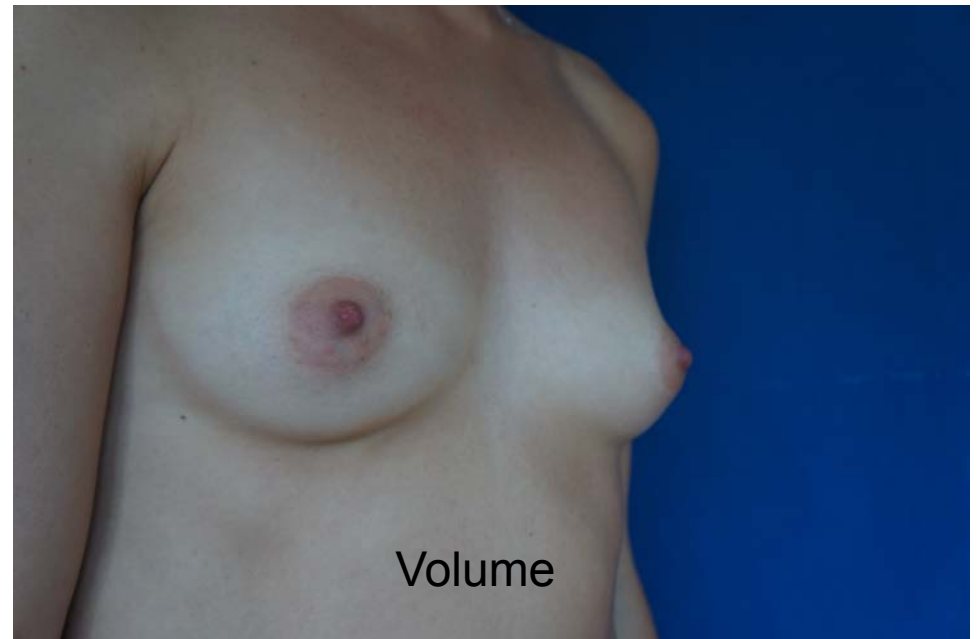
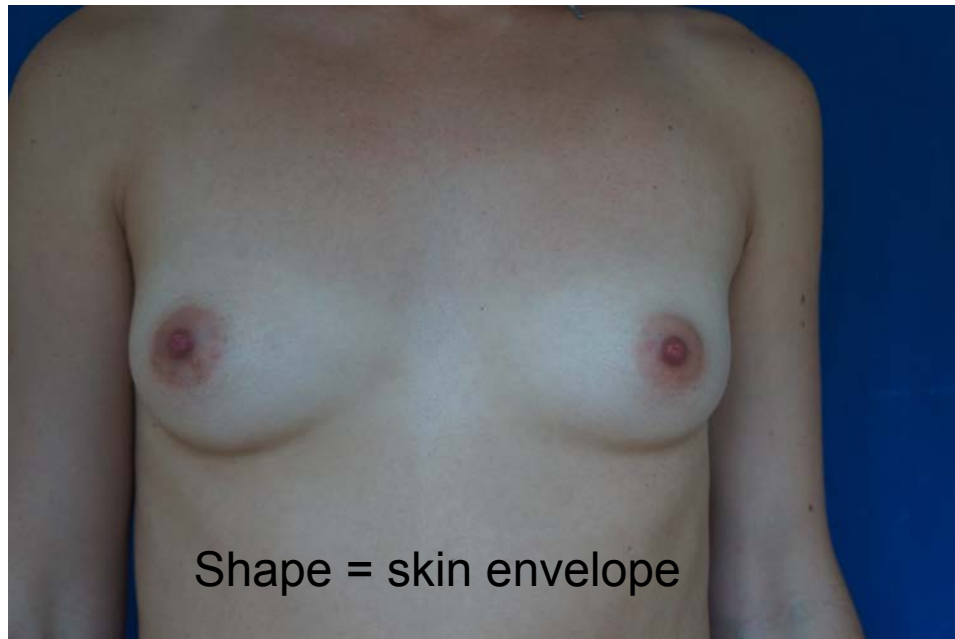


FAT GRAFTING ALONE FOR BREAST RECONSTRUCTION

Christophe Ho Quoc, MD
Christelle Faure, MD
Emmanuel Delay, MD PhD

Lyon, October 2013
NO DISCLOSURE

What is a breast?



What is a reconstructed breast?



Shape = skin envelope
RECONSTRUCTION



Volume
RECONSTRUCTION

What is a reconstructed breast?



VOLUME RECONSTRUCTION?

Implant reconstruction

Ho Quoc C, Delay E. Reconstruction mammaire après mastectomie. J Gynecol Obstet Biol Reprod (Paris) 2013 ; 42:29-39



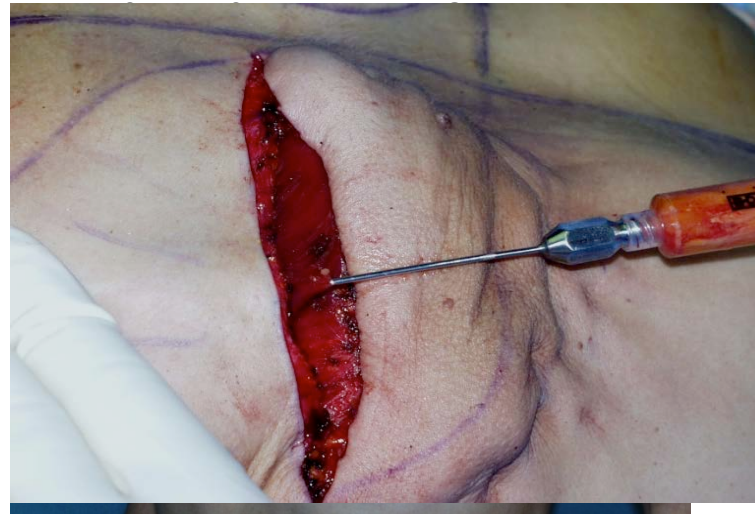
Autologous Latissimus Dorsi reconstructed breasts

Delay E, Ho Quoc C. Autologous latissimus dorsi breast reconstruction. In *Oncoplastic and Reconstructive Breast Cancer Surgery [in English]* – Cicero Urban, Mario Rietjens(Eds), P.267-276, Springer-Verlag Italia 2013



Exclusive lipomodeling breast reconstruction (2001)

Ho Quoc C, Delay E. Breast reconstruction using autologous fat transplantation. In *Oncoplastic Surgery of the Breast : how?* Mancati (Eds),



SKIN RECONSTRUCTION?

Abdominal advancement flap

Ho Quoc C, Delay E. Reconstruction mammaire après mastectomie. J Gynecol Obstet Biol Reprod (Paris) 2013 ;42:29-39

Fasciotomies

Ho Quoc C, Sinna R, Gourari A, La Marca S, Toussoun G, Delay E. Percutaneous Fasciotomies and Fat Grafting: Indications for Breast Surgery. Aesthet Surg J;33:995-1001

BRAVA expansion

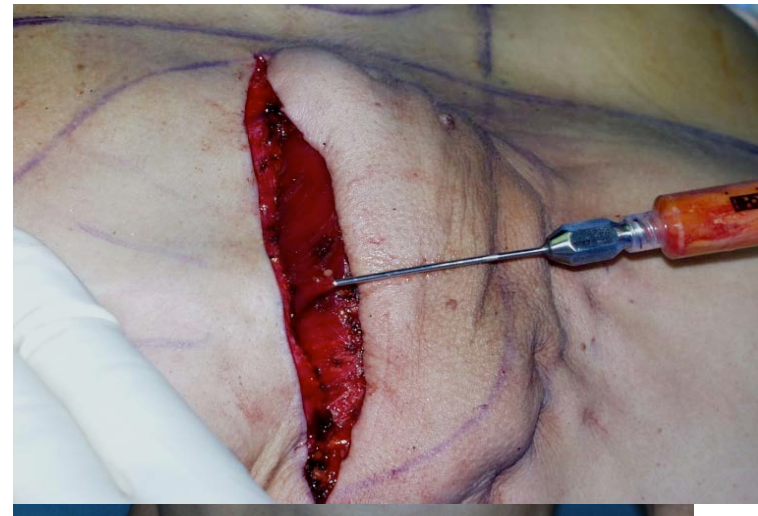
Ho Quoc C, Delay E. Tolérance de la pré-expansion BRAVA en complément des transferts graisseux dans le sein. Ann Chir Plast Esthét 2013;58:216-221



Implant reconstruction

Autologous Latissimus Dorsi reconstructed breasts

Exclusive lipomodeling breast reconstruction (2001)



SKIN RECONSTRU

Abdominal advancement flap

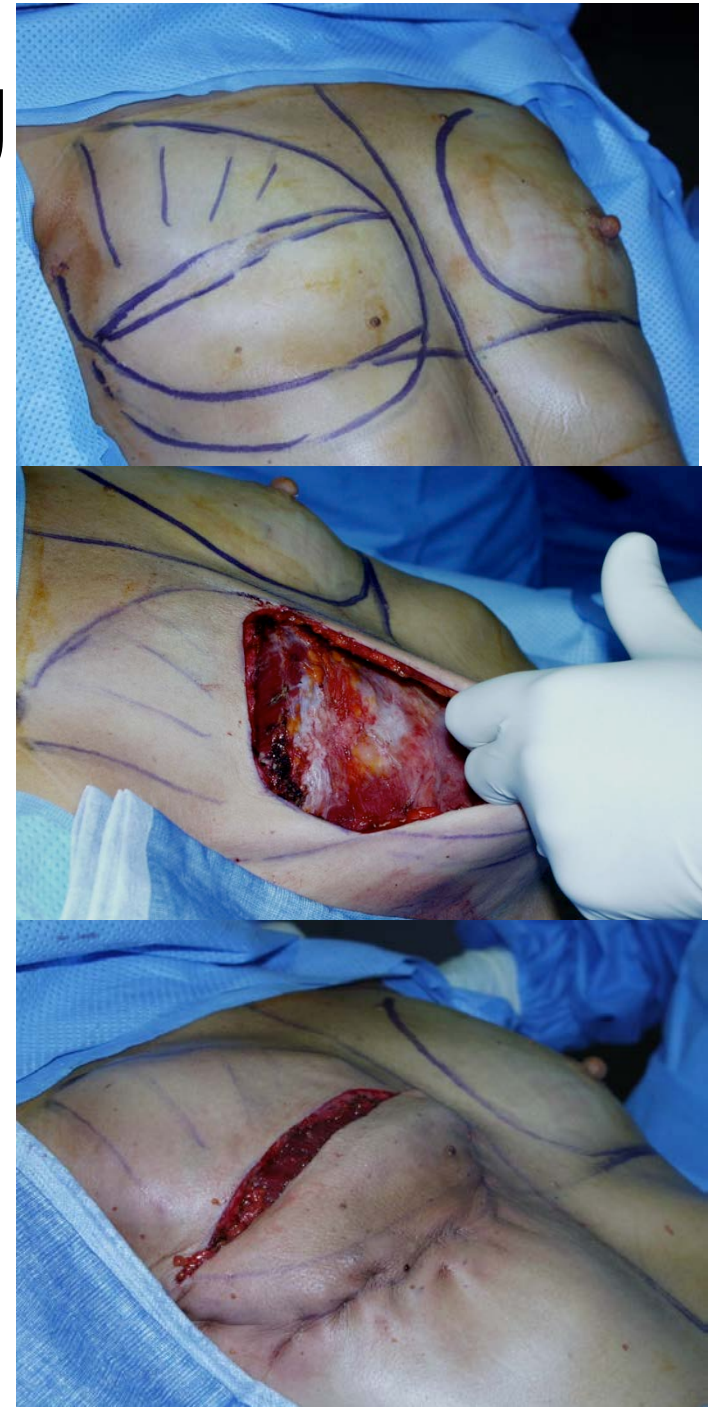
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SKIN RECONSTRUCTION?

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BRAVA expansion

Ho Quoc C, Delay E. Tolérance de la pré-expansion BRAVA en complément des transferts graisseux dans le sein. Ann Chir Plast Esthét 2013;58:216-221



What is BRAVA?

- External Expansion Vacuum Assisted
- Contents:
 - Dome
 - Box
 - Pump
 - Links



Ho Quoc C, Delay E.

Tolérance de la pré-expansion BRAVA en complément des transferts graisseux dans le sein. Ann Chir Plast Esthét 2013

AIM : OEDEMA BREAST



4 weeks after
wearing brava



**BEFORE
SURGRY**



ERAVA en consultation

C. Ho Quoc E. Delay

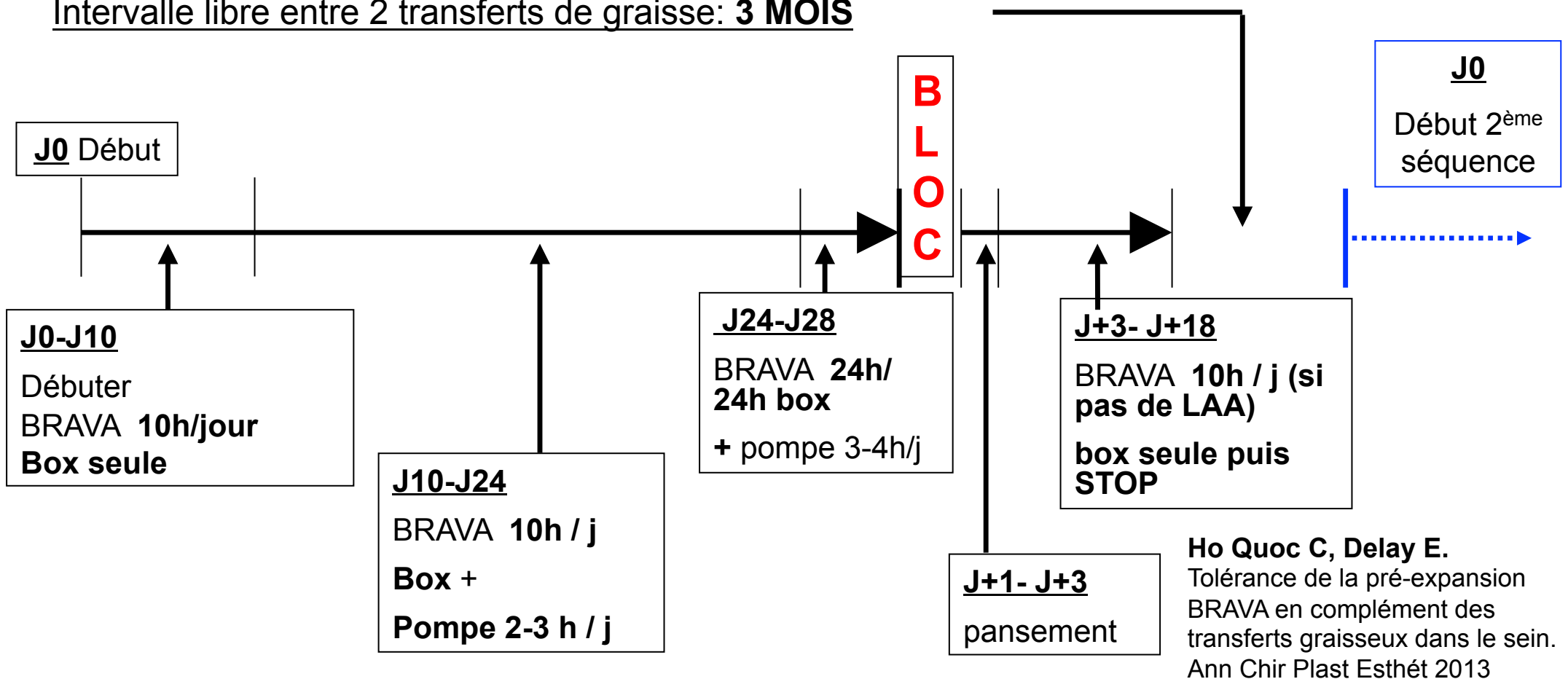
Lyon, France

Déroulement d'une séquence de lipomodelage + BRAVA

Nombre de séquences pour la reconstruction d'un sein:

- 3-4 en RMD ou RMI
- 1-2 en RM partielle

Intervalle libre entre 2 transferts de graisse: 3 MOIS



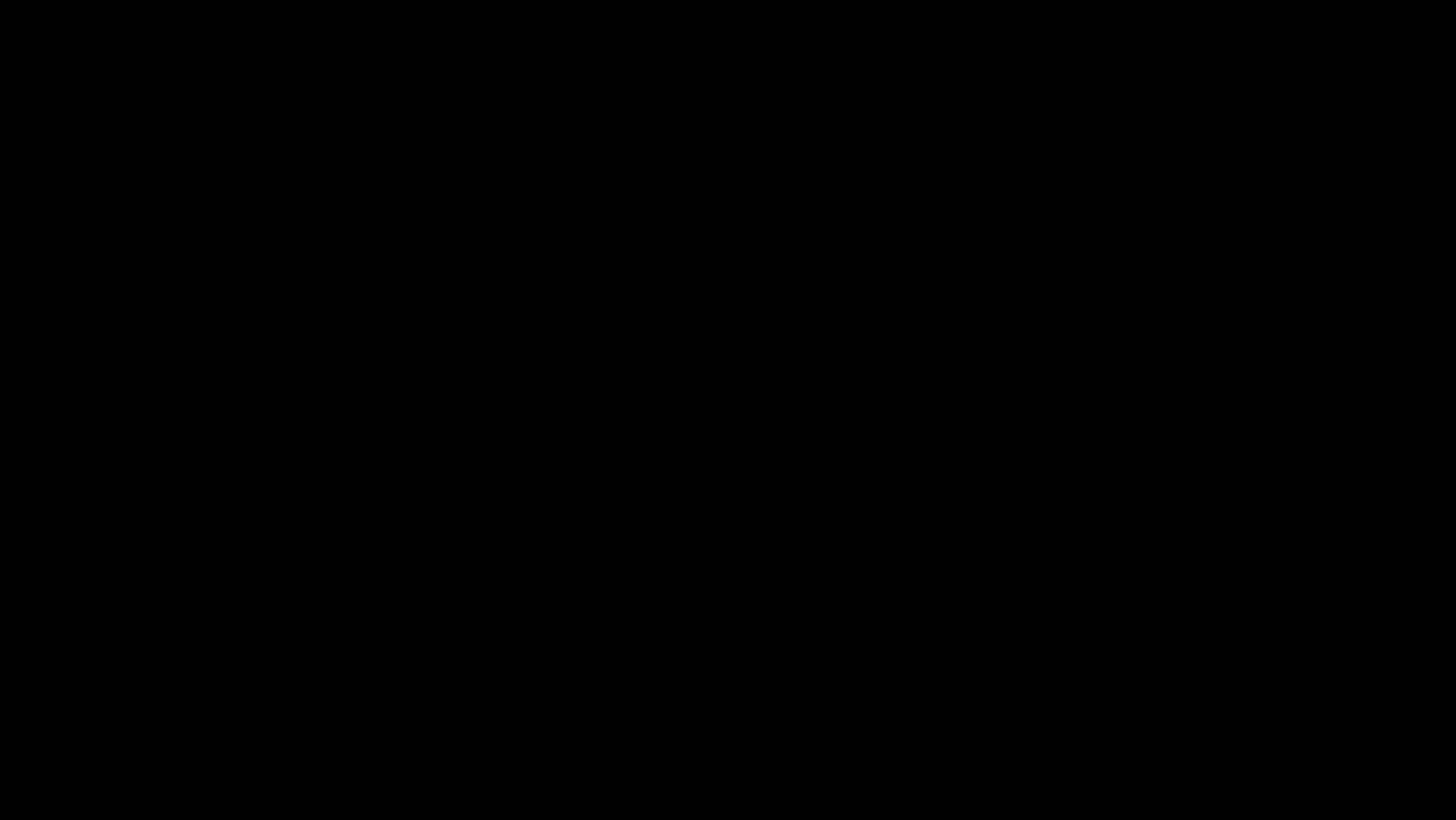
SURGICAL PROCEDURE

BRAVA before surgery?

She comes WITH BRAVA for surgical procedure

- I take off in surgical room
- Surgical procedure





Ho Quoc C, Delay E. Tolérance de la pré-expansion BRAVA en complément des transferts graisseux dans le sein. Ann Chir Plast Esthét 2013;58:216-221

Ho Quoc C, Delay E. Breast reconstruction using autologous fat transplantation. In *Oncoplastic Surgery of the Breast : how? When? Why?* – Eduardo Gonzalez, Alberto Rancati (Eds),

**BRAVA and
BREAST RECONSTRUCTION :
OUR EXPERIENCE**

BREAST RECONSTRUCTION INDICATIONS

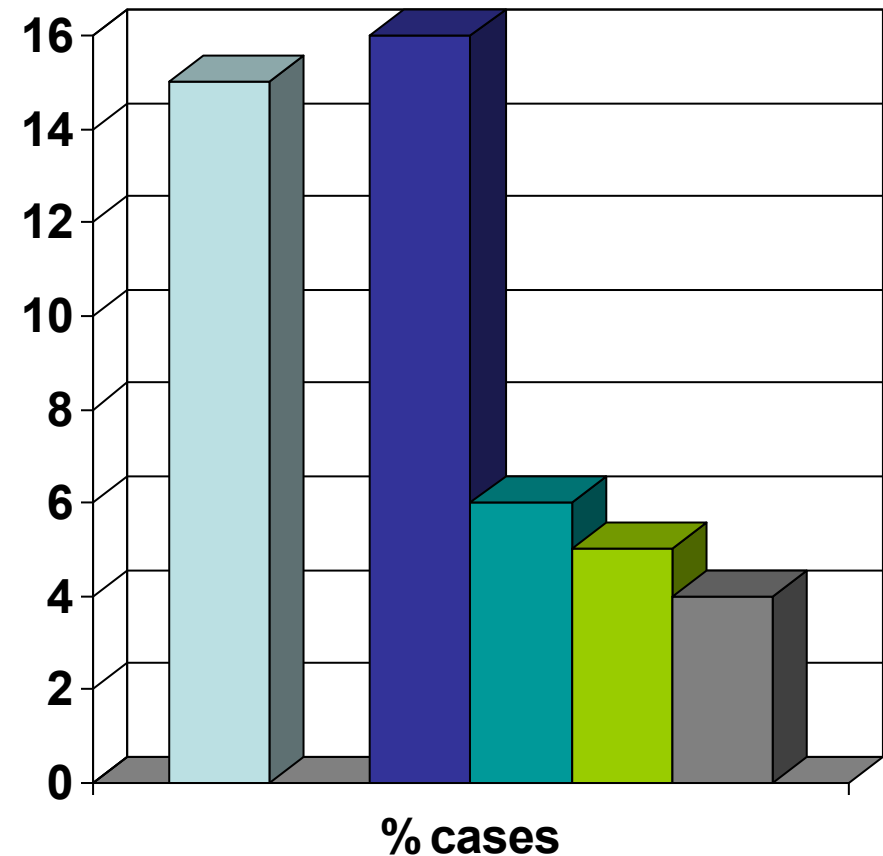
- **31 cases, from 2011 – dec 2012:**

- **15 total reconstructions :**

- 9 Delayed BR (3RT+/6RT-)
- 4 Immediate BR (RT-)

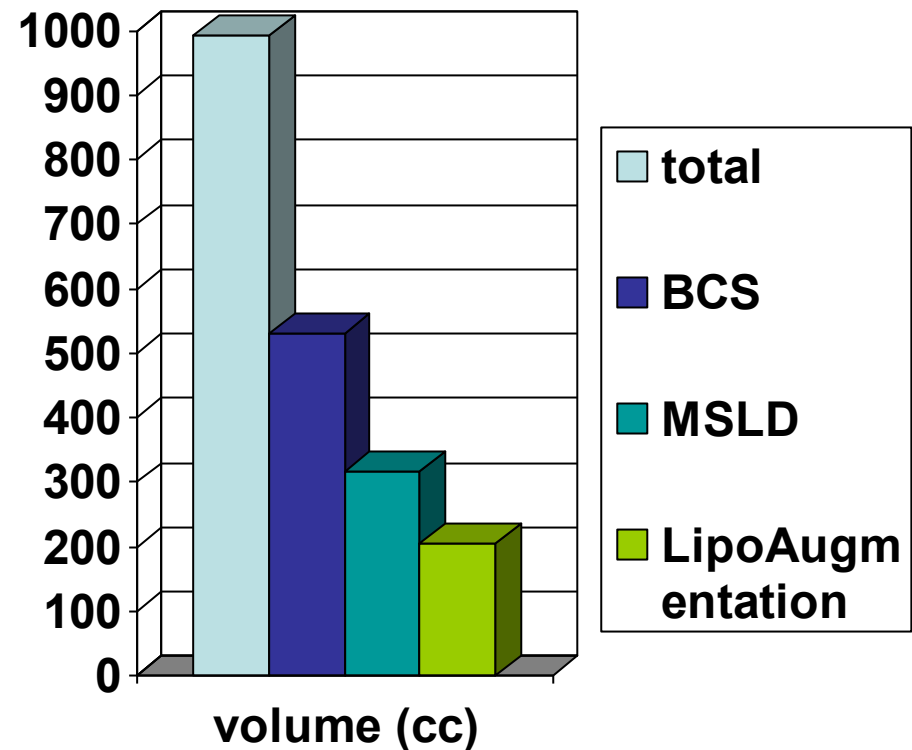
- **16 partial reconstructions:**

- 6 BCS
- 5 BR improvements (MSLD)
- 4 opposite-side lipoaugmentations
- 1 breast deformitie (thoracic scar)



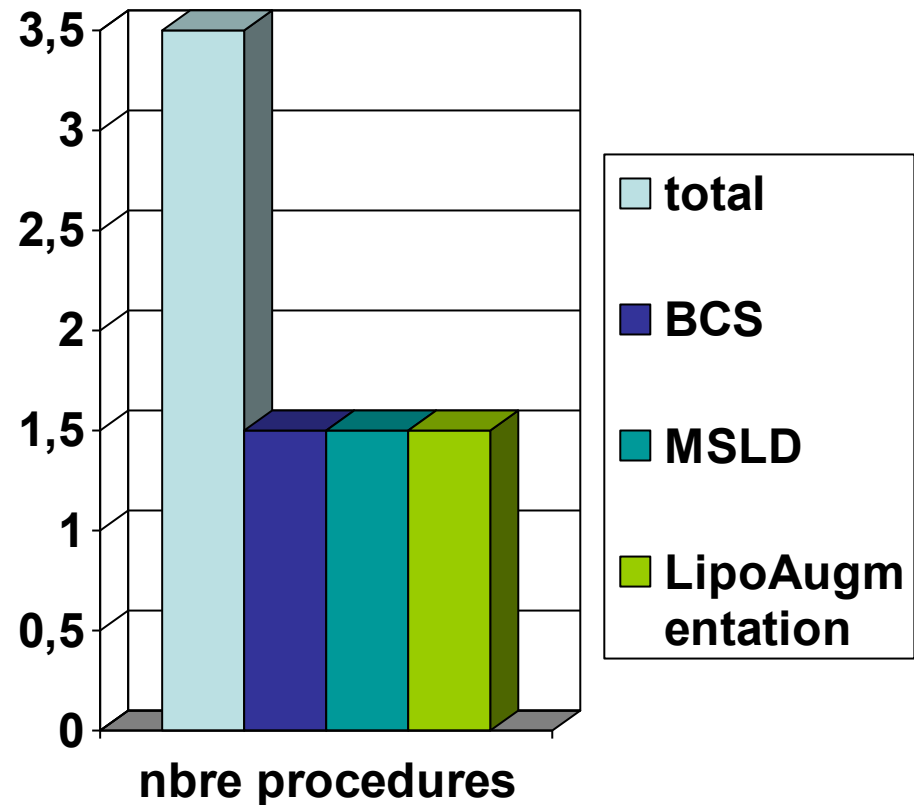
BREAST RECONSTRUCTION VOLUMES

- **31 cases, from 2011 – dec 2012:**
 - **15 total reconstructions :**
 - **Delayed BR : 1052 cc** (818-1568)
 - **Immediate BR : 700 cc** (640-730)
 - **16 partial reconstructions:**
 - BCS : 531 cc (300-653)
 - MSLD : 317 cc (246-401)
 - Lipoaugmentations : 205 cc (180-230)



BREAST RECONSTRUCTION PROCEDURES

- 31 cases, from 2011 – dec 2012:
 - 15 total reconstructions :
 - Delayed BR : 3-4
 - Immediate BR : 2-3
 - 16 partial reconstructions
 - BCS : 1-2
 - MSLD : 1-2
 - Lipoaugmentation : 1-2



Case 1 : Immediate BR



51 yo

MT (154g)



**RMI 116cc
(1st session)**

RT-





2 months po







**1 RMI +
2 sessions BRAVA
= 700 cc
(116 + 274 + 310)**



1 year po



Case 2 : Immediate BR



**1 RMI +
2 sessions
BRAVA
= 709 cc
(129 + 280 +
300)**



1 year po





**1 RMI +
2 sessions
BRAVA
= 709 cc
(129 + 280 +
300)**

1 year po



Case 3: Delayed BR



32 yo

RT -



TECHNICAL POINT

- INFRA MAMMARY FOLD+++
 - AAF (1st or 2nd session)
 - Cannula aspiration (last procedure)





4 sessions
1326 cc
(300+309+480
+237)



And AAF
1 year po





4 sessions
1326cc
(300+309+480+237)

And AAF



1 year po



Case 4 : Delayed BR



54 yo

RT -





4 sessions
1568cc
(441+354+373
+400)

And AAF

1 year po



Case 5 : Delayed BR



58 yo
RT-





3 sessions
818 cc
(218+260+340)

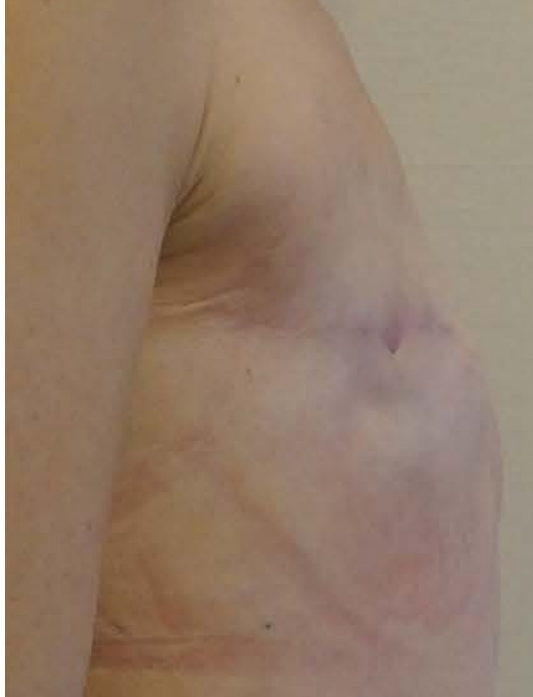


+ AAF

1 year po



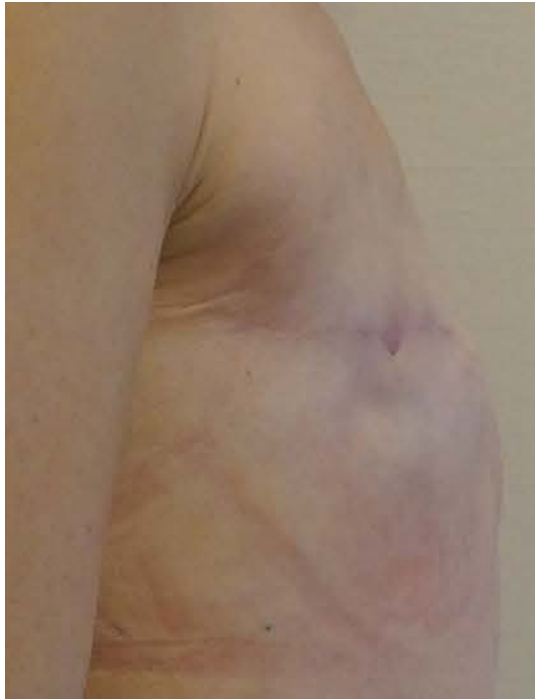
Case 6 : Severe Case



39 yo

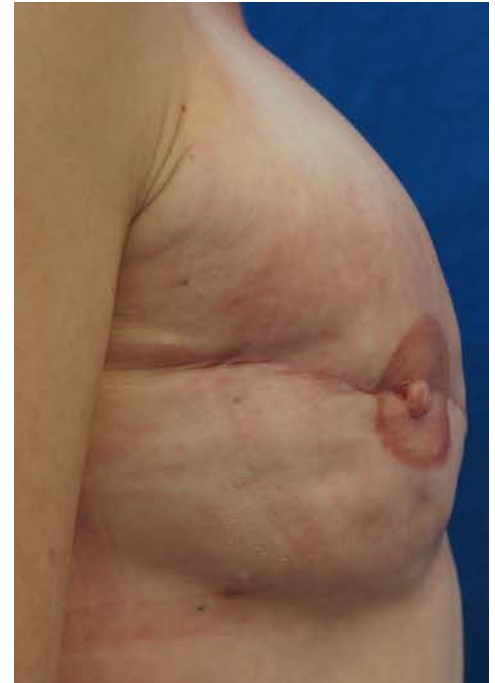
**RT+
Implant
exposure**





4 sessions
909cc
(138+231+330
+ 210)

+ AAF

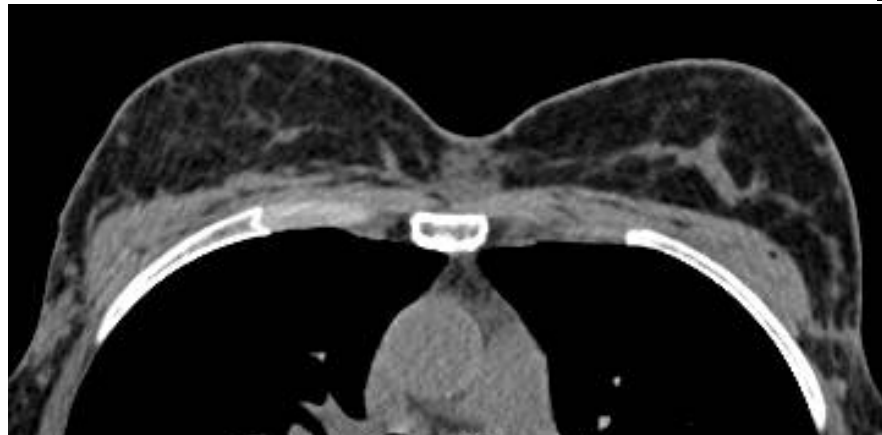
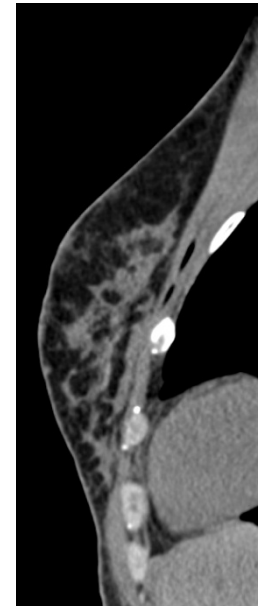
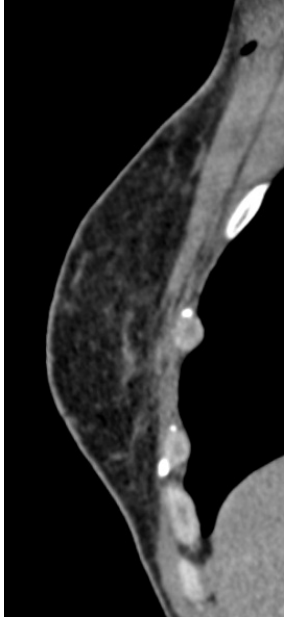


6m po



BRAVA and OBJECTIVE STUDIES

RADIOLOGICAL STUDY



TOLERANCE

SYMPTOME	PRESENCE CHEZ LES 21 PATIENTES (%)
Douleur	
Bruit	
Prurit	
Erythème	
Phlyctènes	
Infection	
Qualité de sommeil perturbée	
Perte de motivation	
Arrêt du BRAVA (après cycle amorcé)	



Ho Quoc C, Delay E.
 Tolérance de la pré-expansion
 BRAVA en complément des
 transferts graisseux dans le sein.
 Ann Chir Plast Esthét 2013

TOLERANCE

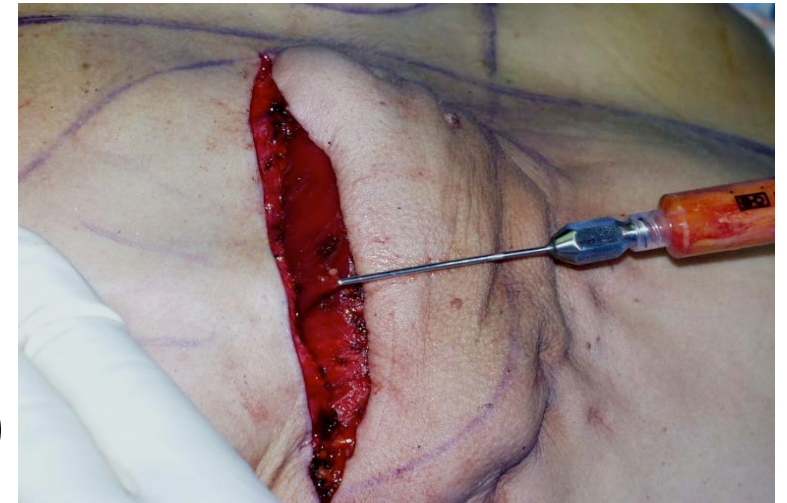
SYMPTOME	PRESENCE CHEZ LES 21 PATIENTES (%)
Douleur	0
Bruit	9,5% (2 cas)
Prurit	66% (14 cas)
Erythème	86% (18 cas)
Phlyctènes	5% (1 cas)
Infection	0
Qualité de sommeil perturbée	9,5%
Perte de motivation	0
Arrêt du BRAVA (après cycle amorcé)	0



Ho Quoc C, Delay E.
 Tolérance de la pré-expansion
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 Ann Chir Plast Esthét 2013

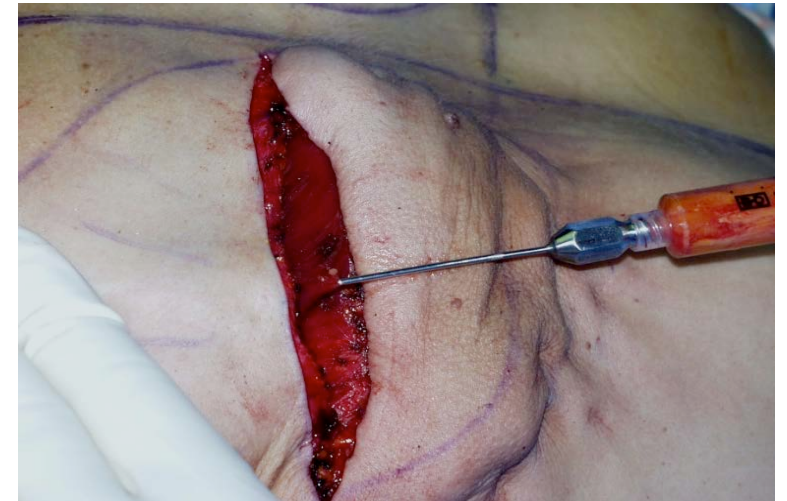
Discussion

- Efficient Autologous Technique
- Small discreet scars
- Uncomplicated outcomes
- Short hospitalization
- Double effect (2 sites treated)



Discussion

- Limits of the technique : adipose tissue capital, quality of the recipient site
- Indicated breast morphology :
 - small or moderate volume
 - little projection

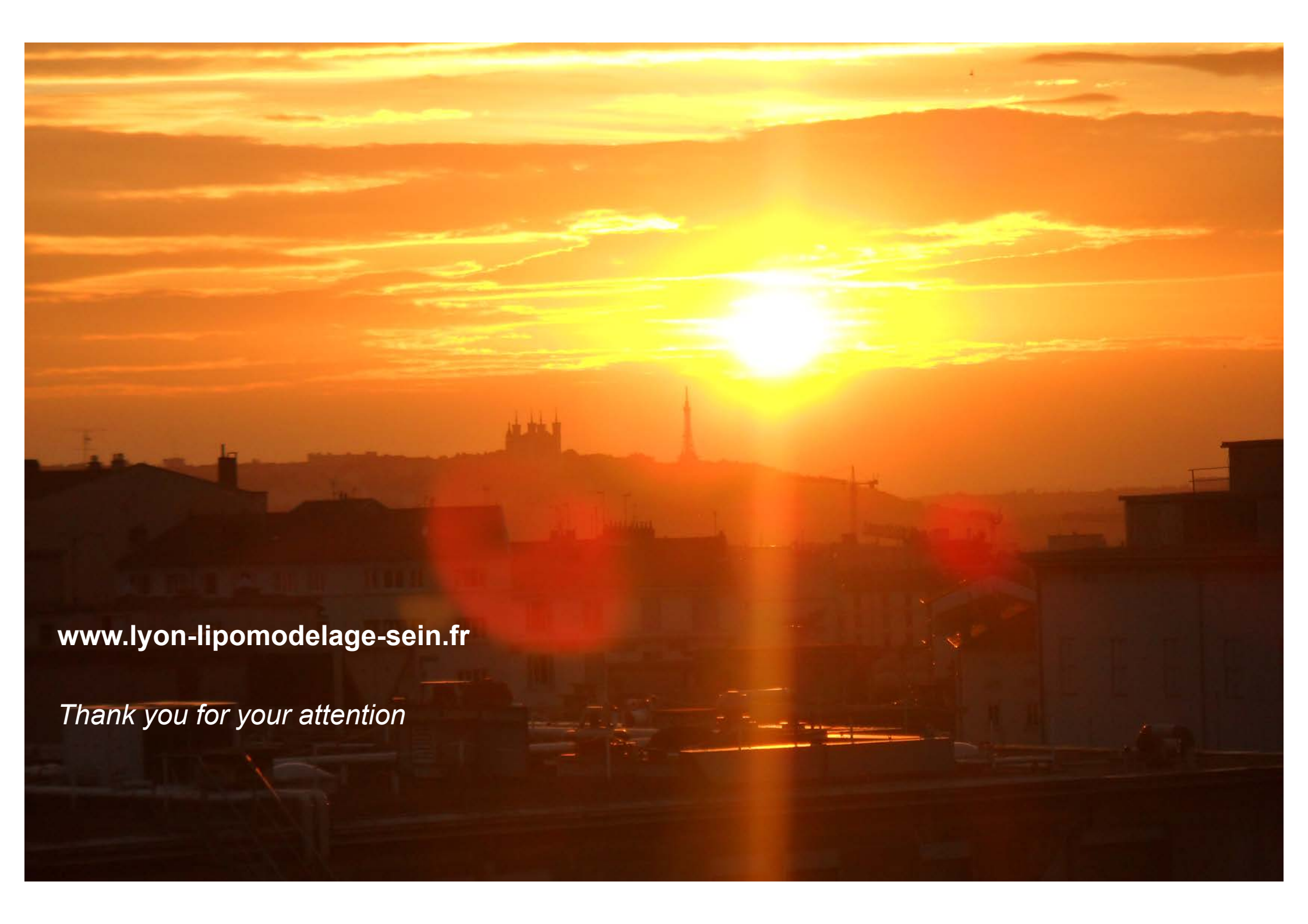


Conclusion

- Breast reconstruction with Lipomodeling alone is possible and can give excellent results in **well selected patients**
- Very promising technique with **additional tools** (fasciotomies, abdominal advancement flap, BRAVA)
- Exclusive Lipomodeling should integrate common breast reconstruction techniques (10-15% patients)

Team's experience





www.lyon-lipomodelage-sein.fr

Thank you for your attention