La Radioterapia nella Chirurgia Senologica Ricostruttiva: Il Punto di Vista del Chirurgo

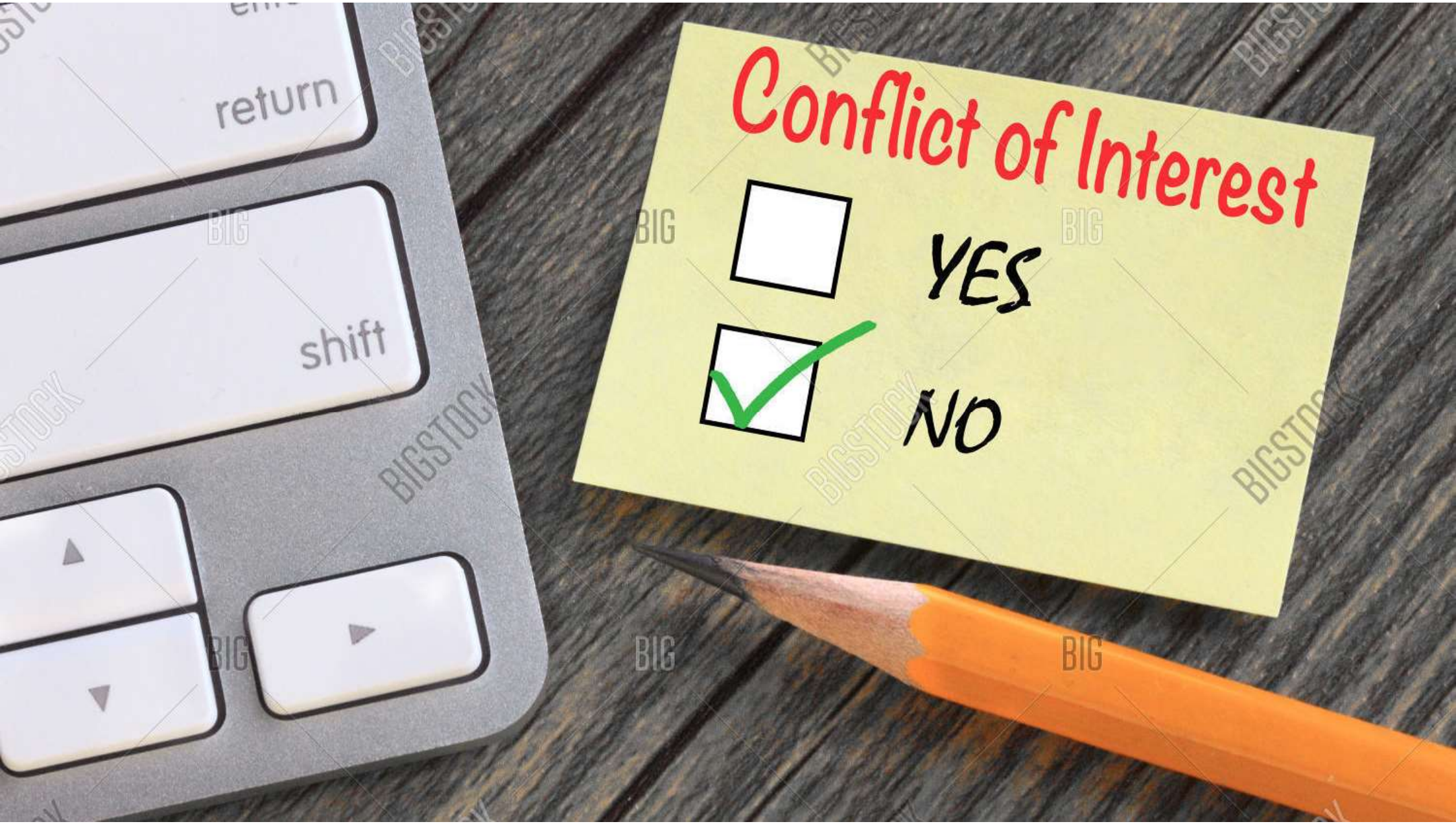
REGIONE PIEMONTE

AZIENDA OSPEDALIERO - UNIVERSITARIA
Città della Salute e della Scienza di Torino

Dall'oncologia alla bellezza: l'alleanza tra chirurgo, radioterapista e radiologo

Donato Casella

Valeria Nesi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rt and breast reconstruction'

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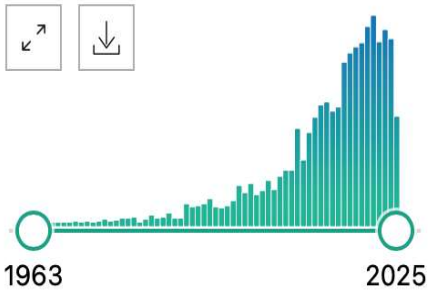
2,738 results

Page 1 of 274

RESULTS BY YEAR



1 Cite Share

ESTRO-ACROP guidelines in postmastectomy radiation after immediate **reconstruction**: Dosimetric Comparison of 3D-CRT versus VMAT planning.

Nageeti TH, Salma U, Alhawi DA, Kalantan OK, Rashaidi E, Shorbagi NM.

Gulf J Oncolog. 2025 Jan;1(47):79-82.

PMID: 40464439

Volumetric Arc Treatme nt (VMAT) planning based on contouring guidelines of European Society for Therapeutic Radiology and Oncology Advisory Committee in Radiation Oncology Practice (ESTRO-ACROP) for implant sparing and target volume delineation in postmastectomy radiation therap ...

Linee guida

CARCINOMA MAMMARIO IN STADIO PRECOCE


Coordination
Patient needs
Diverse professional expertise
Decision-making
Coordination

IL PERCORSO DELLA DONNA NELLE BREAST UNIT

1. SCREENING MAMMOGRAFICO

- Donne 50/69, ogni 2 anni
- Standard tecnologici
- 2 radiologici esperti

2. RADIOLOGIA

- Esami di imaging e microbiopsie
- Prima riunione multidisciplinare

3. PRIMO COLLOQUIO

- Informazioni chiare
- Descrizione interventi
- Consegna referto

4. ACCETTAZIONE

- Guida per accesso ai reparti
- Documentazione sanitaria
- Pratiche per esenzioni ASL

5. IL REPARTO DI CHIRURGIA SENOLOGICA

Chirurgo **senologo** + Chirurgo **oncoplastico**

6. IL REPARTO DI ONCOLOGIA MEDICA: SECONDO COLLOQUIO E RADIOTERAPIA

- Antomo - patologico
- Diagnosi definitiva
- Referto
- Terapia farmacologica

Secondo colloquio

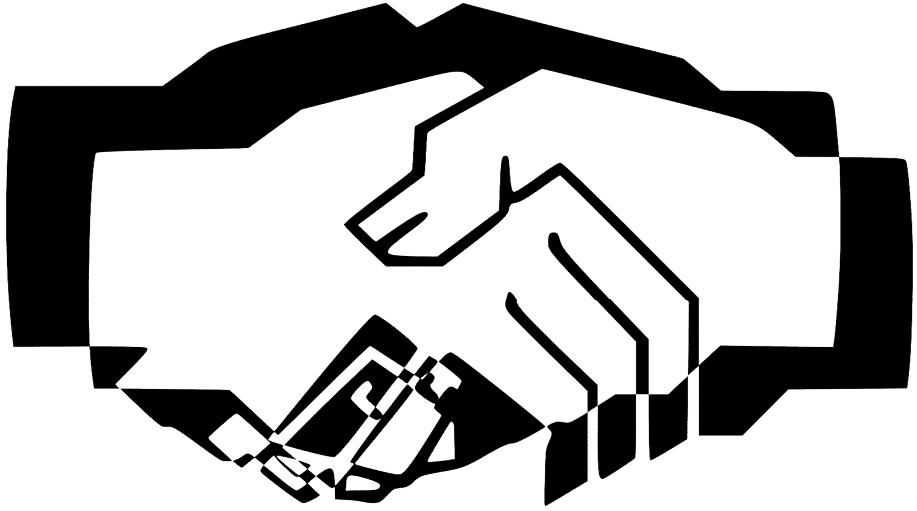
7. LA RADIOTERAPIA

8. IL FOLLOW UP

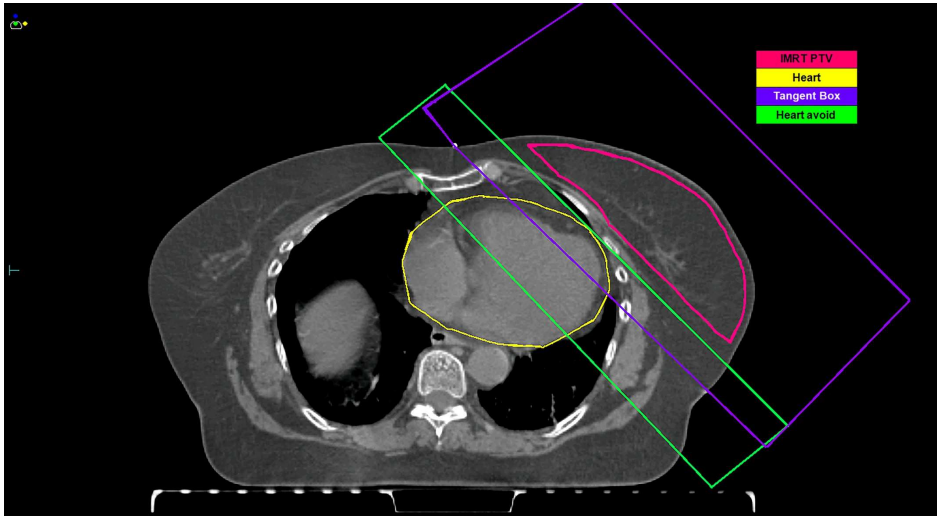
Visite ed esami programmati in riferimento alla cura

ihealthyou

Team Multidisciplinare



- RADIOTERAPISTA
- CHIRURGO
- RADIOLOGO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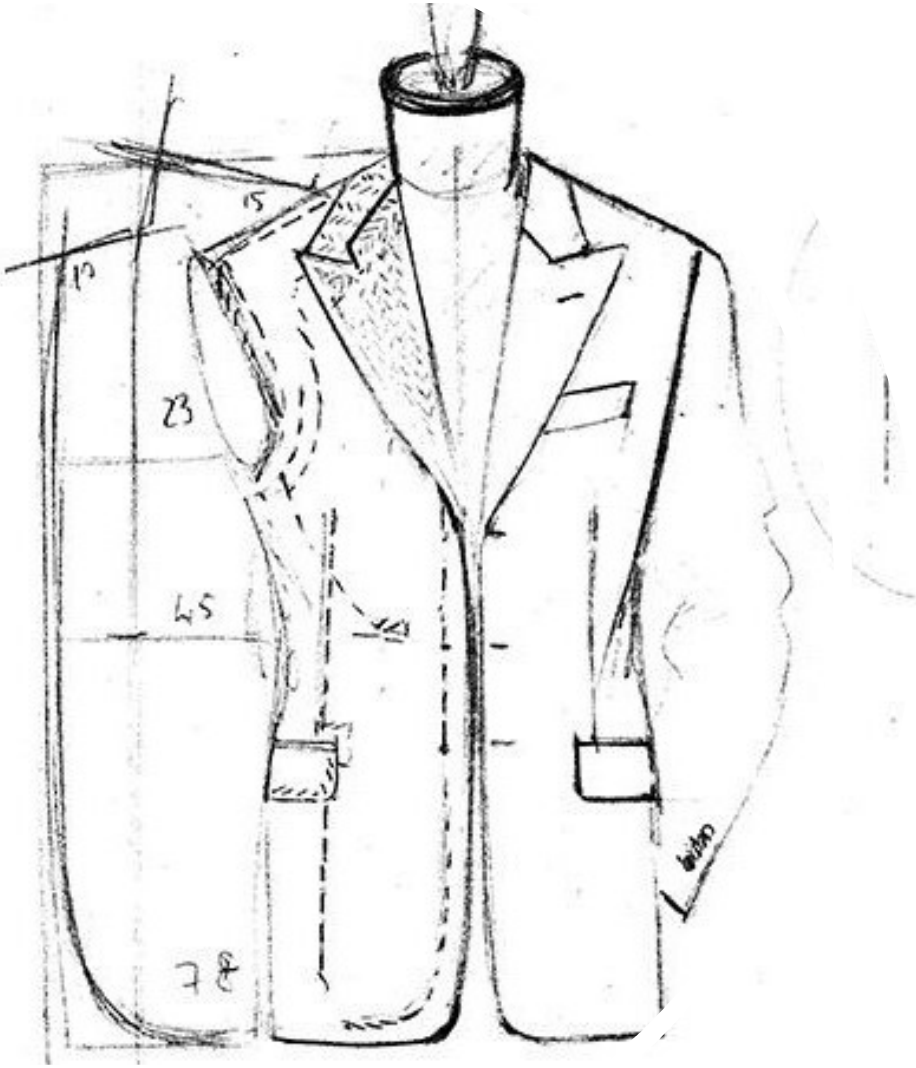
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PERCHE' QUESTO TEMA?

- 60% delle pazienti con Ca mammario necessita di RT

- Complicanze ricostruttive post-RT: Fino al 30% dei casi

Breast Cancer
DOI 10.1007/s12282-016-0726-z

ORIGINAL ARTICLE

Current trends and outcomes of breast reconstruction following nipple-sparing mastectomy: results from a national multicentric registry with 1006 cases over a 6-year period

Donato Casella[1] · Claudio Calabrese[1] · Lorenzo Orzalesi[1] · Ilaria Gaggelli[1] · Lorenzo Cecconi[2] · Caterina Santi[3] · Roberto Murgo[3] · Stefano Rinaldi[4] · Lea Regolo[5] · Claudio Amanti[6] · Manuela Roncella[7] · Margherita Serra[8] · Graziano Meneghini[9] · Massimiliano Bortolini[10] · Vittorio Altomare[11] · Carlo Cabula[12] · Francesca Catalano[13] · Alfredo Cirilli[14] · Francesco Caruso[15] · Maria Grazia Lazzaretti[16] · Icro Meattini[17] · Lorenzo Livi[17] · Luigi Cataliotti[18] · Marco Bernini[1]

Received: 11 June 2016 / Accepted: 28 August 2016

Abstract
Background Reconstruction options following nipple-sparing mastectomy (NSM) are diverse and not yet investigated with level IA evidence. The analysis of surgical and oncological outcomes of NSM from the Italian National Registry shows its safety and wide acceptance both for prophylactic and therapeutic cases. A further in-depth analysis of the reconstructive approaches with their trend over time and their failures is the aim of this study.

Methods Data extraction from the National Database was performed restricting cases to the 2009–2014 period. Different reconstruction procedures were analyzed in terms of their distribution over time and with respect to specific indications. A 1-year minimum follow-up was conducted to assess reconstructive unsuccessful events. Univariate and multivariate analyses were performed to investigate the causes of both prosthetic and autologous failures.

Table 4 Univariate and multivariate analyses of reconstructive failures with the different types of reconstruction, baseline characteristics, and oncological parameters

Reconstructive failure analysis	Failure N = 26	No failure N = 939	OR (95 % CI) *p* value	Adjusted OR (95 % CI) *p* value
Age >45 years	17/26 (65.4 %)	535/939 (57.0 %)	1.42 (0.63, 3.23) 0.395	0.84 (0.31, 2.29) 0.739
Smoke	7/25 (28.0 %)	84/742 (11.3 %)	3.05 (1.24, 7.51) **0.016**	2.71 (0.86, 8.55) 0.089
Diabetes	2/26 (7.7 %)	5/779 (0.6 %)	12.9 (2.4, 69.9) **0.003**	20.07 (3.17, 127.2) **0.001**
Type of reconstruction				
Tissue expander	17/26 (65.4 %)	603/939 (64.2 %)	Ref.	Ref.
Direct-to-implant	6/26 (23.1 %)	261/939 (27.8 %)	0.81 (0.32, 2.10) 0.671	1.10 (0.36, 3.41) 0.858
Autologous breast reconstruction	0/26 (0.0 %)	42/939 (4.5 %)	n.c.	n.c.
Autologous + tissue expander	0/26 (0.0 %)	3/939 (0.3 %)	n.c.	n.c.
Autologous + implant	3/26 (11.5 %)	30/939 (3.2 %)	3.55 (0.99, 12.77) 0.053	3.23 (0.77, 13.61) 0.110
Oncological stage				
Prophylactic	3/26 (12.0 %)	109/865 (12.6 %)	Ref.	Ref.
Stage 0	3/26 (12.0 %)	161/865 (18.6 %)	0.68 (0.13, 3.42) 0.637	0.90 (0.14, 6.02) 0.916
Stage I	10/26 (40 %)	250/865 (28.9 %)	1.45 (0.39, 5.38) 0.576	1.34 (0.25, 7.14) 0.732
Stage II	8/26 (32 %)	303/865 (35.0 %)	0.96 (0.25, 3.68) 0.952	1.02 (0.18, 5.65) 0.984
Stage III	1/26 (4 %)	42/865 (4.9 %)	0.87 (0.09, 8.55) 0.901	0.82 (0.06, 10.39) 0.878
Neoadjuvant chemotherapy	3/26 (11.5 %)	82/939 (8.7 %)	1.36 (0.40, 4.64) 0.620	2.34 (0.62, 8.85) 0.211
Pre-operative radiation	3/21 (14.3 %)	22/782 (2.8 %)	5.76 (1.58, 20.99) **0.008**	8.27 (2.00, 34.24) **0.004**

Statistical analyses were performed excluding cases without a complete 1-year follow-up
Significant values are shown in bold
OR odds ratio, *CI* confidence interval, *Ref.* Reference category, *n.c.* not computable

Table 1 Distribution of the different types of reconstruction among the 1006 cases of NSM

Type of reconstruction	*N*	%
Prosthetic	928	92.2
Tissue expander, TE (two-stage) (TE + soft-tissue replacement devices 31/650, 15.8 %)	650	64.6
Direct-to-implant, DTI (one-stage) (DTI + soft-tissue replacement devices 107/278, 68.5 %)	278	27.6
Autologous breast reconstruction	42	4.2
Abdominal flaps	36	3.6
Latissimus dorsi flap	6	0.6
Hybrid (prosthetic plus autologous)	36	3.6
Autologous + tissue expander	3	0.3
Autologous + implant	33	3.3

Table 2 Distribution of the types of reconstruction in the groups of therapeutic and prophylactic NSMs

	Therapeutic	Prophylactic
Tissue expander	586 (66.4 %)	64 (51.6 %)
Direct-to-implant	234 (26.5 %)	44 (35.6 %)
Autologous breast reconstruction	34 (3.9 %)	8 (6.45 %)
Autologous + tissue expander	3 (0.3 %)	0 (0.0 %)
Autologous + implant	25 (2.8 %)	8 (6.45 %)

$p = 0.01$

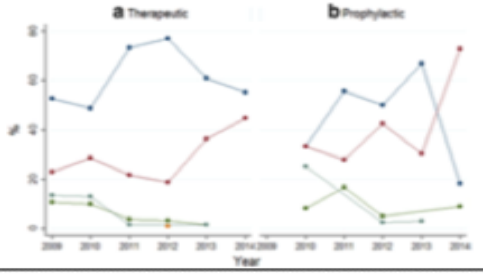
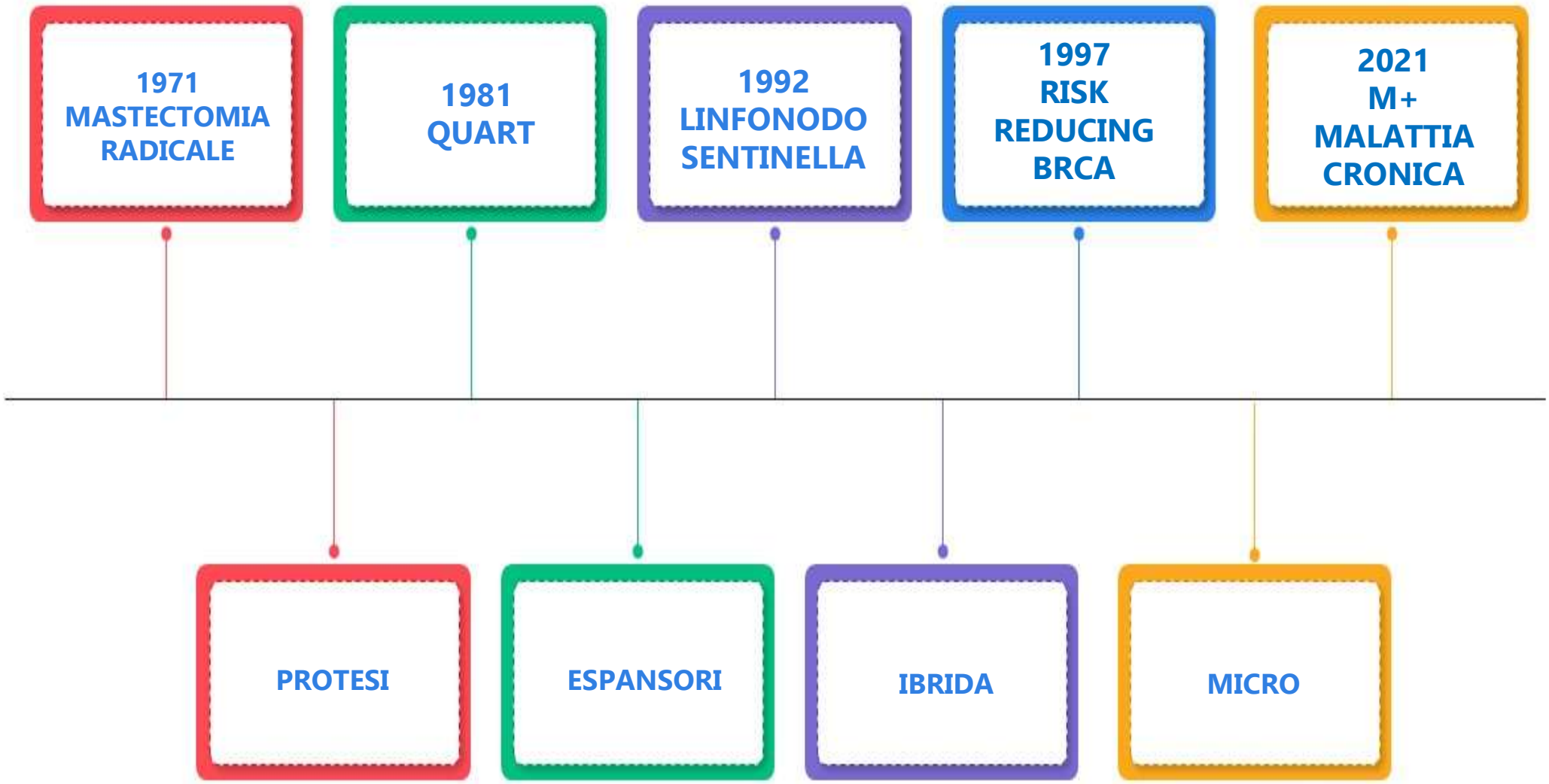


Table 3 Reconstruction failures within 1 year from NSM

Tissue expander	17/620	(2.7 %)
Direct-to-implant	6/267	(2.3 %)
Autologous breast reconstruction	0/42	(0.0 %)
Autologous + tissue expander	0/3	(0.0 %)
Autologous + implant	3/33	(9.1 %)

Statistical analyses were performed excluding cases without a complete 1-year follow-up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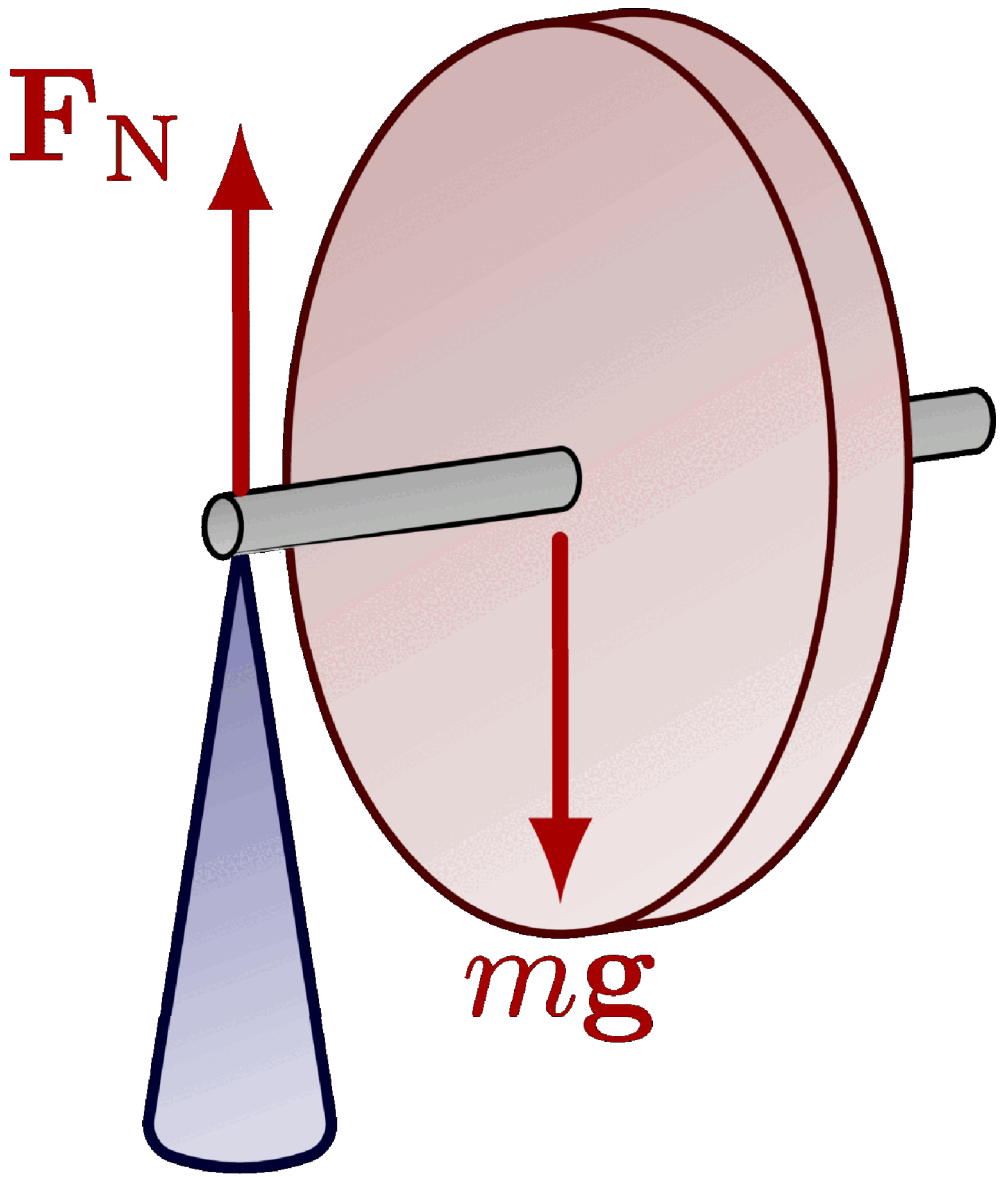
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FROM RETROMUSCOLAR TO DUAL PLANE TO PRE-PEC

Eur J Plast Surg (2014) 37:599–604
DOI 10.1007/s00238-014-1001-1

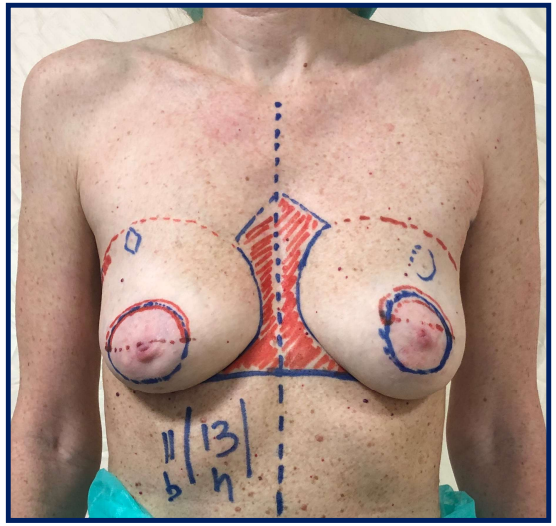
ORIGINAL PAPER

TiLoop® Bra mesh used for immediate breast reconstruction: comparison of retropectoral and subcutaneous implant placement in a prospective single-institution series

Donato Casella · Marco Bernini · Lapo Bencini · Jenny Roselli · Maria Teresa Lacaria · Jacopo Martellucci · Roberto Banfi · Claudio Calabrese · Lorenzo Orzalesi

Received: 23 May 2014 / Accepted: 20 July 2014 / Published online: 3 August 2014

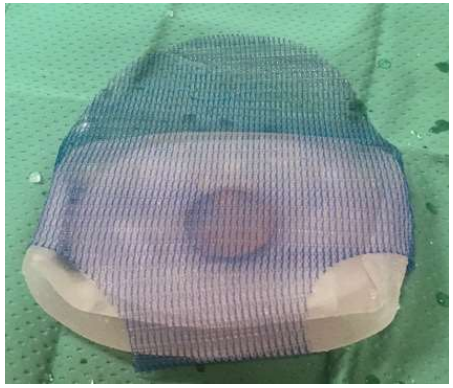
Abstract
Background Immediate implant reconstruction after a conservative mastectomy is an attractive option made easier by prosthetic devices. Titanized polypropylene meshes are used as a hammock to cover the lower lateral implant pole. We conducted a prospective nonrandomized single-institution study of reconstructions using titanium-coated meshes either in a standard muscular mesh pocket or in a complete subcutaneous approach. The complete subcutaneous approach means to wrap an implant with titanized mesh in order to position the implant subcutaneously and spare muscles.
Methods Between November 2011 and January 2014, we performed immediate implant breast reconstructions after conservative mastectomies using TiLoop® Bra, either with the standard retropectoral or with a prepectoral approach. Selection criteria included only women with normal Body Mass Index (BMI), no large and very ptotic breasts, no history of smoking, no diabetes, and no previous radiotherapy. We analyzed short-term outcomes of such procedures and compared the outcomes to evaluate implant losses and surgical complications.
Results A total of 73 mastectomies were performed. Group 1 comprised 29 women, 5 bilateral procedures, 34 reconstructions, using the standard muscular mesh pocket. Group 2 comprised 34 women, 5 bilateral procedures, 39 reconstructions with the prepectoral subcutaneous technique. Baseline and oncologic characteristics were homogeneous between the two groups. After a median follow-up period of 13 and 12 months, respectively, no implant losses were recorded in group 1, and one implant loss was recorded in group 2. We registered three surgical complications in group 1 and two surgical complications in group 2.
Conclusions Titanium-coated polypropylene meshes, as a tool for immediate definitive implant breast reconstruction, resulted as safe and effective in a short-term analysis, both for a retropectoral and a totally subcutaneous implant placement. Long-term results are forthcoming. A strict selection is mandatory to achieve optimal results.

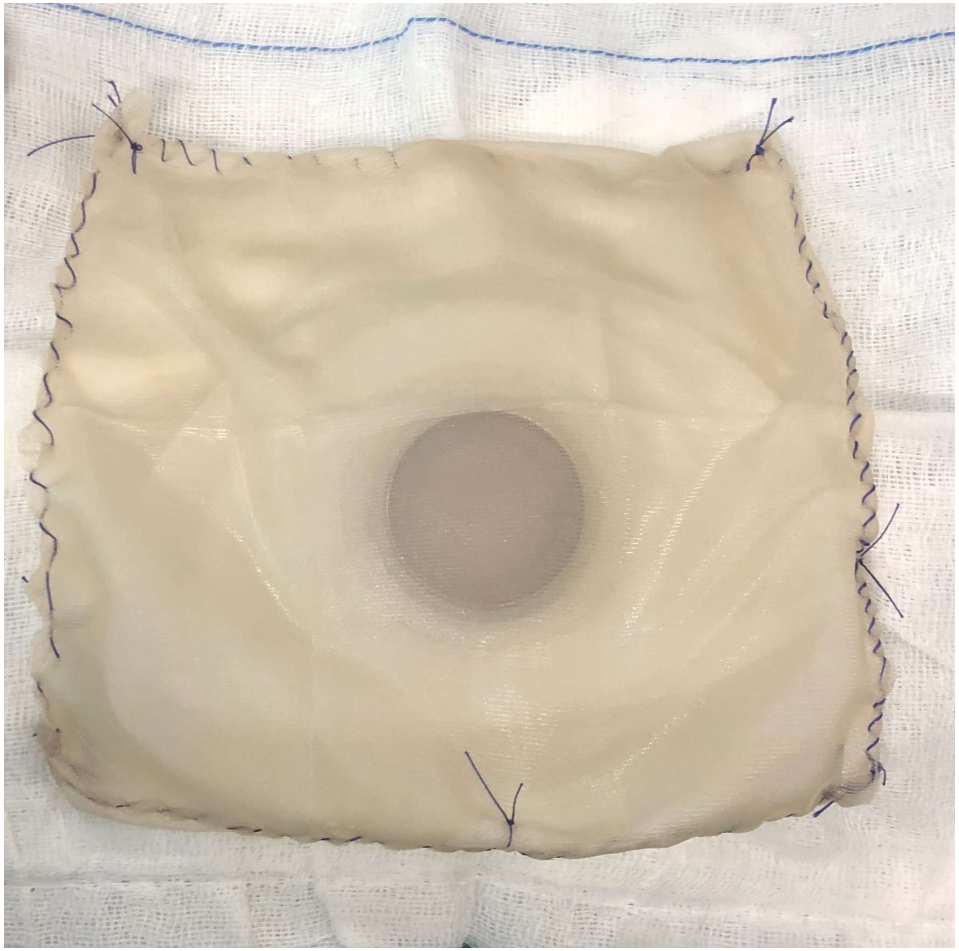


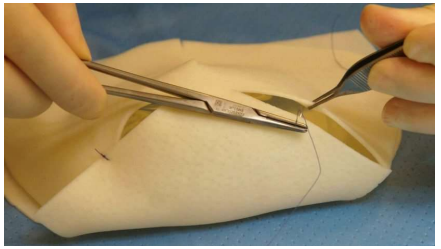
Transareolar

Nipple Sparing Mastectomy

+ Pre pectoral DTI
+ Synthetic Mesh







BANCA DEI TESSUTI SIENA

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- *BANCAGGIO TESSUTO ADIPOSO*
- *MATRICI DERMICHE DED*

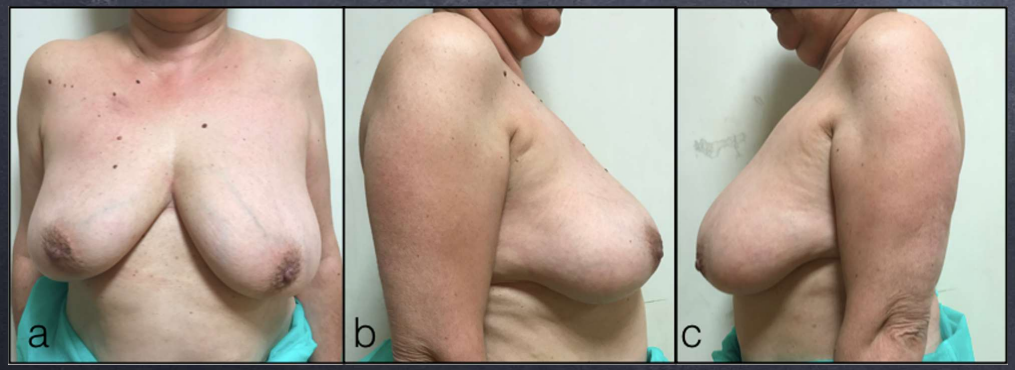
> J Plast Reconstr Aesthet Surg. 2018 Aug;71(8):1123-1128. doi: 10.1016/j.bjps.2018.05.005. Epub 2018 Jun 8.

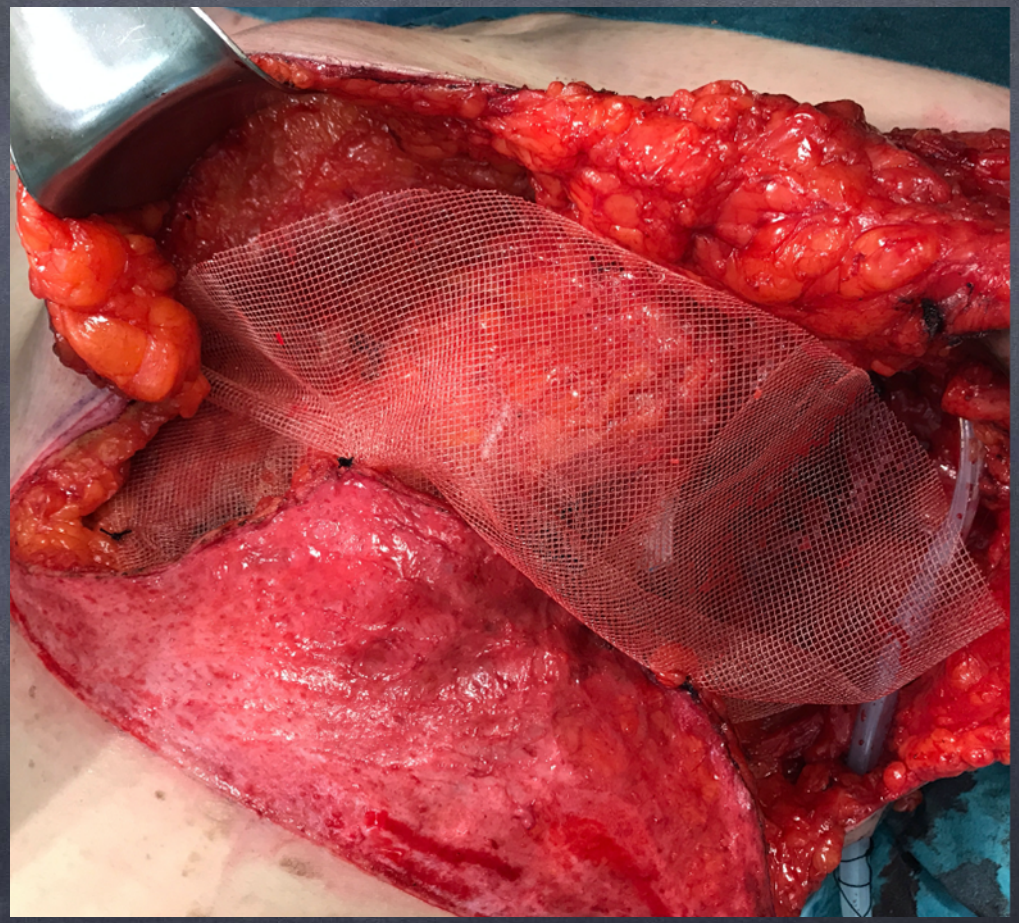
Skin-reduction breast reconstructions with prepectoral implant covered by a combined dermal flap and titanium-coated polypropylene mesh

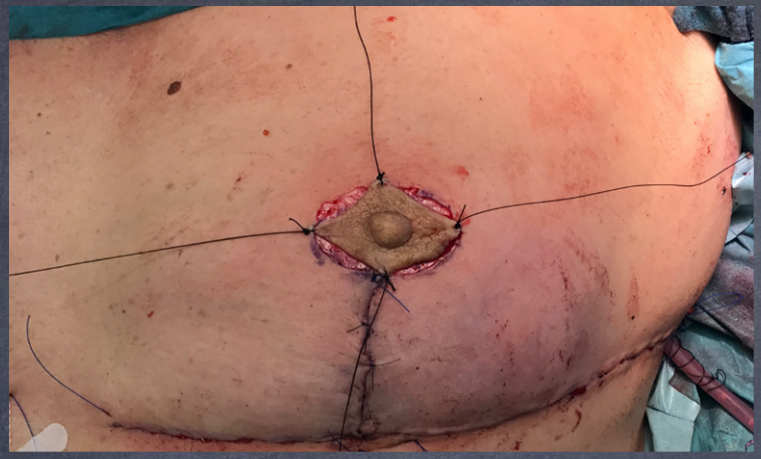
Marco Marcasciano Md [1], Juste Kaciulyte [2], Marika Gentilucci [2], Leonardo Barellini [3], Diego Ribuffo [2], Donato Casella [4]

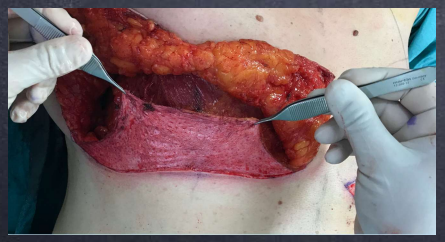
Affiliations + expand

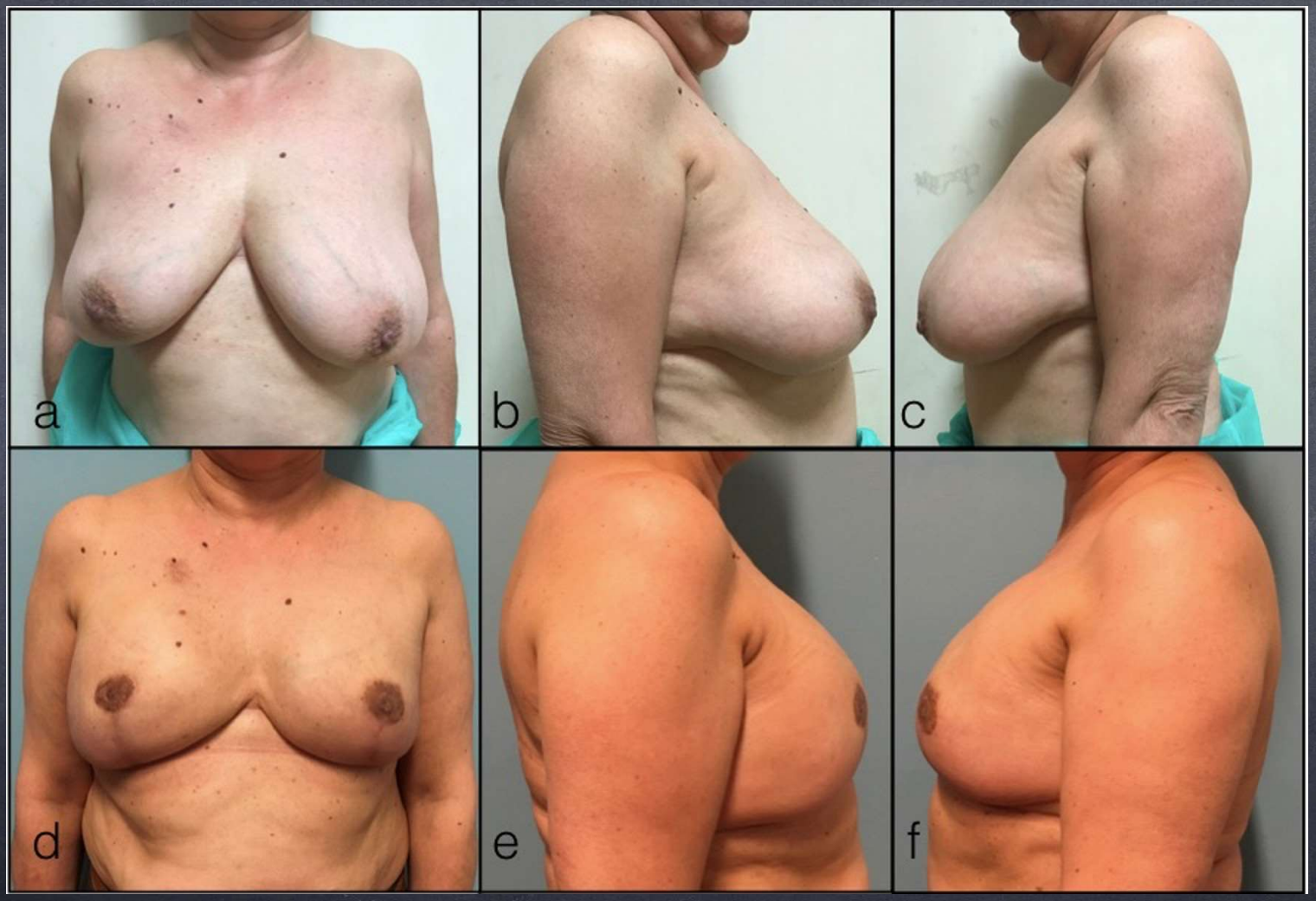
PMID: 29936004 DOI: 10.1016/j.bjps.2018.05.005







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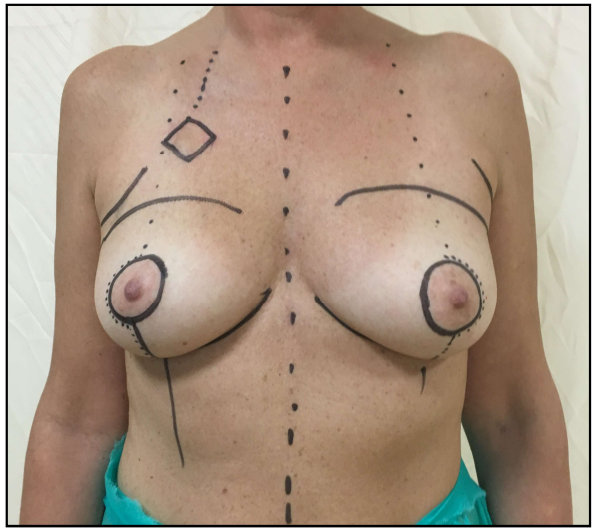
J Plast Reconstr Aesthet Surg. 2019 May;72(5):805-812. doi: 10.1016/j.bjps.2018.12.018. Epub 2018 Dec 16.

Subcutaneous expanders and synthetic mesh for breast reconstruction: Long-term and patient-reported BREAST-Q outcomes of a single-center prospective study



EVOLUZION E TECNICHE DI SUTURA

Aesth Plast Surg
https://doi.org/10.1007/s00266-024-04501-4

INNOVATIVE TECHNIQUES BREAST SURGERY

Is Half a Century-Based Suturing Pattern Worth the Upgrade? Evaluating a Novel Suturing Technique: Knot Less is More

Edoardo Giuseppe Maritano[1] · Juste Kaciulyte[1,2,6] · Silvia Sordi[2] · Marco Marcasciano[3] · Federico Lo Torto[1] · Gianluigi Luridiana[4] · Andrea Bartalini Cinughi de Pazzi[5] · Irene Zerini[2] · Diego Ribuffo[1] · Donato Casella[2]

Received: 7 August 2024 / Accepted: 22 October 2024

Abstract The aesthetic outcomes of wise pattern-based breast reduction and mastopexy procedures are significantly influenced by the final scar quality, which is directly impacted by the suturing technique. Over the past century literature on suture placement has remained limited, with little advancement in tissue approximation methods. The success of conventional suturing depends on the surgeon's skills and expertise and the selection of suture material. Proper deep placement of absorbable sutures is essential to reduce risks; in fact, incorrect placement can lead to complications such as poor scar quality and negative psychological effects on the patient, and occasionally more severe issues like delayed wound healing. Our experience with a running suturing technique for wise pattern-based mammoplasty indicates that reducing the number of knots can lead to a better overall experience for both the patient and the surgeon. This technique may improve aesthetic results, decrease complications, and streamline the surgical process.

Level of Evidence IV This journal requires that authors assign a level of evidence to each article. For a full description of these Evidence-Based Medicine ratings, please refer to the Table of Contents or the online Instructions to Authors www.springer.com/00266.

Keywords Breast surgery · Breast reduction · Wise pattern · Suture · Knot extrusion

✉ Juste Kaciulyte
justeke@gmail.com

[1] Unit of Plastic and Reconstructive Surgery, Policlinico Umberto I, Department of Surgery "P. Valdoni", Sapienza University of Rome, Rome, Italy

[2] Oncologic Breast Surgery Unit, Department of Medicine, Surgery and Neuroscience, University of Siena, Siena, Italy

[3] Division of Plastic Surgery, Department of Experimental and Clinical Medicine, Magna Graecia, University of Catanzaro, Catanzaro, Italy

[4] Unit of Oncologic and Breast Surgery, A.R.N.A.S. Brotzu, Businco Oncologic Hospital, 09047 Cagliari, Italy

[5] Unit of Surgical Oncology, Department of Medical, Surgical and Neuro Sciences, University of Siena, Azienda Universitaria Senese, Siena, Italy

[6] Department of Breast Cancer Surgery, Azienda Ospedaliero-Universitaria Senese, V.le Mario Bracci, 11, 53100 Siena, SI, Italy

Introduction

In breast surgery, aesthetic outcome impacts patient satisfaction similarly as postoperative complications' incidence. Despite suture placement style plays a significant role in this, literature remains sparse, with techniques for tissue approximation largely unchanged over the past century.

Regardless of surgeon's experience, suture extrusion is one of the most "non-relevant" complications occurring in breast surgery. It is crucial to emphasize its potential consequences, including delayed initiation of adjuvant therapies in the context of oncoplastic surgery [1]. Additional implications such as infections can exacerbate the rate of capsular contracture [2] and increase the risk of implant loss, particularly in prepectoral reconstructions.

Conventional suture success relies on surgeon's skills and experience as well as suturing materials' choice. Most used materials in deep planes are Vicryl (polyglactin 910) and Monocryl (Poliglecaprone 25), for their low antigenicity and sparse inflammatory infiltrates [3]. Multifilament sutures have a higher rate of complications, nevertheless they provide superior tensile strength and knot

Published online: 07 November 2024

TECNICHE DI SUTURA

Posizione degli unici punti singoli: incrocio della T invertita, ore 6 e ore 12 peri-areolari

Current Oncology

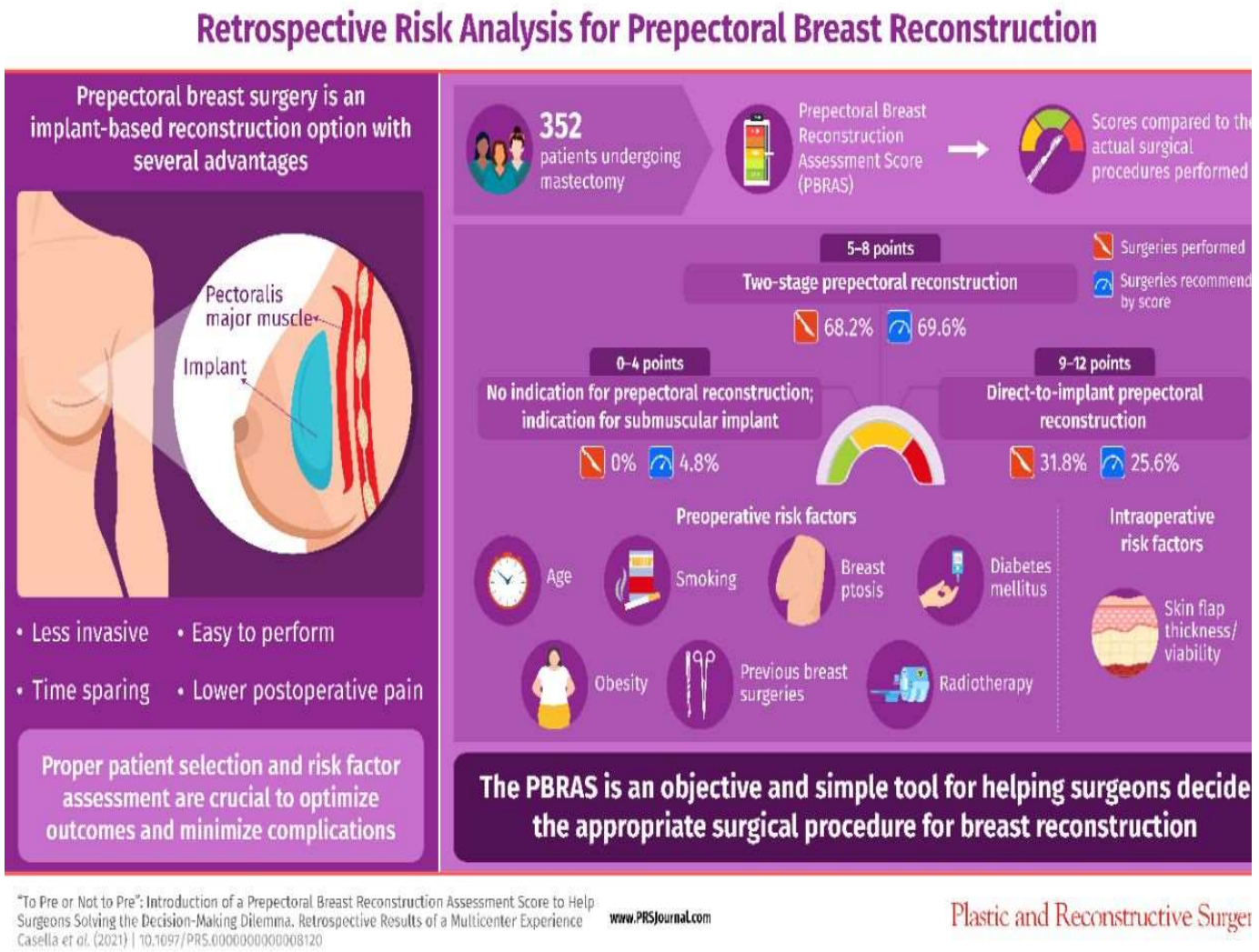
MDPI

Article

Controlateral Symmetrisation in SRM for Breast Cancer: Now or Then? Immediate versus Delayed Symmetrisation in a Two-Stage Breast Reconstruction

Donato Casella [1], Daniele Fusario [2,*], Dario Cassetti [3], Anna Lisa Pesce [2], Alessandro De Luca [4], Maristella Guerra [5], Roberto Cuomo [6], Diego Ribuffo [7], Alessandro Neri [8] and Marco Marcasciano [9]

SELEZIONE PAZIENTI



"To Pre or Not to Pre": Introduction of a Prepectoral Breast Reconstruction Assessment Score to Help Surgeons Solving the Decision-Making Dilemma. Retrospective Results of a Multicenter Experience
Casella *et al.* (2021) | 10.1097/PRS.0000000000008120

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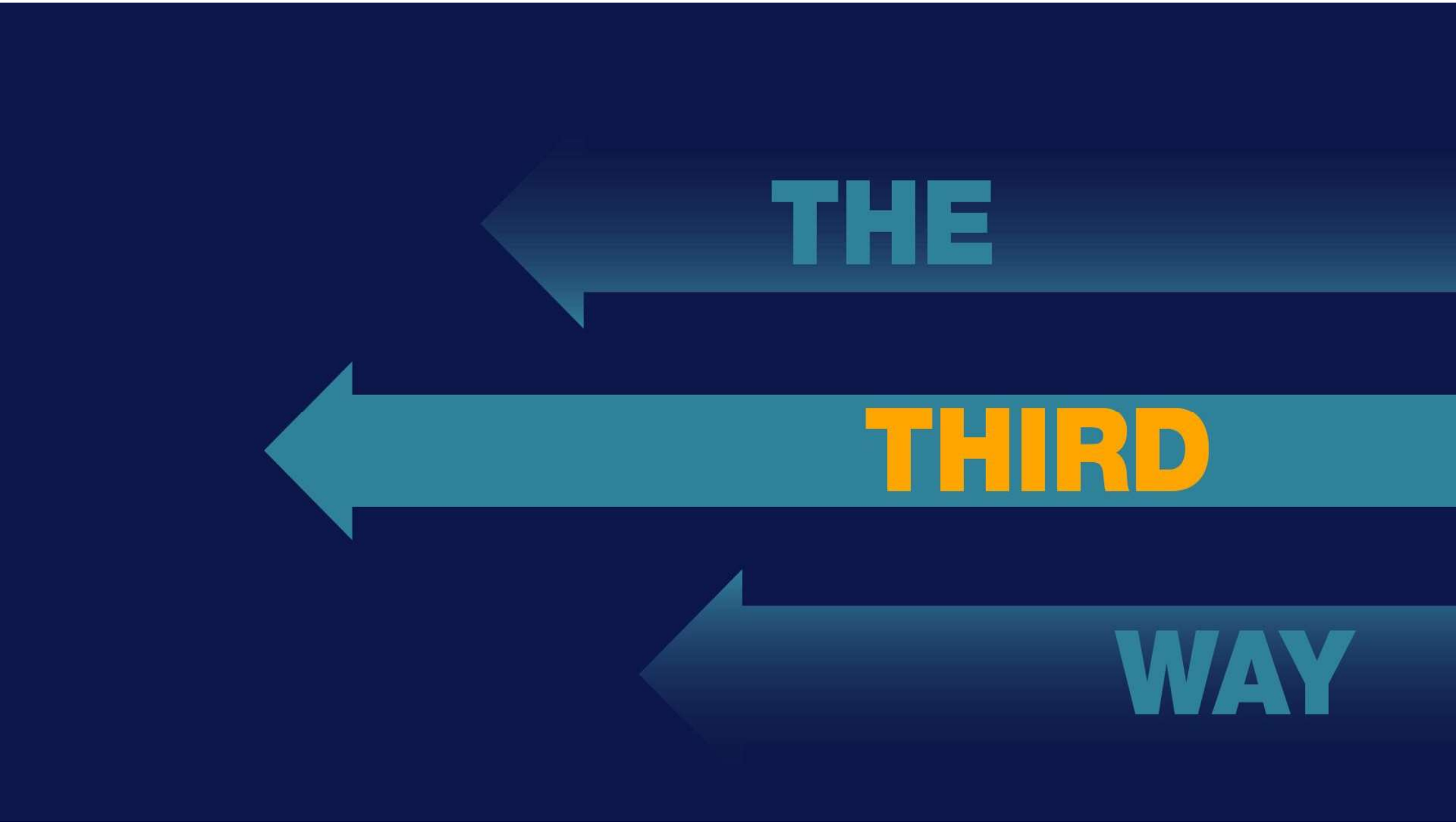
Plastic and Reconstructive Surger

PreBra*Score*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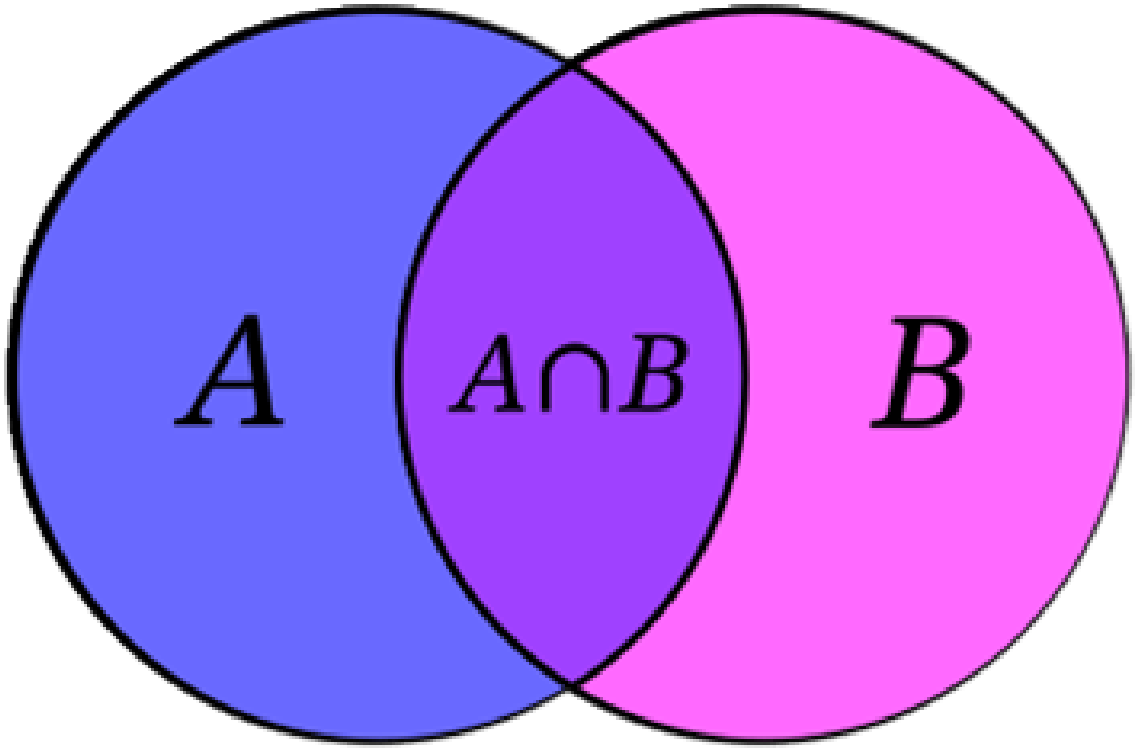

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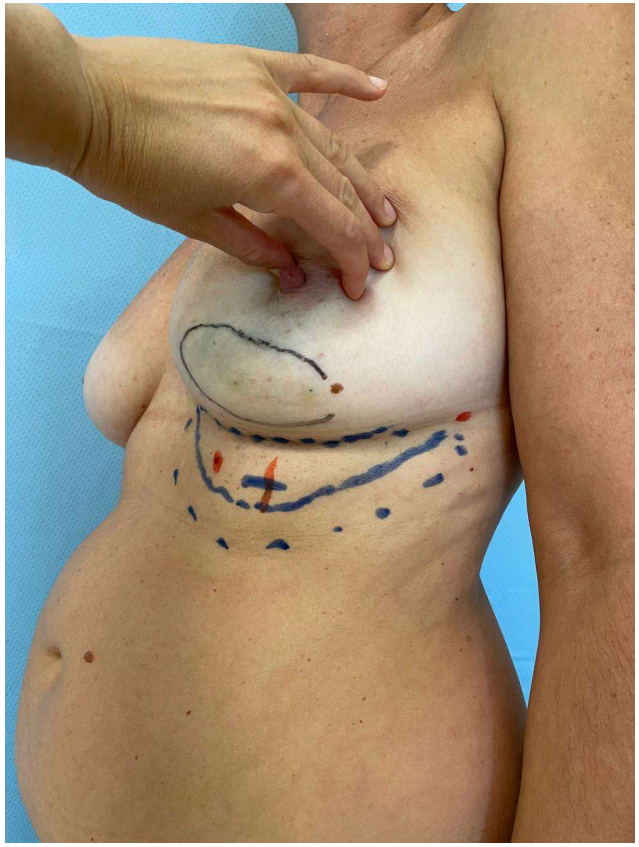
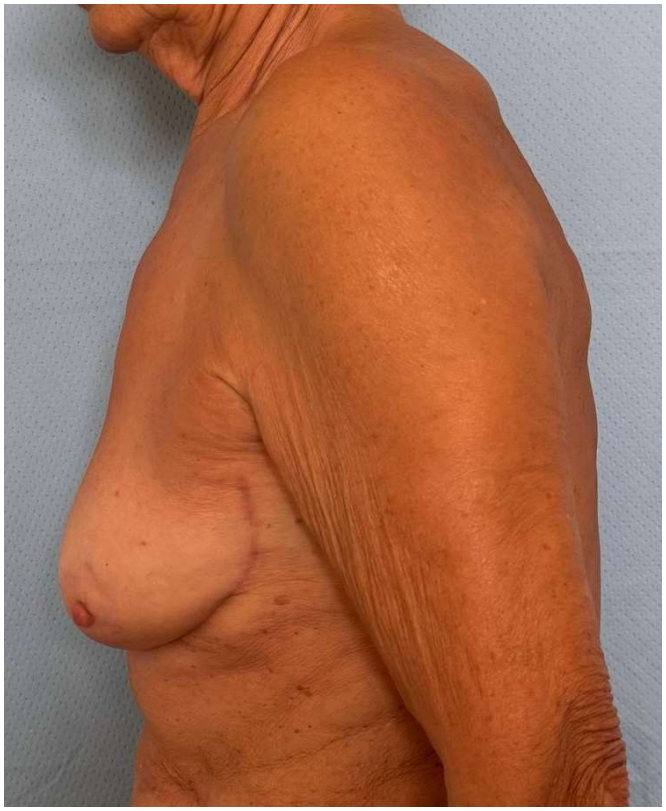
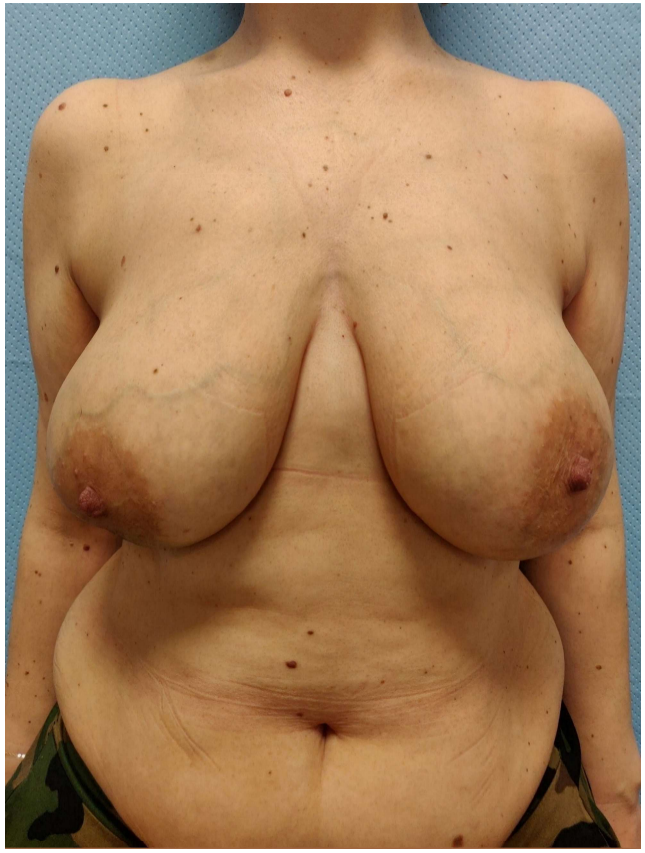
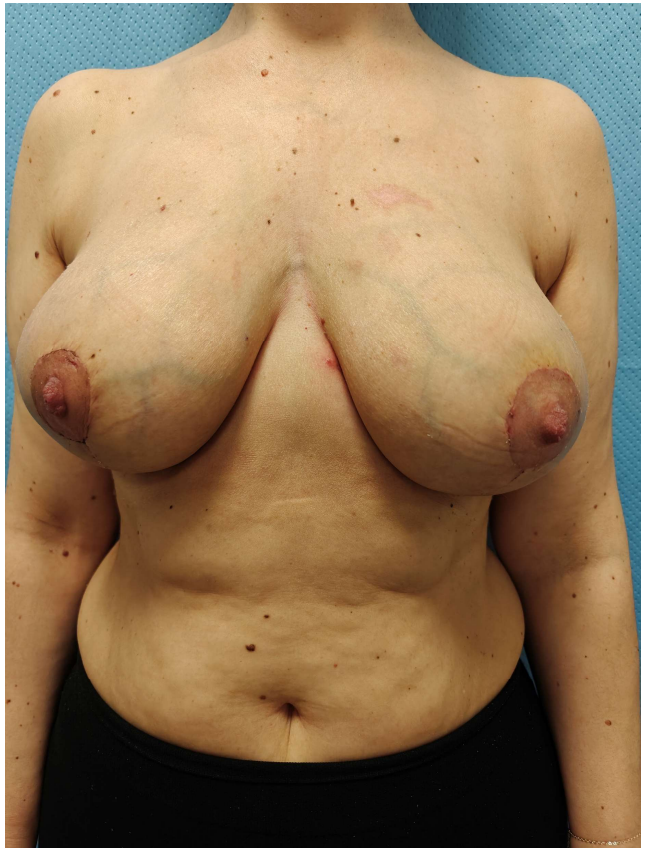
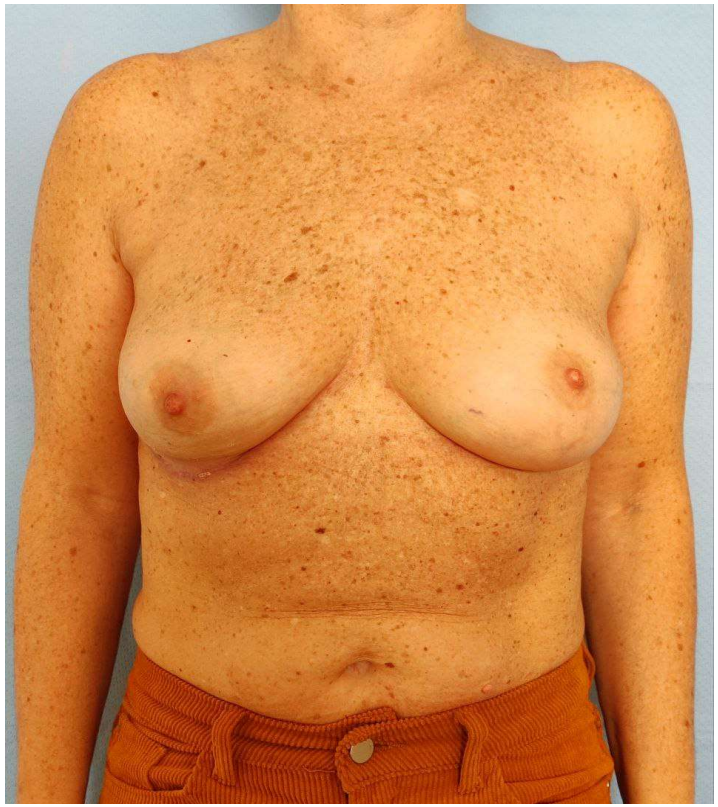
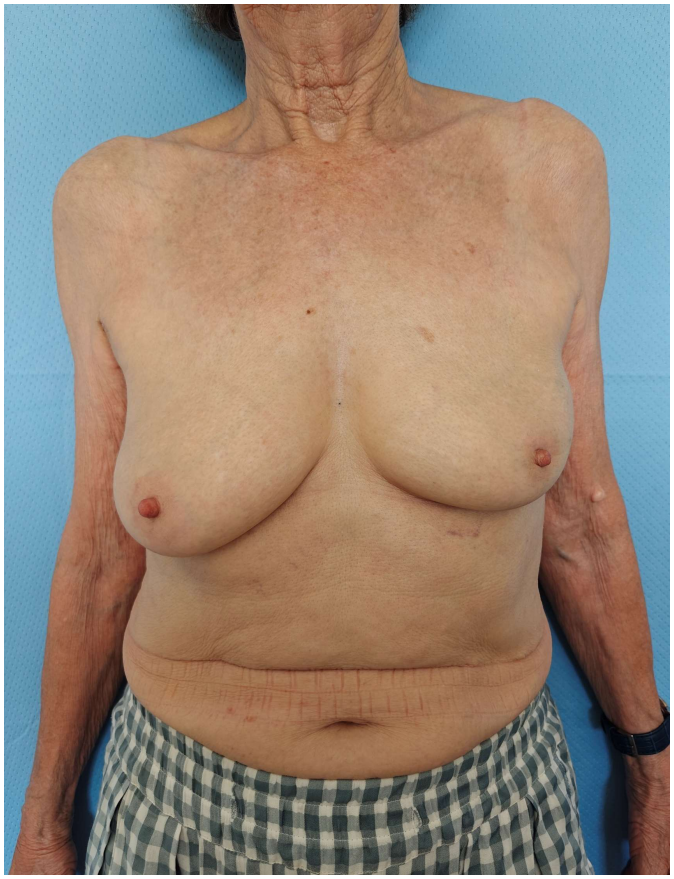


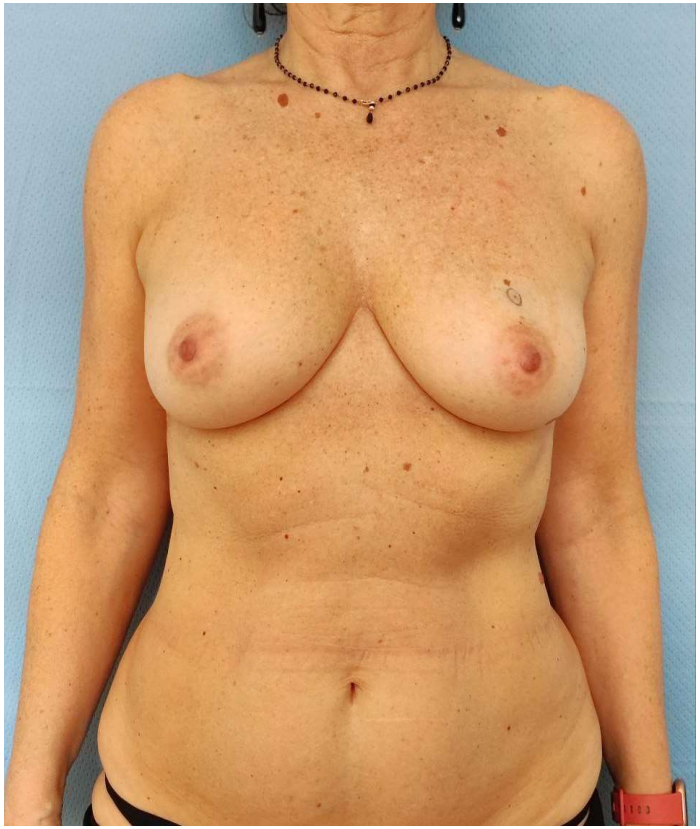


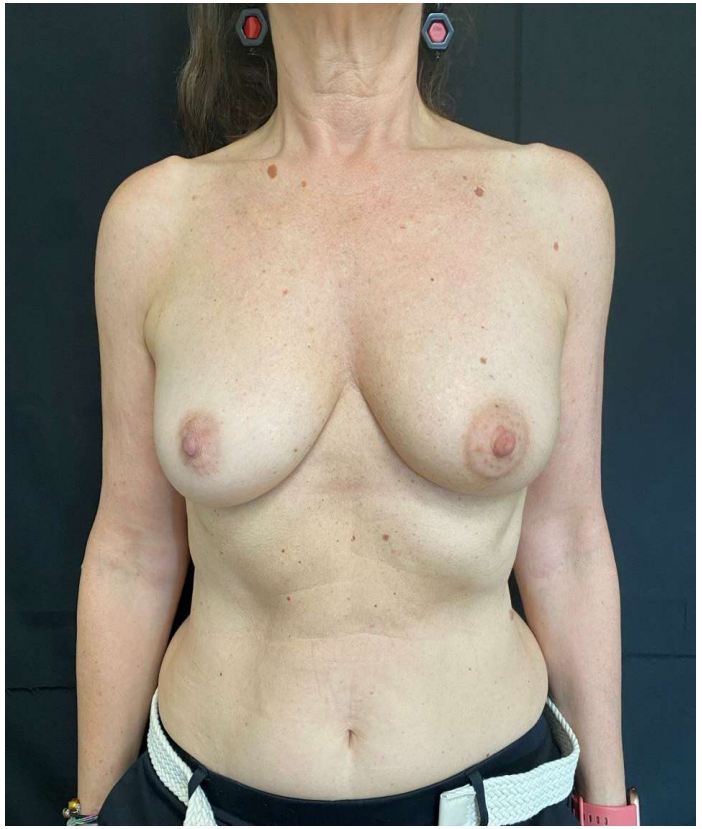


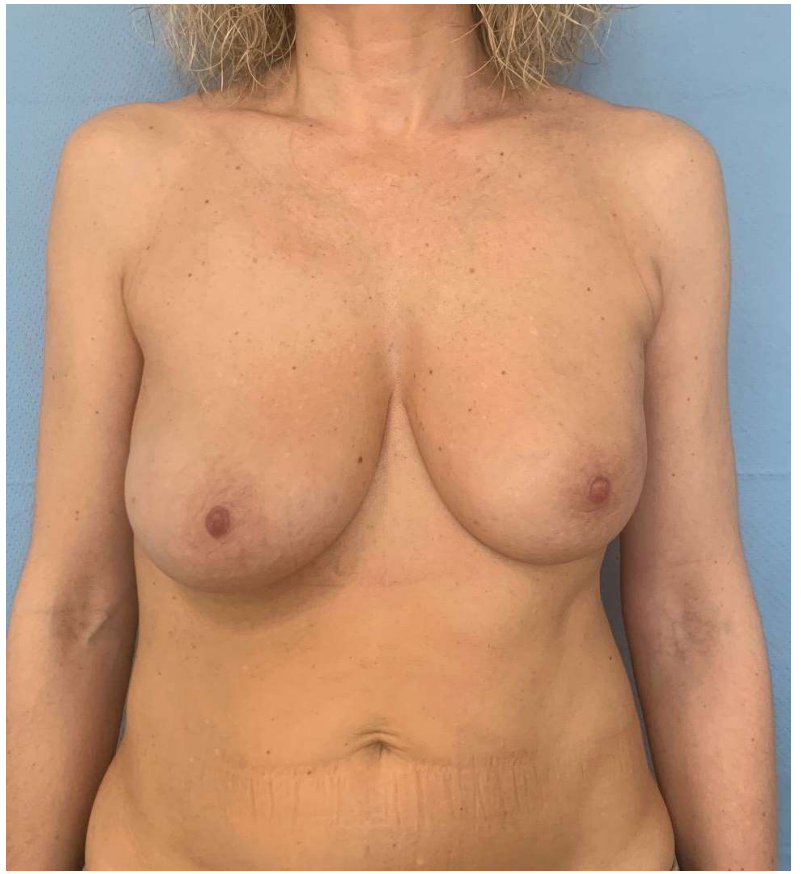


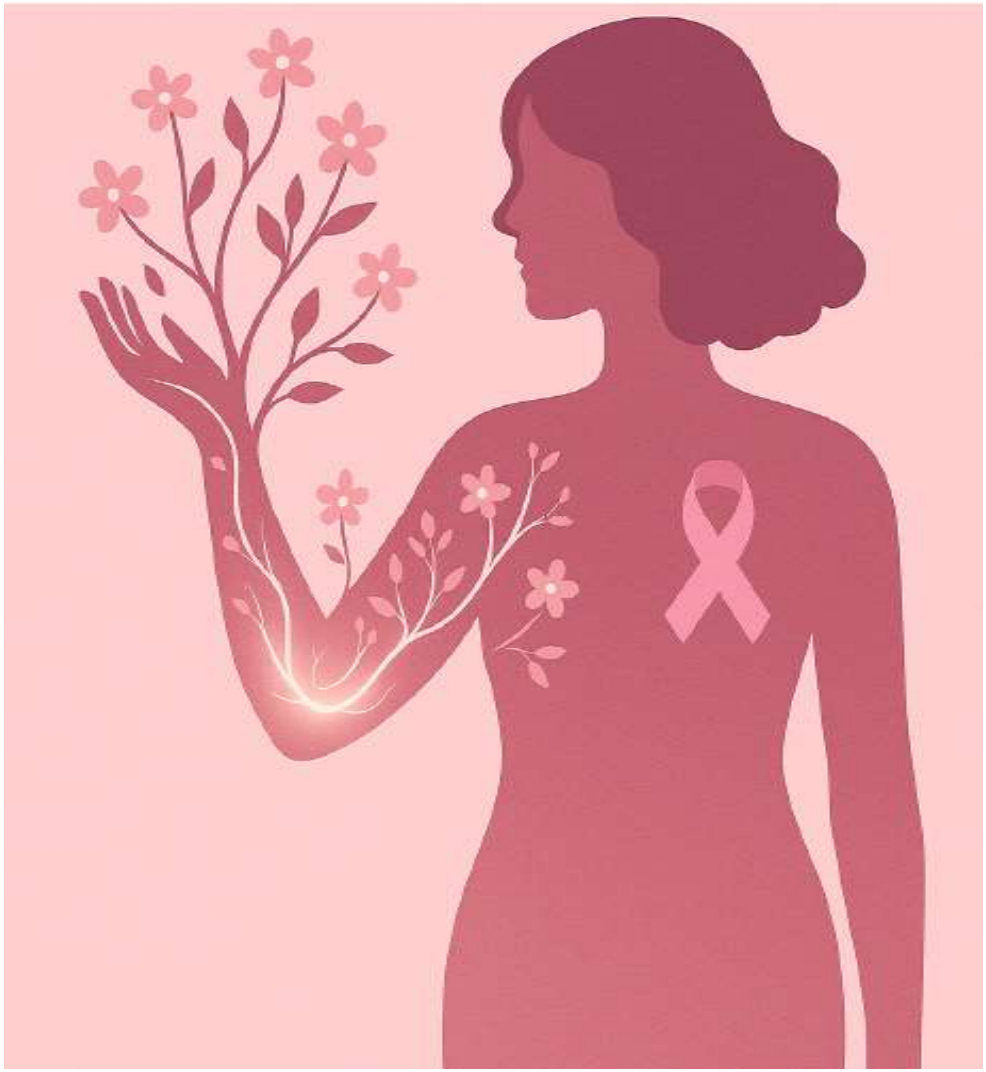












Trattamento chirurgico del Breast Cancer-related Lymphedema

Rt fattore di rischio indipendente

Il linfedema: trattamenti

Conservativi

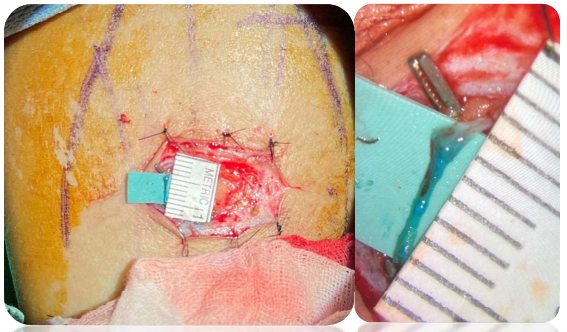
- Farmacoterapia: antiedemigeni, antiossidanti, antinfiammatori…
- Agopuntura
- LLLT - Low Level Light Therapy con luce LED
- MLD - Manual Lymphatic Drainage
- CDT - Complete Decongestive Therapy

Chirurgici Escissionali

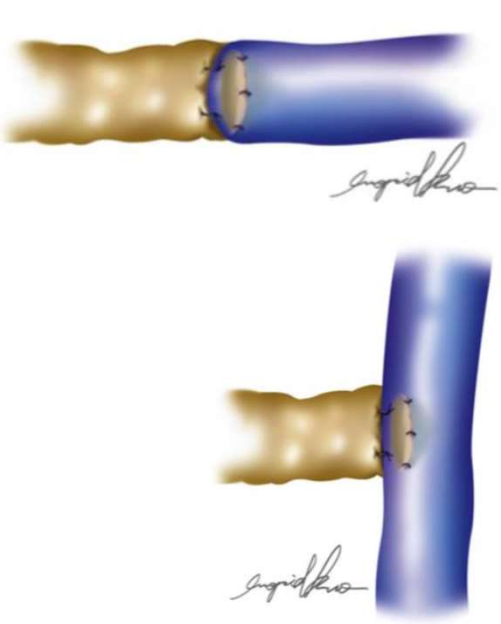
- SAL – Suction Assisted Lipectomy
- RRPP - Radical Reduction with Preservation of Perforators
- Charles' procedure

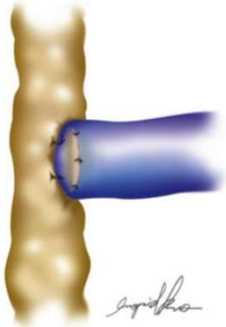
Chirurgici Derivativi

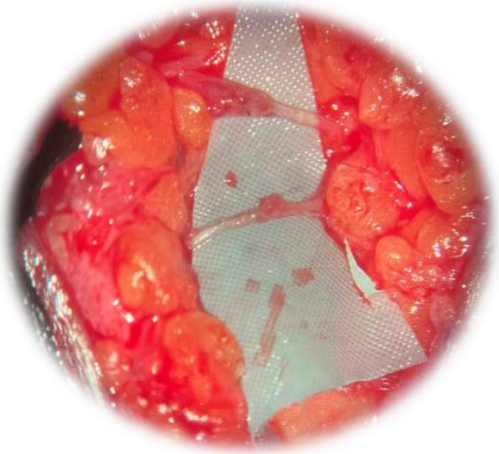
- LVB - Anastomosi Linfo-Venose (LVB)
- LVA - Anastomosi Linfo-Venulari
- VLNT - Vascularized Lymph Node Transfer

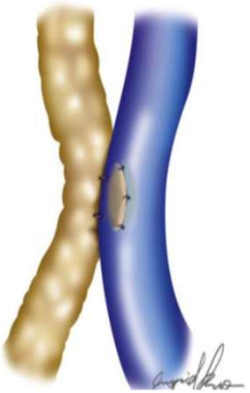


Nel 1996, Koshima et al. introdusse il concetto moderno di LVA, che prevede l'applicazione della supermicrochirurgia per anastomizzare i capillari linfatici e venosi nel derma.

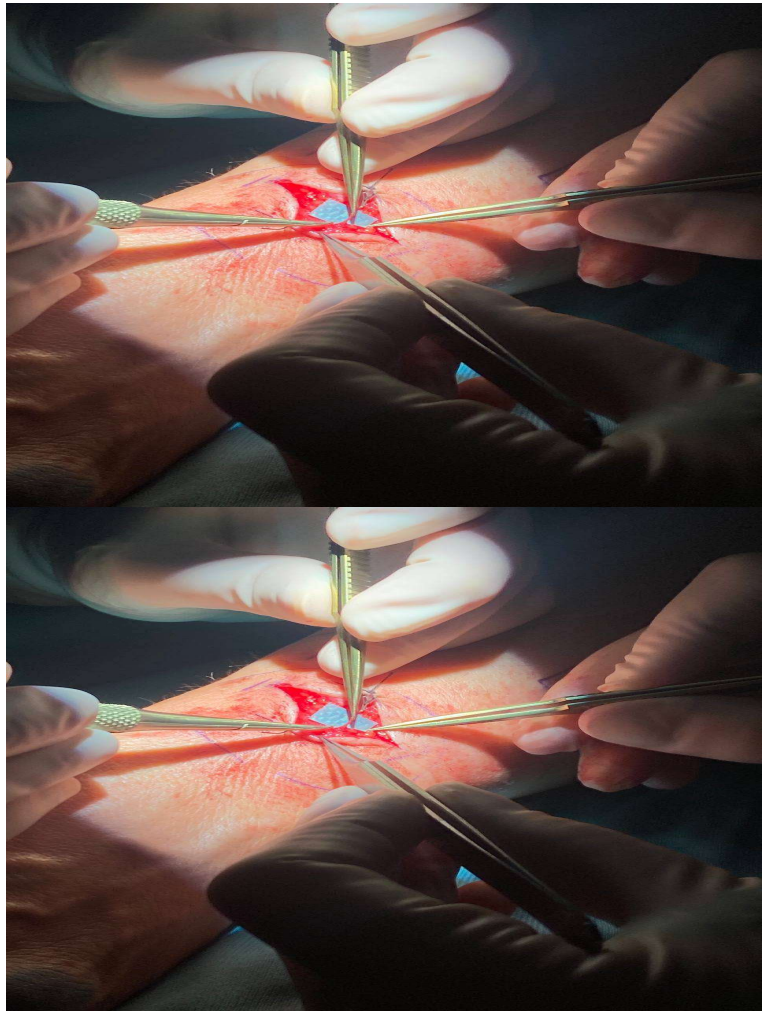






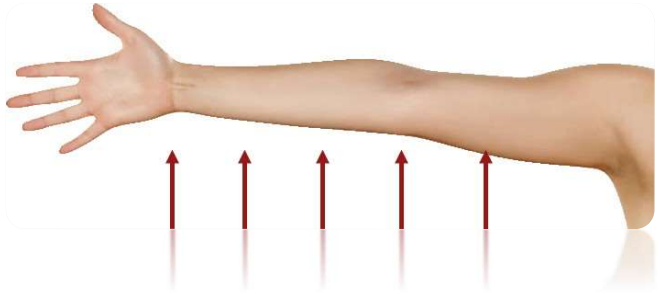


Koshima I, Inagawa K, Urushibara K, Moriguchi T. Supermicrosurgical lymphaticovenular anastomosis for the treatment of lymphedema in the upper extremities. J Reconstr Microsurg. 2000;16:437–442.



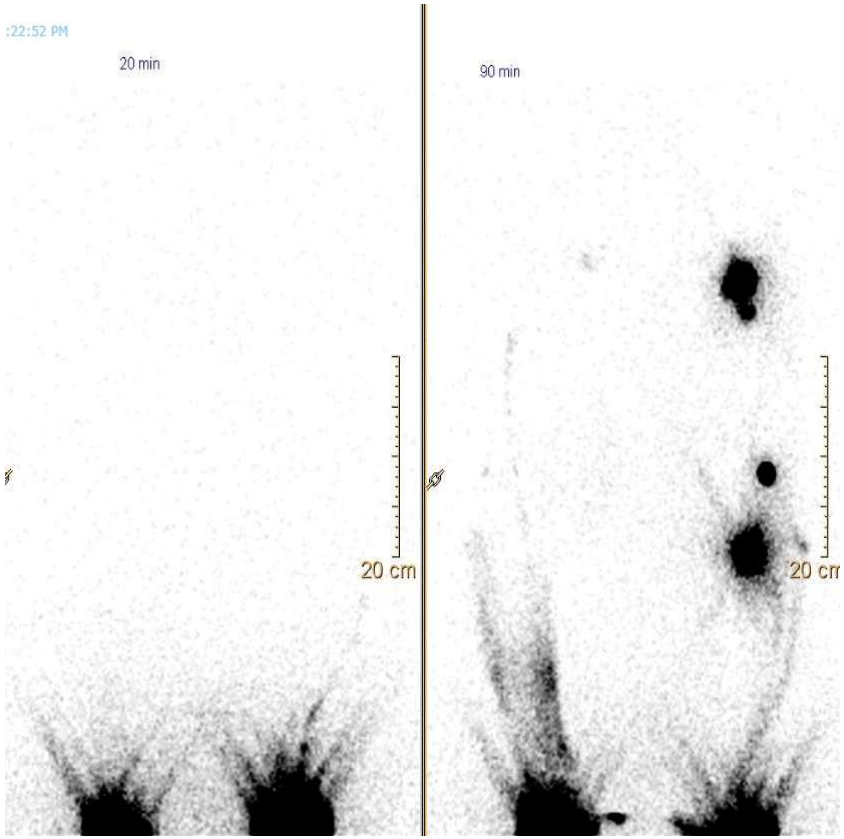

ICV
Indocianina Verde
Ophthalmos
5 mg
25 mg
50 mg
Contém:
1 frasco-ampola com 5 mg de indocianina verde esterilizada por filtro esterilizante.
1 frasco-ampola com 10 mL de água para injetáveis esterilizada por autoclavação.
OPHTHALMOS

Follow-up



CRR (%) = (1 − [postop AL − NAL] / [preop AL − NAL]) × 100

AL = arto affetto
NAL = arto non affetto

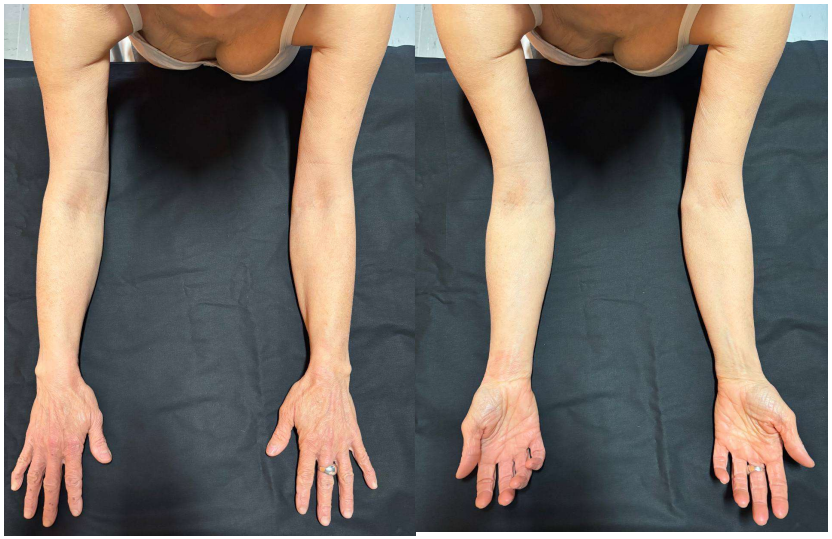


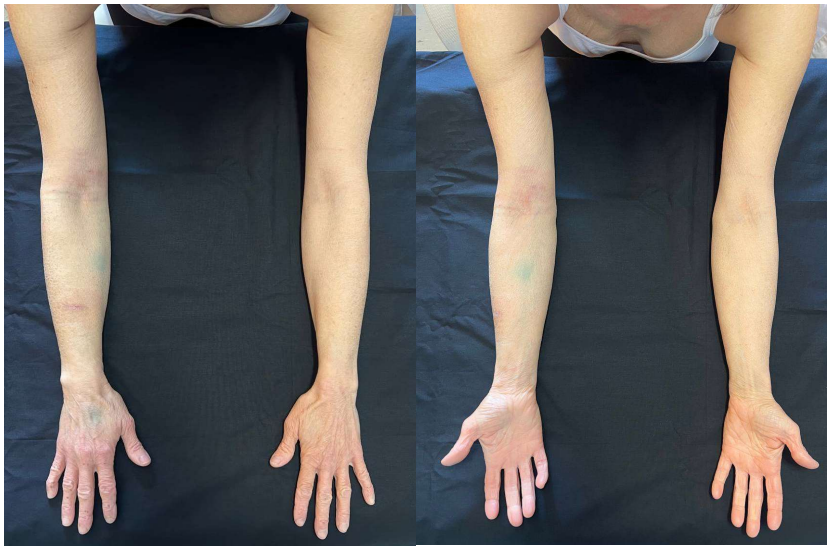
Linfoscintigrafia pre- e post-operatoria
con calcolo del TI index

Caso 1

2019: Mastectomia dx + DA + RT
Dal 2021: BCRL con 6 linfangiti / anno

BCRL dx ISL IIA,
Δ 3 cm



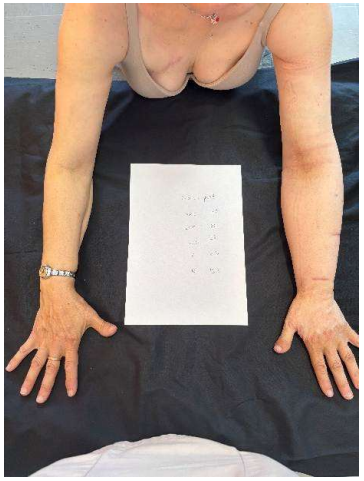


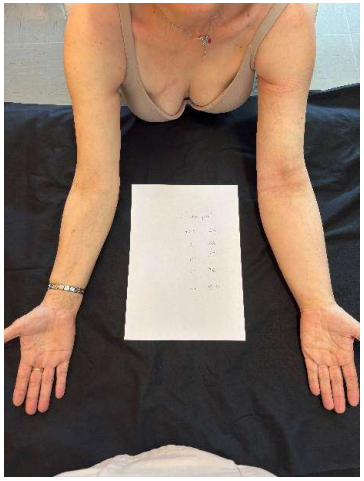
1 mese post 3 LVA
Δ 1.5 cm

Caso 2

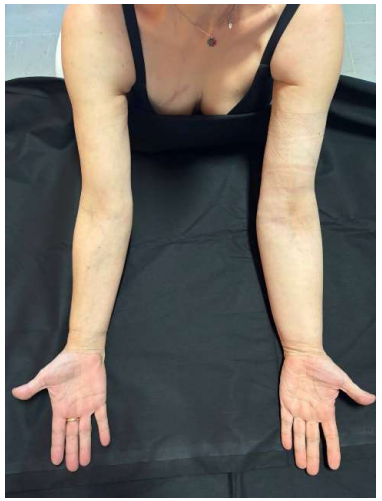
BCRL sin ISL IIB
TI 14.6
Δ 5 cm

2017: Mastectomia sin + DA + LD flap
Dal 2019: BCRL con 2 linfangiti / anno





3 mesi post 3 LVA:
Δ 3.5 cm

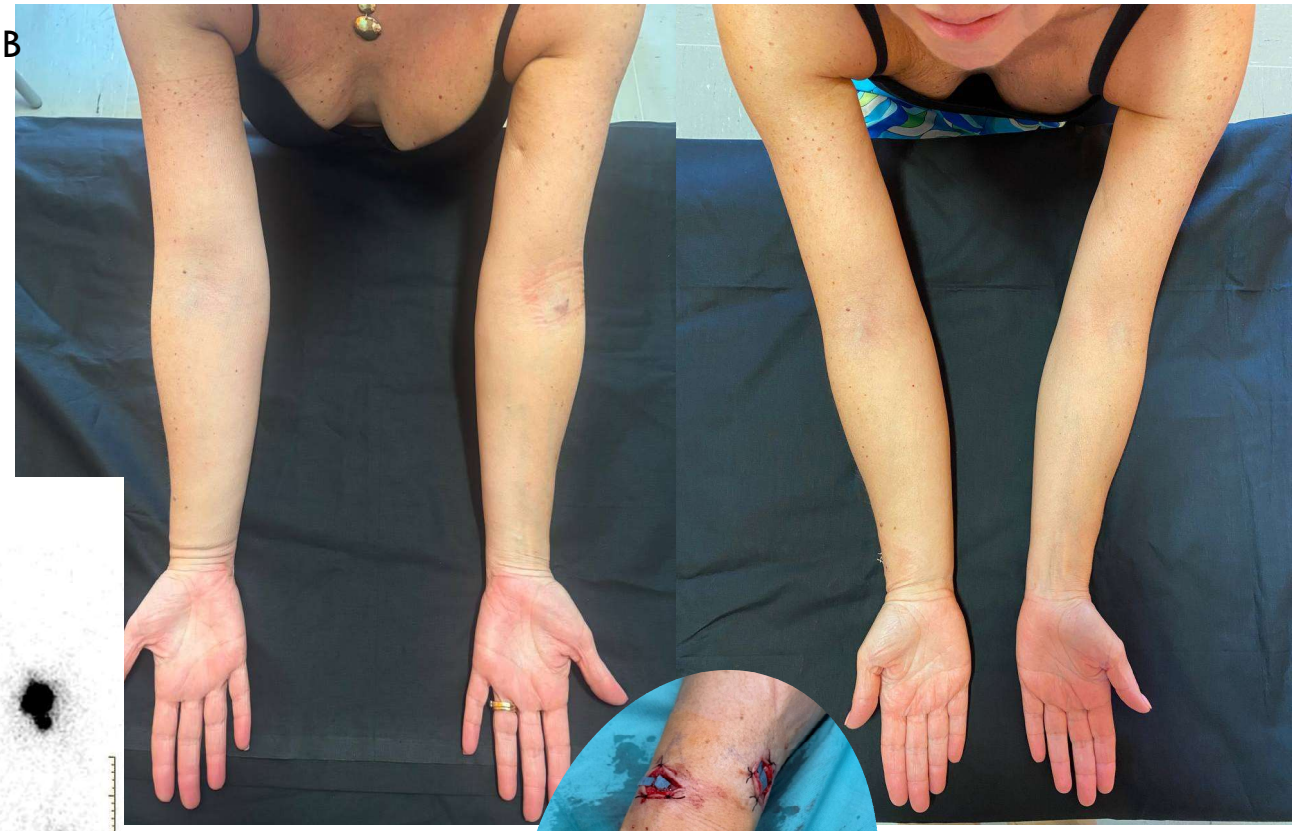


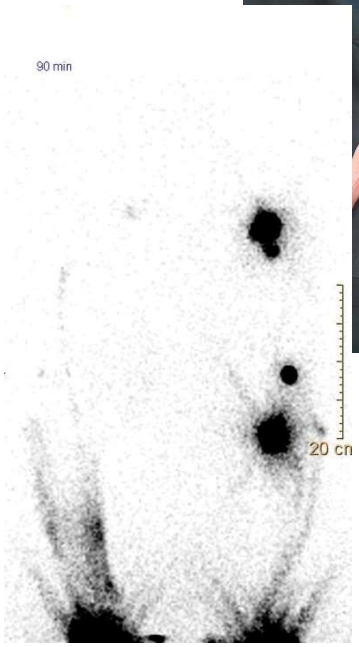
1 mesi post 3 LVA:
Δ 3 cm

Caso 3

2020: neoCT
2021: Mastectomia dx + DA + RT
Dal 2022: BCRL

BCRL dx ISL IIB
TI 25
Δ 3.5 cm





1 mese post 3 LVA
Δ 1 cm

Conclusioni

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Check for updates

The LyBra score: A risk assessment tool to address targeted prevention against breast cancer – Related lymphedema

Donato Casella [a], Nicola Rocco [b], Silvia Sordi [a], Giuseppe Catanuto [c], Antonio Toesca [d], Luca Sanvitale [e], Michele Barbiero [e], Laura Bergamasco [f], Diego Ribuffo [g], Pietro Maria Ferrando [h], Juste Kaciulyte [a,g,*]

[a] Oncologic Breast Surgery Unit, Department of Medicine, Surgery and Neuroscience, University of Siena, Siena, Italy
[b] Department of Advanced Biomedical Sciences, University of Naples Federico II, Naples, Italy
[c] Breast Unit, University Hospital Federico II, Naples, Italy
[d] Candiolo Cancer Institute, FPO - IRCCS, Candiolo, (TO), Italy
[e] Department of Surgical Science, Unit of Surgery 1U, Torino University, Torino, Italy
[f] Department of Surgical Sciences, Torino University, Torino, Italy
[g] Unit of Plastic and Reconstructive Surgery, Policlinico Umberto I, Department of Surgery "P. Valdoni", Sapienza University of Rome, Rome, Italy
[h] Plastic Surgery Department, AOU Città della Salute e della Scienza di Torino - CTO Hospital, Torino, Italy

OBIETTIVO

▶ Ottimizzare la collaborazione tra

chirurgo
radioterapista
team

EFFETTI DELLA RADIOTERAPIA SUI TESSUTI

Alterazioni critiche:

- Fibrosi, ipossia, danno vascolare
- Ridotta elasticità cutanea

Impatto sulla ricostruzione:

- Rischio doppio di contrattura capsulare (protesi)
- Necrosi del lembo nel 15% dei casi (autologo)

.

Fase 1: Pre-RT

- Valutazione anatomica (spessore cute, BMI)
- Scelta timing ricostruzione: Immediata vs. differita
- Strumenti: Ecografia Doppler per mappatura vascolare

Fase 2: Durante RT

- Colloquio con radioterapista: Proteggere il peduncolo vascolare
- Uso di clips chirurgiche per delimitare il letto tumorale

Fase 3: Post-RT

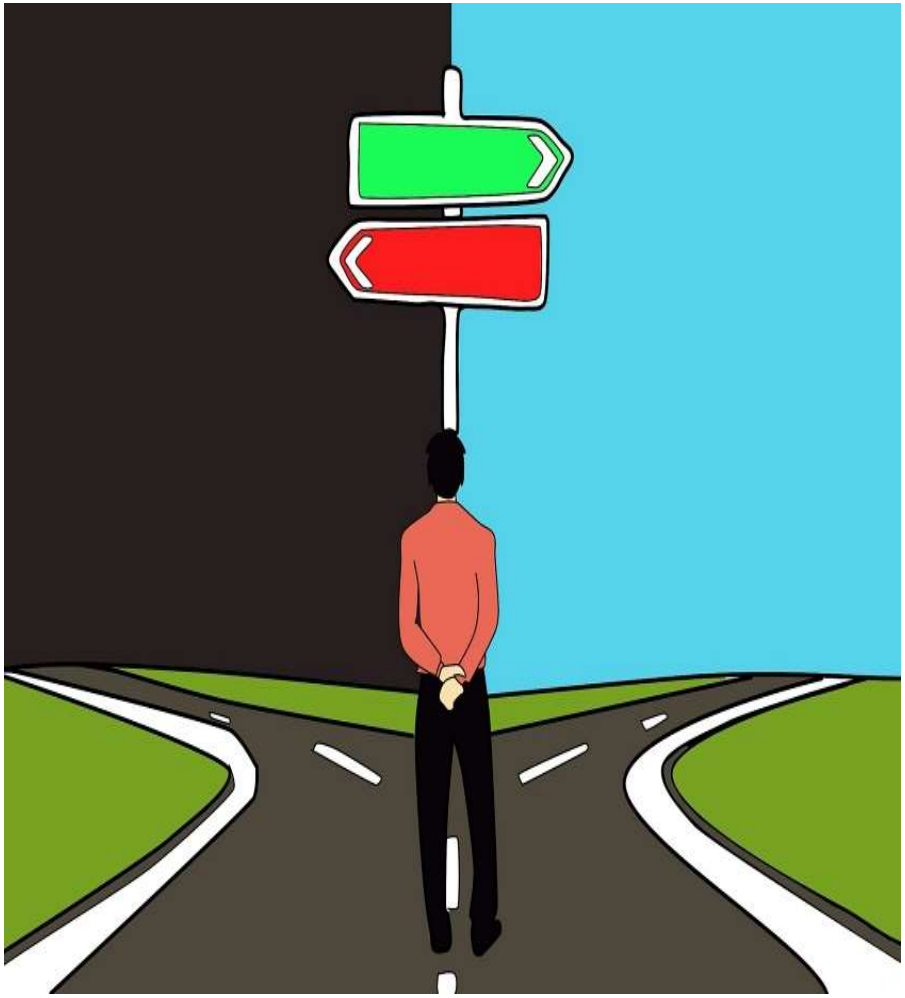
- Monitoraggio complicanze (checklist chirurgica)
- Timing ricostruzione differita: 6-12 mesi post-RT

Ricostruzione immediata (pre-RT)

- ▶ Vantaggi: Benessere psicologico, 1 intervento
- ▶ Rischi: 40% revisioni chirurgiche
- ▶ Candidati ideali: RT neoadiuvante, basso stadio

Ricostruzione differita (post-RT)

- ▶ Vantaggi: Minor complicanze
- ▶ Svantaggi: Due interventi, atrofia tessutale
- ▶ Candidati ideali: RT adiuvante, stadio avanzato



Scelta della Tecnica Protesi vs. Autologo

Protesi in pazienti irradiate

▶ Solo se RT neoadiuvante + uso di espansori a riempimento ritardato

▶ Materiali preferiti: Poliuretano, texture alta

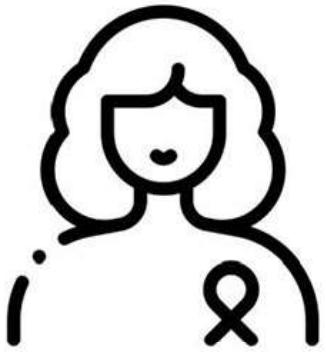
▶ Complicanze: 35% vs. 12% negli autologhi (dati IEO 2023)

Lembi autologhi

▶ Gold standard per pazienti irradiate

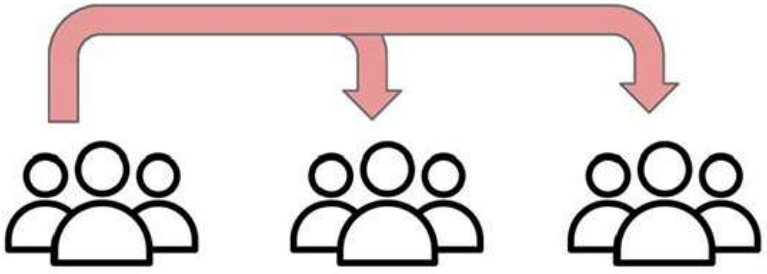
▶ Tasso di successo: 85-90%

▶ Criticità: Tempi operatori lunghi (4-8 ore)



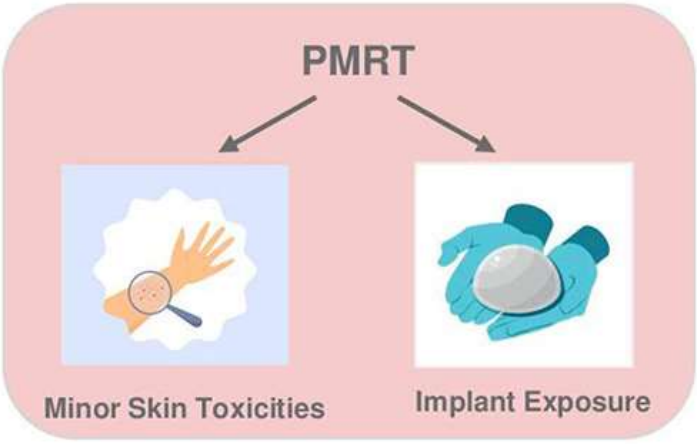
262 Breast Cancer Patients With Immediate Breast Reconstruction

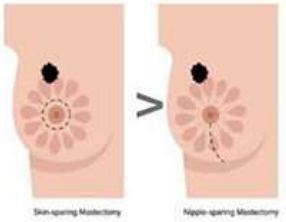
Univariate and Multivariate Analyses of **Major** and **Minor** Post-IBR complications



No significant associations between a prior history of radiation and developing major or minor post-surgical complications.

Key Findings



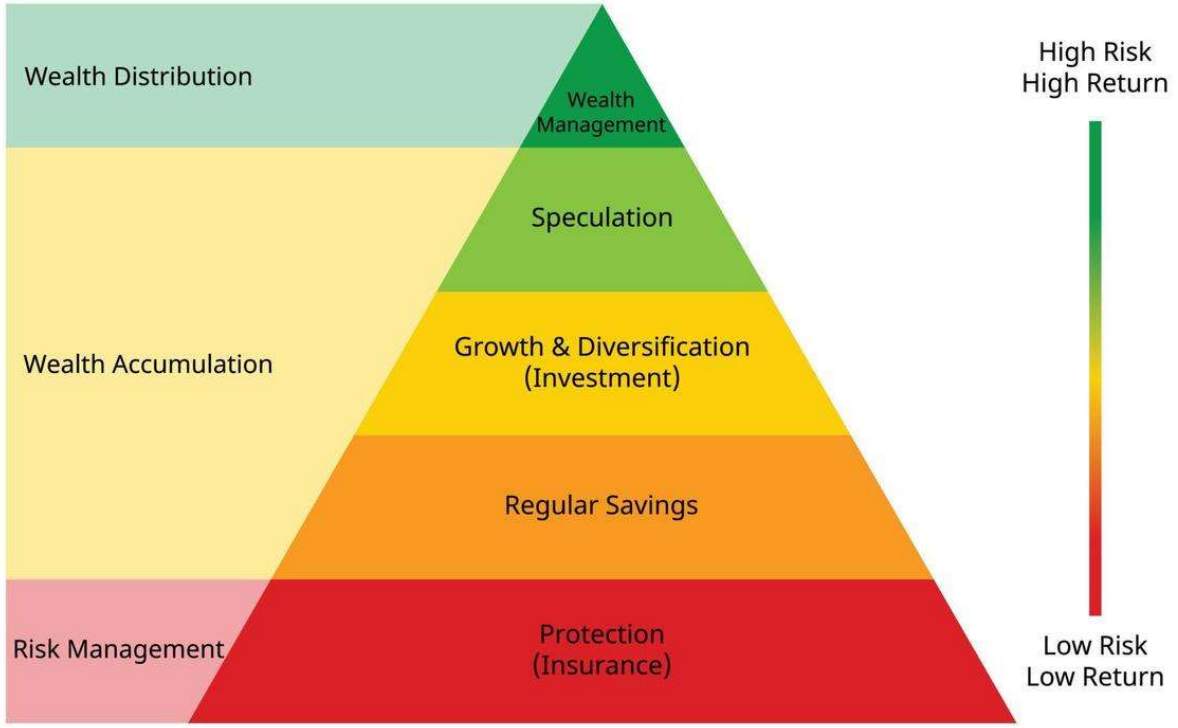


Higher risk of major complications

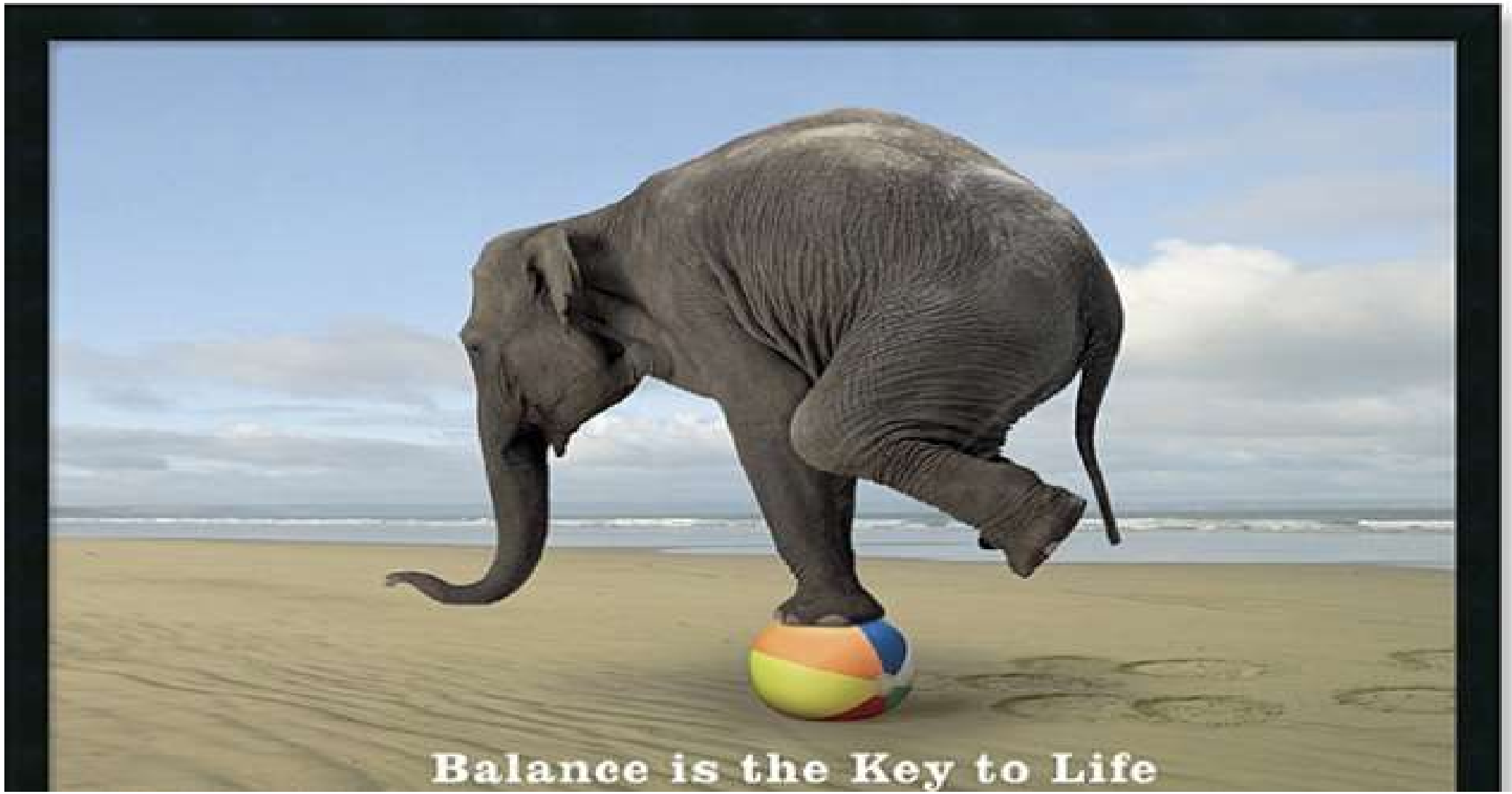
Higher risk of major and minor complications

There is no conclusive evidence that clinicians should omit the discussion of reconstruction in the face of prior or planned radiation therapy.

PIRAMIDE RICOSTRUTTIVA




F I GB USA MEX
ONE SIZE
DOES NOT
FIT ALL
Von links bügeln/ Iron inside out/
repasser sur l'envers /


Balance is the Key to Life

The difference

Multidisciplinarity

one disciplinary view, supported by views from other fields of science.

Interdisciplinarity

many disciplinary views with equal weights.

Transdisciplinarity

multiple views in a common conceptual framework, joined by multiple stakeholders.


Errare
humanum est

COMPLICANZE

Gestione Chirurgica
Contrattura capsulare (G3/G4):

▶ Capsulectomia totale + sostituzione con lembo

Necrosi del lembo:

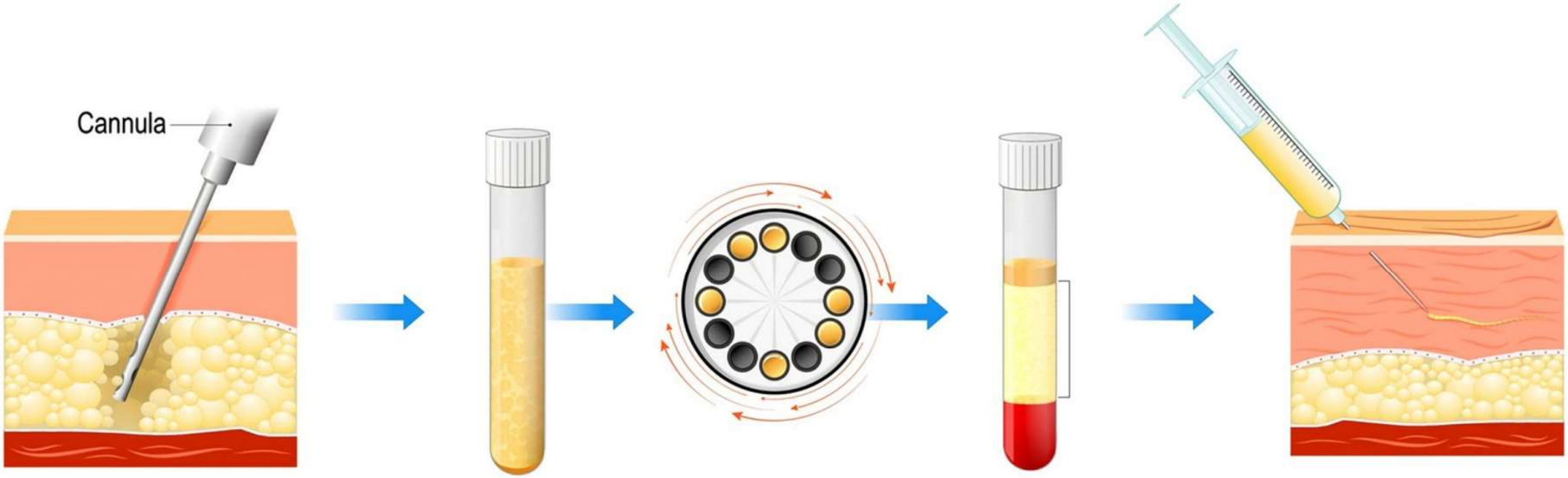
▶ Debridement + lipofilling rigenerativo

Fibrosi dolorosa:

▶ Neurotomia selettiva + fisioterapia

Fat Transfer Process

HYBRID RECONSTRUCTION



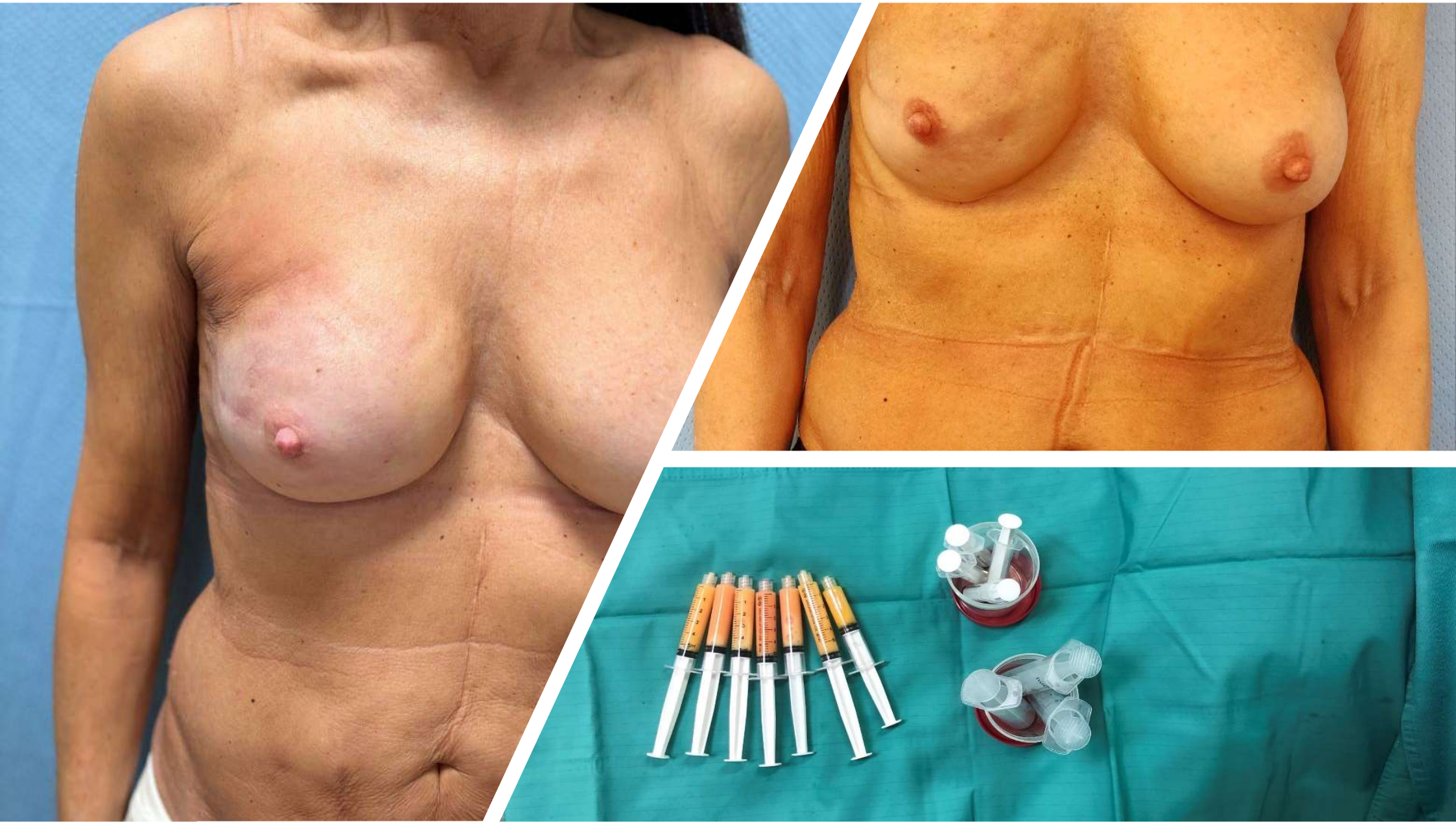
Liposuction extracts fat tissue

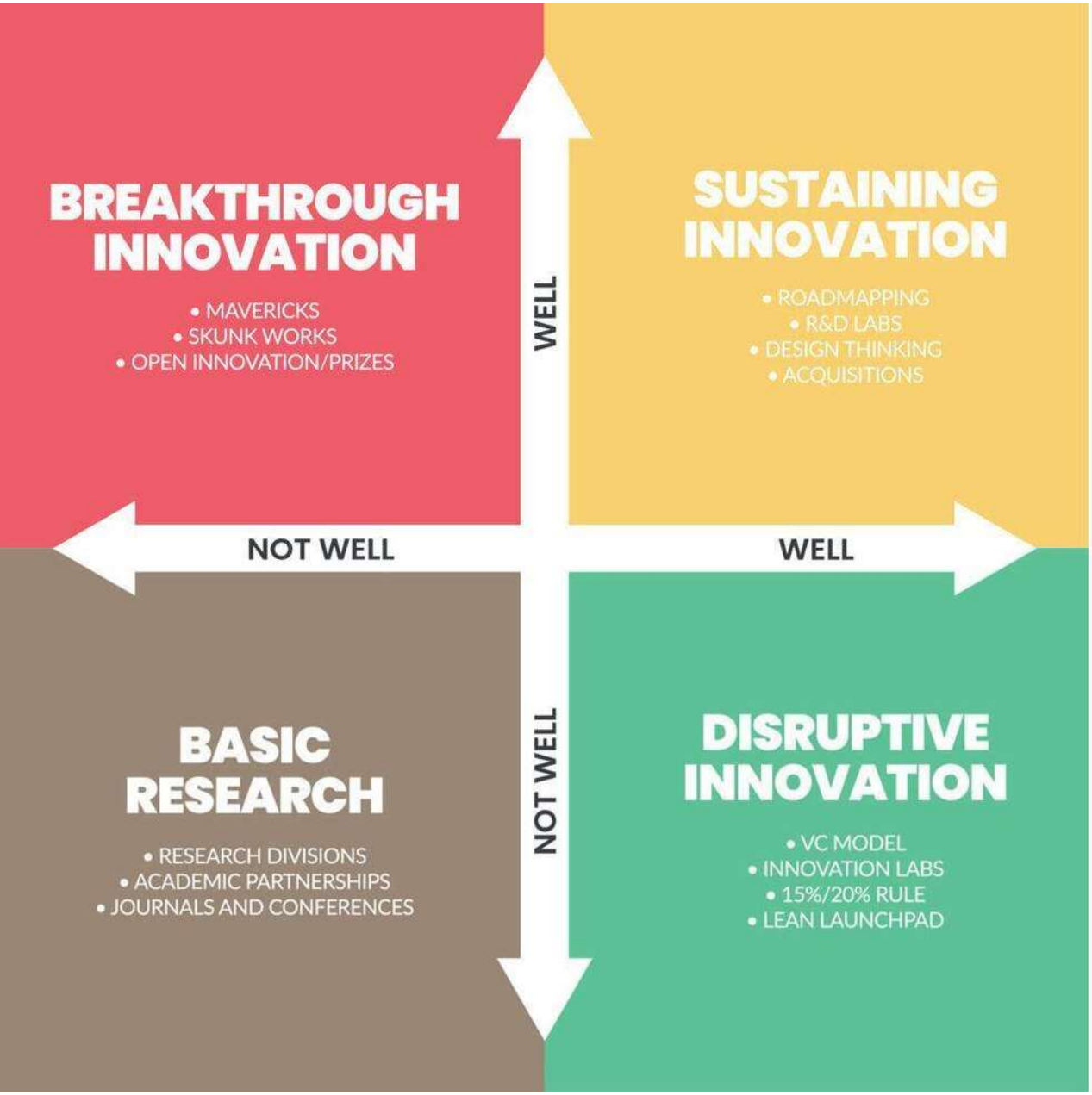
Collect fat cells

Centrifuge separates fat cells from oil and other fluids

Pure fat is extracted

Fat is injected into the target area





4 TYPES OF INNOVATION

STRUMENTI INNOVATIVI PER IL CHIRURGO

1.Realtà aumentata:

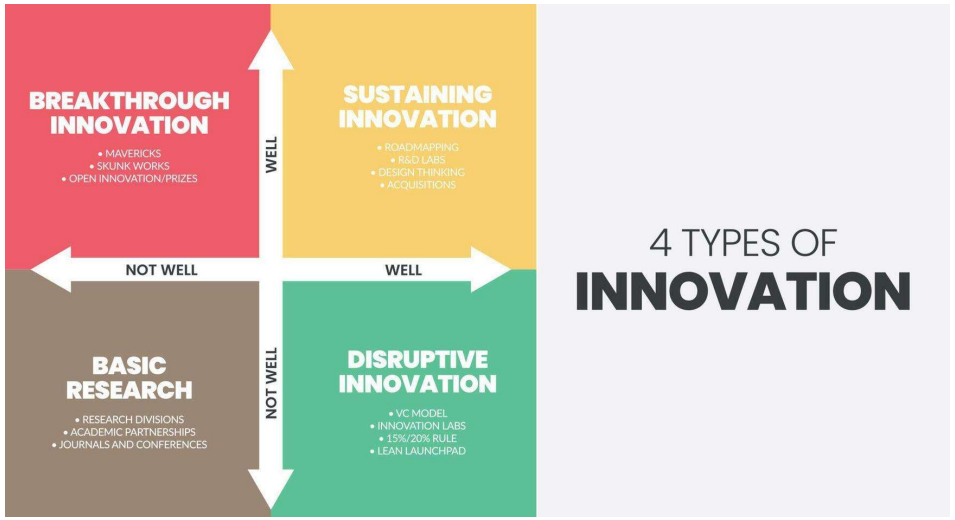
▶ Sovrapposizione mappe di dose RT al campo operatorio

2. Bioprinting 3D:

▶ Scaffold personalizzati per tessuto irradiato

3. Simulatori virtuali:

▶ Training su complicanze post-RT



- Ai fini di limitare l’uso di cerotti medicati che tendono a causare eritemi fino a vere e proprie ustioni, utilizziamo le coppe contenenti ROS che favoriscono una rapida guarigione delle ferite.


PREVENA PLUS™ 125

NDoCaSco

Risk factor	Score: 0	Score: 1	Score :2
Patient's age	> 70	50-70	< 50
Diabetes	YES	Hbg <9	NO
Connective tissue diseases	Active	Not-active	NO
Corticosteroids therapy	YES	Previous	NO
Smoker	Current smoker	Ex-smoker	Never smoker
BMI	Low: < 22	High: > 25	Medium: 22 - 25
Breast ptosis	Grade III	Grade I - II	NO
Previous breast surgery	Major previous breast surgery	Minor previous breast surgery	NO
Previous Radiotherapy	Previous breast irradiation	NO	-
Chemotherapy	Current CT	Previous neo-adjuvant CT	NO
Mastectomy flaps vitality and thickness	1 or more not perfused not resectable areas	1 not perfused resectable area	> 2 cm, perfused

NPWT

medicina

MDPI

Article

Portable Negative Pressure Wound Dressing in Oncoplastic Conservative Surgery for Breast Cancer: A Valid Ally

Donato Casella [1], Daniele Fusario [1,*], Anna Lisa Pesce [1], Marco Marcasciano [2], Federico Lo Torto [3], Gianluigi Luridiana [4], Alessandro De Luca [5], Roberto Cuomo [1] and Diego Ribuffo [3]

[1] Department of Medicine, Surgery and Neurosciences, University of Siena, 53100 Siena, Italy; donato.casella@unisi.it (D.C.); annalisa.pesce@student.unisi.it (A.L.P.); roberto.cuomo@unisi.it (R.C.)
[2] Unit of Plastic and Reconstructive Surgery, University of Catanzaro "Magna Graecia", 88100 Catanzaro, Italy; dott.marcomarcasciano@gmail.com
[3] Department of Plastic Reconstructive and Aesthetic Surgery, Sapienza Università di Roma, 00185 Rome, Italy; federico.lotorto@uniroma1.it (F.L.T.); diego.ribuffo@uniroma1.it (D.R.)
[4] Unit of Oncologic and Breast Surgery, A.R.N.A.S Brotzu, Businco Oncologic Hospital, 09047 Cagliari, Italy; gianluigi.luridiana@aob.it
[5] Department of Surgery, Sapienza Università di Roma, 00185 Rome, Italy; dr.aless.deluca@gmail.com
* Correspondence: dani.fusario@gmail.com

Abstract: *Background and Objectives*: The use of oncoplastic techniques has spread widely in the last decade, with an expansion of the indications and demonstration of excellent oncological safety profiles. A potential downside may be the increased complication rates, which could influence the timing of adjuvant therapy. To date, there is increasing evidence that negative pressure therapy on closed wounds can reduce complication rates after surgery. From this perspective, we tested the use of portable negative pressure wound dressings (NPWDs) in oncoplastic surgery to minimize early post-operative admissions to the outpatient clinic and prevent surgical complications. *Materials and Methods:* An observational prospective cohort study was conducted on a population of patients who underwent quadrantectomy and wise-pattern reduction mammoplasty for breast cancer. The primary objective of the study is represented by the evaluation of the impact of NPWD on post-operative outcomes in an oncoplastic surgery setting. Patients enrolled between January 2021 and January 2023 were divided into two groups, the conventional dressing (CD) group and the NPWD group, by a simple randomization list. *Results:* A total of 100 patients were enrolled, with 52 in the CD group and 48 in the NPWD group. The use of NPWD significantly reduced the wound dehiscence rate (2.0% vs. 7.7% $p = 0.002$) and the number of one-month postoperative admissions to our clinic (3.8 ± 1.1 vs. 5.7 ± 1.3 $p = 0.0009$). Although not significant, it is possible to note a trend of reduction of clinically relevant postoperative total complications in patients treated with NPWDs. *Conclusions*: NPWDs may represent a useful tool in the post-surgical management of complex oncoplastic procedures, ensuring less wound dehiscence. Furthermore, the use of these dressings led to a significant reduction in admissions to the clinic, promoting a lower use of resources by hospitals and effective prevention of possible complications.

Keywords: wound healing; oncoplastic; breast cancer; negative pressure

check for updates

Citation: Casella, D.; Fusario, D.; Pesce, A.L.; Marcasciano, M.; Lo Torto, F.; Luridiana, G.; De Luca, A.; Cuomo, R.; Ribuffo, D. Portable Negative Pressure Wound Dressing in Oncoplastic Conservative Surgery for Breast Cancer: A Valid Ally. *Medicina* **2023**, *59*, 1703. https://doi.org/10.3390/medicina59101703

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1. Introduction

Immediate breast reconstruction after breast-conserving surgery has been a significant innovation in the treatment of breast cancer: its success is based on the combination of complete excision of tumors with adequate and oncologically safe margins with the attempt to preserve the natural shape and appearance of the breast. The implementation of screening and neoadjuvant chemotherapy has extended the indications for breast-conserving surgery.

Despite the proven oncological safety, oncoplastic breast surgery was introduced to overcome the obstacle of unsatisfactory aesthetic results. Oncoplastic breast-conserving

CONCLUSION

1

La RT non preclude la ricostruzione, ma richiede adattamento

2

Il chirurgo è il regista: deve conoscere radioterapia, anatomia e aspettative della paziente

3

Il successo dipende dal team: "Nessun campione vince una partita da solo

"Non esiste una scelta giusta, ma una scelta condivisa."

Grazie

donatocasella@gmail.com