradiated areas of the body. All were treated by surgery alone. Clinical presentation was classical: a slowly growing chronic ulceration. None of the patients was chronically exposed to chemical agents. In this series, only 12 patients were initially irradiated for benign diseases. This underlines the necessity to have regular skin screening after external irradiation.

## DR. COELST, A BELGIAN PIONEER IN STRUCTIVE SURGERY

### P. WYLOCK

*Department of Plastic Surgery, A.Z. - V.U.B.*

Little is known about the history of plastic surgery in Belgium.

Even during the celebrations to mark the 100<sup>th</sup> anniversary of the Royal Belgian Society of Surgery in 1993, no attention was paid to the specialist field of plastic surgery.

The beginning of plastic surgery as a specific discipline during the years between the World Wars was regarded with suspicion all over the world by the established surgeons of the time.

For a long time Maurice Coelst (1894-1963) was the only plastic surgeon in Belgium.

In 1931 the first issue of the “Revue de Chirurgie Plastique” appeared.

He operated in a private clinic because the great surgeons of this period believed that there was no need for this type of surgery.

In 1955 Maurice Coelst became a co-founder of the Belgian Society of Plastic Surgery.

He was the first president of the Society from 1955 till 1961, and its Honorary President in the years afterwards.

The history of our profession in Belgium is for ever associated with the name Maurice Coelst.

## J.F.S.ESSER

### M. DEPOORTER

*AZ SinT-Jan AV Brugge, Ruddershove 10, B-8000 Brugge*

World War I has been a milestone in the evolution of plastic surgery, the military victims treated by Hippolyte Morestin and his “Gueules cassées” in Paris, Harold Gillies at Aldershot and J.F.S.Esser as a civilian surgeon on the Austro-Hungarian side.

The surgeon Johannes Fredericus Samuel Esser (°1877) is well known for the “epithelial inlay” (1917), the cheek rotation flap, the bilobed flap and the biological or arterial flap (axial pattern flap). He published an extensive book on the “Artery Flaps” describing the basics of modern flap surgery.

H.D.Gillies (1920) is referring to the Esser inlay as a procedure he performed with considerable success.

Besides his medical activities, Esser was an international well-known chess player, an art collector and a good real-estate businessman.

Esser was a Don Quichote in the attempt to realize a utopic dream, establishing an international scientific institute for plastic and reconstructive surgery. (A free state devoted to international plastic surgery).

In order to obtain support for this ideal, he traveled worldwide and performed difficult operations in many countries, mainly by invitation.

He became an active contributor of the first *European Journal Revue de Chirurgie Plastique*, edited by Maurice Coelst of Brussels.

In 1934, the institute Esser de Chirurgie Structive was officially founded.

In October 1936, Esser was elected Honorary President of the first European Congress of Plastic Surgery in Brussels.

Well known authors (D.N.Matthews (1946), Ferris Smith (1950), Calvin Padgett (1948)) refer in extenso to the innovative work of J.F.S.Esser

# CIRCULAR EXCISION OF HEMANGIOMA AND PURSE-STRING CLOSURE

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## **Introduction:**

Infantile haemangioma acts like a tissue expander. This rapidly growing tumor causes cutaneous laxity and scarring. Parents are highly demanding to minimize scarring mainly in the face. Surgeons try to minimize the scar as much as possible. The circular excision and purse-string closure described by John Mulliken is a valuable solution.

## **Material and methods:**

17 children (11 girls, 6 boys) with infantile hemangioma at any stage of evolution have been operated according to Mulliken's technique from 2002 to 2004. The follow-up time is at least 6 months. 6 were located in the face, 8 on the trunk, 3 on the limbs. 3 were resected during the proliferative phase and 14 during the involuting or involuted phase.

A circular excision was performed and the edges of the wound were drawn together by a single 4-0 or 5-0 running, intradermal polydioxanone suture. Tightening the sutures closed the wound. If a small opening remained, few resorbable sutures were added and glue was put on the top. It took only a few weeks for the radial ridges to flatten. At the end of the remodelling phase of the scar, it might be necessary to do another circular or lenticular excision.

## **Results:**

After single circular-excision/purse-string closure, the mean long-axial diameter (length) decreased by 45 percent, the mean short-axial width (width) decreased by 73 percent. Breakdown of the suture was observed in 4 patients. Subsequent revision to a linear scar was requested by the parents of 4 patients.

## **Conclusion:**

Circular excision of haemangioma and purse-string suture reduces both the longitudinal and transverse dimensions and converts a large circular lesion into a small ellipsoid scar.

## FREE NIPPLE GRAFT IN BREAST REDUCTION. AN OVERLOOKED TECHNIQUE.

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The authors stress the importance of keeping in mind an ancient technique in breast reduction too little used nowadays.

The tendency is actually to focus exclusively on the size of the scar. However as surgeons we must never forget the “primum non nocere”.

A quick and safe recovery without risking a nipple necrosis in very large breast reductions satisfies both the patient and the surgeon.

The authors have reviewed their cases of breast reduction with nipple graft according to the Thorek technique.

The indications, technical points, complications and satisfaction rate will be discussed.

# HISTOLOGICAL EVALUATION OF INTERNAL MAMMARY VESSELS USED AS RECIPIENT VESSELS IN BREAST RECONSTRUCTION

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## **Introduction:**

Microsurgical techniques have greatly expanded the quality of reconstructive breast surgery. Nowadays, free DIEAP, SGAP and SIEA flaps are used on a routine base at our department, with the internal mammary vessels as our first choice recipient vessels.

## **Aims:**

To study the histological changes of donor and recipient vessels used in free flap breast reconstruction and correlate these results with possible preoperative risk factors such as radiotherapy and chemotherapy.

## **Material en Methods:**

Internal mammary vessel biopsies of 100 consecutive free-flap breast reconstructions were intra-operatively collected and paraffin embedded. Each biopsy underwent H&E staining, a Movat pentachrome stain and a SMA immunohistochemistry. These stains allow us to evaluate more critically any preoperative histological damage to the internal mammary vessels. Preoperative risk factors were recorded and correlated with histological changes.

## **Results and discussion:**

Severe microvascular damage, characterised by fragility of the vessel wall, was noted in 12 patients (12%). Histologically, this damage consisted of fibrosis together with loss of proteoglycans and atrophy of the vascular smooth muscle cells in the media of the internal mammary arteries. Radiotherapy was implicated in 9 out of the 12 damaged arteries (75%), with only minimal changes noted in the internal mammary veins.

**Conclusion:** Microvascular damage of internal mammary arteries used as recipient vessels in breast reconstruction has been demonstrated to be most frequently due to preoperative radiotherapy in this series. Revision of the anastomoses seems not to be correlated with one or more of the risk factors.

# FAT NECROSIS IN DEEP INFERIOR EPIGASTRIC PERFORATOR FLAPS: A REVIEW OF 202 CASES

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Fat necrosis remains a rather frequent complication after autologous breast reconstruction. The knowledge is limited, because previous studies used vague and diverse definitions, and were based on physical examination only. This study examined 202 deep inferior epigastric perforator (DIEP) flaps for breast reconstruction with respect to fat necrosis. Our findings of the prevalence of fat necrosis are not only based on a physical examination, but also on ultrasound imaging. Physical examination revealed a palpable mass or focal thickening of the flap in 28 patients (13,8%) with fat necrosis. Ultrasound examination added an other 43 patients (21,2%) with formation of a firm area of scar tissue with a diameter  $\geq 5$ mm. For these two findings, the following explanatory variables were checked in logistic regression models: age, smoking, body mass index, timing of the reconstruction, timing and extend of radiation therapy fields. In contrast to previous studies, none of these variables were statistically significant for the occurrence of fat necrosis. These results suggest that there is no need for a delayed reconstruction in patients who need post-mastectomy radiation therapy. We conclude that the incidence of fat necrosis in DIEP flaps is much higher than expected on a clinical base. Nevertheless, the overall complication rate of DIEP flaps is definitely lower than reported after other autologous and implant-based reconstructions.

## MODEL 510, A PRELIMINARY EXPERIENCE

**K. LAGEY**

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Model 510 is a new prosthesis created by Mc Ghan. It was introduced in the Netherlands in June 2004.

Since then 50 patients were treated with this new model. Some of them had hypotrophy of the breast but most patients had breast ptosis. Due to the great projection it is possible to treat these more difficult cases without visible scars.

Some examples will be shown.

The author has no financial or other interest in the company.

## PHALLOPLASTY: BEST AVAILABLE TREATMENT FOR 46 XY BOYS WITHOUT A PENIS

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The 46 XY boy without a penis still remains a major challenge to the reconstructive plastic and urological surgeon. Former treatments like gender reassignment and psychological support have shown high failure rates. After having gained extensive experience with the sensate radial forearm flap in female to male transsexual surgery in more than 200 cases, we started to use this technique for boys without a penis. Our experience in the first 2 cases is reported.

Two boys born with exstrophy (17 and 22 years old), having lost most of their penile tissues due to former surgeries, were selected for treatment with radial forearm phalloplasty. After long discussions with the patients and their relatives and after they were given the opportunity to speak with transsexuals who had undergone the procedure, both boys decided infavor of the surgery. Both procedures were uneventful. Specific consideration was given to the incorporation of any sensitive penile tissue left, into the neophallus. The nerves of the flap were connected to one dorsal penile nerve and one ileoinguinal nerve in the first boy and to 2 ileoinguinal nerves in the second boy.

Patient satisfaction after surgery was extremely high. Psychological evaluation confirms this, especially on the self-esteem level.

Both patients experienced sensitivity in the neophallus and reported sensitivity in the remnants of their penile tissue.

Both boys report orgasms with stimulation of the neophallus and one even ejaculates through the new penis.

Both boys are planned to undergo penile implant surgery within 1 year after the phallic reconstruction.

This initial success of phalloplasty in boys without a penis has convinced us that penile reconstruction is the optimal treatment for this condition.

This opens new horizons for the treatment of penile agenesis, micropenis, crippled penis, shrivelled penis, some intersex conditions, traumatic amputations and cloacal exstrophy.

## MERCKEL CELL TUMOR UP-DATED

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Merckel cell tumor is a rare but highly aggressive skin neoplasm.

It is associated with a high rate of local recurrence and frequent loco-regional extension. Distant metastases are observed in up to one third of the patients. Overall survival rate at 2 years is estimated between 50 and 70%.

The authors present a series of five cases, and an overview of the recent literature on this subject, in order to recall clinical appearance, incidence, etiology and the so far established guidelines in the treatment of Merckel cell tumor.

# PSYCHOLOGICAL EFFECTS OF AESTHETIC SURGERY

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## **Introduction/Purpose:**

Research on the psychological effects of aesthetic surgery is limited and often shows methodological shortcomings, which leads to a lack of uniform conclusions. This study aimed to assess the influence of aesthetic surgery on psychological variables such as body image, personality, self-esteem, psychoneuroticism, subjective well-being and personality disorders. Strengths of this investigation include the prospective pre-post design, a satisfactory sample size using matched controls and the use of standardized and reliable instruments.

## **Materials and Methods:**

The experimental group consisted of 87 patients anticipating aesthetic surgery. Comparison was made between them and 40 volunteers matched according to sex, age and education level. All variables were assessed using validated and standardized questionnaires (Body Image Guilt and Shame Scale, Body Image Scale, NEO-FFI, Rosenberg Self-Esteem Scale, Single Item Self-Esteem, Self-Liking/Self-Competence Scale-Revised Version, Symptom Checklist-90, Satisfaction With Life Scale, Oxford Happiness Questionnaire, ADP-IV). A total of 87 patients responded to the questionnaires preoperatively. Six months after surgery all patients received the same questionnaires and 63 were returned (72.4%). The non-respondents did not differ significantly from respondents in terms of mean scores in the pretest. All 40 controls filled in the questionnaires at 0 and 7 months.

## **Results:**

Preoperatively, patients showed a lower satisfaction with body image compared to the controls but their perception of body image improved significantly after surgery. Patients who had aesthetic facial surgery were more satisfied with their face and body postoperatively, while after aesthetic body surgery improved satisfaction was limited only to the area treated. No significant changes in personality traits were measured among patients pre- and postoperatively, nor were there significant differences between patients and controls preoperatively. Before surgery, patients and controls showed comparable levels of subjective

well-being, self-esteem and psychoneuroticism. Postoperatively, global self-esteem remained unchanged, although patients experienced a significant increase in the “self-liking” component and a decrease of all psychological complaints. Moreover, patients who underwent a breast reduction reported a significant improvement in satisfaction with life. Preoperatively, patients scored higher than controls on measures of several personality disorders, particularly the paranoid, schizoid, schizotypal, narcissistic and avoidant personality disorders. These preoperative differences were not significantly altered after surgery.

**Conclusion:**

Patients undergoing aesthetic surgery experienced significant improvements of various psychological variables measuring body image, self-liking and psychological complaints. However, they showed no significant postoperative improvement in more stable traits as measured by personality questionnaires and assessments of personality disorders.

# VIBROLIPOSUCTION: THE ULTIMATE STEP IN SUCTION LIPECTOMY.

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## **Introduction:**

Although liposuction is a widely use technique, it is not a trivial one. During the two last decades, infiltration techniques, canulas and extraction techniques evolved to lower the morbidity. However, the best extraction technique is not still clearly defined (SAL, UAL, Vibroliposuction, ...). In order to clarify that, we compared SAL and vibroliposuction and the efficiency of different canula type.

## **Materials and Methods:**

18 patients were operated on for abdominoplasty without liposuction. The infra-umbilical soft tissue resected, separated in two equal part, were used for this study. The two parts were infiltrated (super wet). Two minutes were dedicated to the aspiration (Vibroliposuction or SAL). Studied parameters were the amount aspirated, the fat fraction after centrifugation and the histologic appearance of fat tissue. In ten other patients we compared, in term of fat extraction, \_4, \_5 canulas with 3 or 9 holes, powered by 3 and 5 bars.

## **Results:**

The mean aspirated volume was 151 gr +/- 50 for the vibroliposuction and 111 gr +/- 42 for the SAL technique ( $p < 0,0003$ ). After centrifugation, the fat fraction for 100gr of tissue was 14,4+/-4,1 for Vibroliposuction and 8,4+/-2,8gr for SAL ( $p < 0,0001$ ). No difference was noted between the histologic pictures. The fat extracted with \_4 3holes canula was 206 gr at 5b and 198 gr at 3 bars. The fat extracted with \_4 9holes canula was 346 gr at 5b and 150 gr at 3 bars. The fat extracted with \_5 3holes canula was 183 gr at 5b.

## **Conclusions:**

Although liposuction is now safe and effective, vibroliposuction seems to be a better choice in term of speed of extraction, amount of fat extracted and tissue trauma. Indeed, a same fat quantity is removed in a shorter space of time, with less arm movements. Moreover, for the same condition, a thinner canula extracts more fat, justifying less trauma.

