This presentation: goo.gl/R51cmt

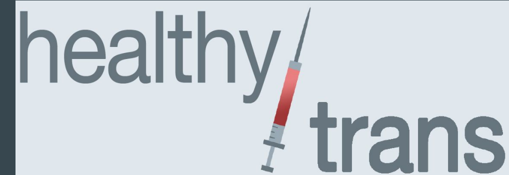
Top Surgery

An Overview of Chest Reduction Surgeries

This presentation is publicly available for the benefit of the community.

Please share or quote only with credit. I can give a much more thorough presentation in person. Book me to come to your school, healthcare organization, social service provider, etc. I have equivalently detailed presentations on FFS, Vaginoplasty, Phalloplasty/Metoidioplasty, and Hysterectomy.

www.healthytrans.com



Gaines, Medical Case Manager (he/him/his)

"a welcoming, non-judgmental, confidential program designed specifically to meet the medical and mental health needs of lesbian, gay, bisexual, transgender, and questioning adolescents and young adults ages 13-24."

CALLEN
-LORDE

I am not a doctor or lawyer! Consult a medical provider for medical advice!

Agenda

- On Pictures
- What are my procedure options?
  - Periareolar Types
  - Double Incision Types
- Which procedure is best for me?
- Outcomes, Complications, and Revisions
- Where do I find and research surgeons?
- What to expect from consultation, surgery day, and recovery
- Questions

- Insurance 101 and billing scams to watch out for (if time permits)

ON PICTURES

This presentation includes pictures of pre- and post- op chests and surgical drawings. No bloody operating room pictures.

More on pictures....

1) I have chosen to only include images from surgeons who take some form of insurance.

2) All surgical drawings in this presentation appear to be of white, thin people. I hope to to rectify this as more drawings become available.

3) It's not useful to compare images from surgeons (here or online) when one picture is two months post op and another is 2 years post op.

4) Surgeons who work for big teaching hospitals often have no control over their own websites. Surgeons who work for themselves can more easily put post-op pictures on their websites

5) People shown in pictures are being vulnerable for your benefit. Be respectful. Use I statements.

“Top Surgery”

General term for a collection of procedures that can be used to reduce the chest in a gender affirming way

Including:

- Removal of chest tissue
- Nipple reduction and repositioning
- Removal of extra skin

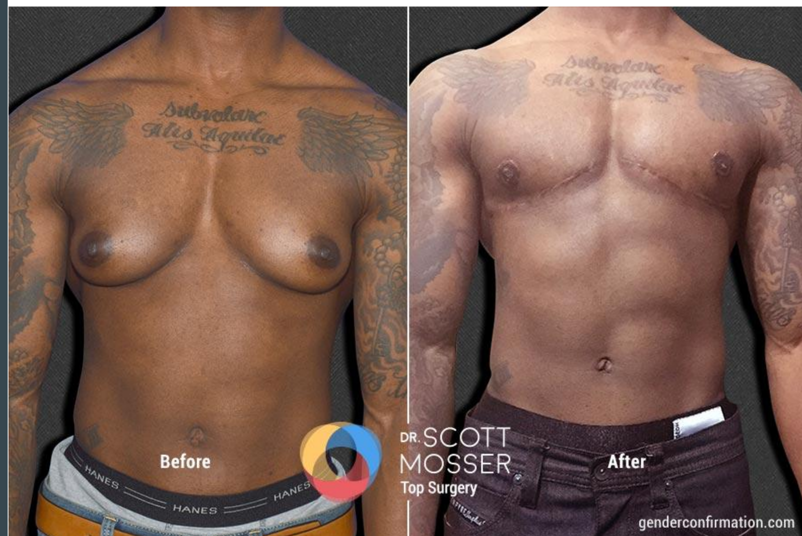
Anatomy Words

Areola

Inframammary Fold

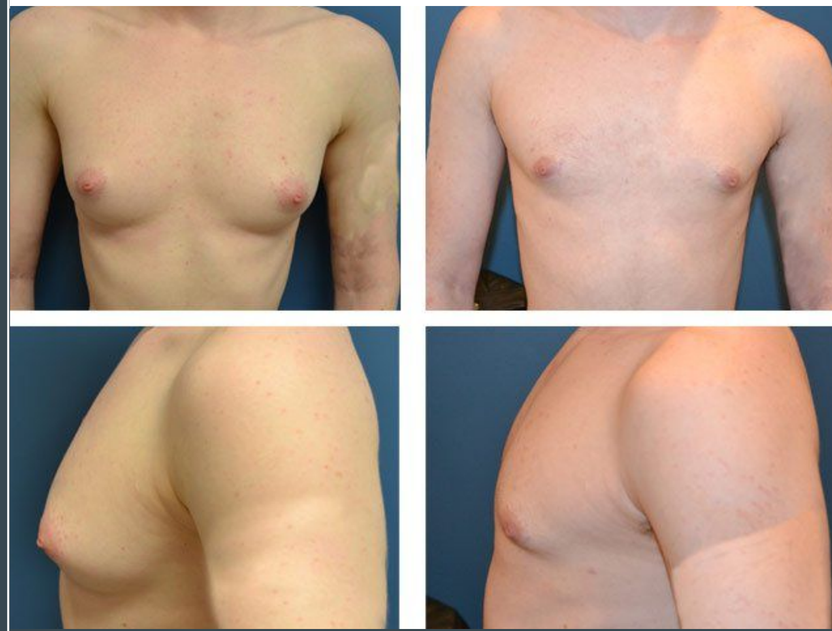
Procedures

Double Incision



Dr. Scott Mosser (SF, CA)

Periareolar or Keyhole



Dr. Melissa Johnson (Springfield, MA) 7 months post op

Procedures

Double Incision

Any procedure that results in long scars, usually under the pectoral line.

Includes:
Free Nipple Graft
T-anchor
Pedicled Nipple Graft/ “Buttonhole”
Fish mouth/Lollipop/J-incision

Periareolar or Keyhole

Any procedure that that results in ‘keyhole’ scar and/or scar around (“peri”) the areola (“areolar.”)

Includes:
“Minimal scar”
Periareolar
Circumareolar/ “purse string” “donut hole”
Keyhole

Periareolar and Keyhole

Keyhole

Skin reduction is not possible

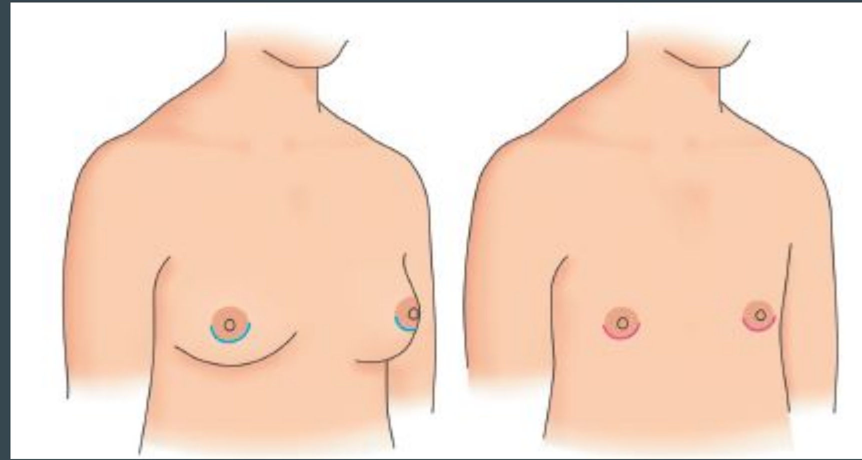
Small incisions = small scars

Most chance of retaining current nipple sensation

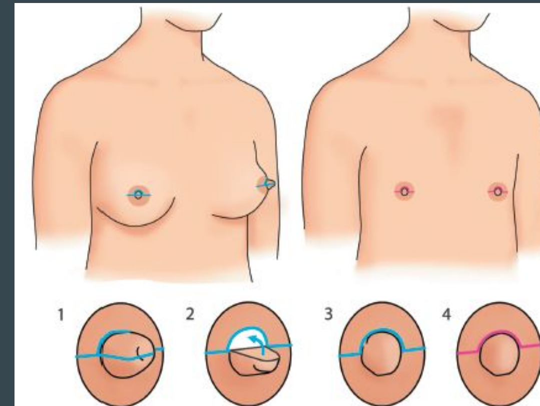
No repositioning or areola reduction
Nipple reduction is possible

More difficult for the surgeon, smallest "window" through which to work, more chance of bleeding-related complications

Takes long time to see full result. Excess skin will contract over a year or more

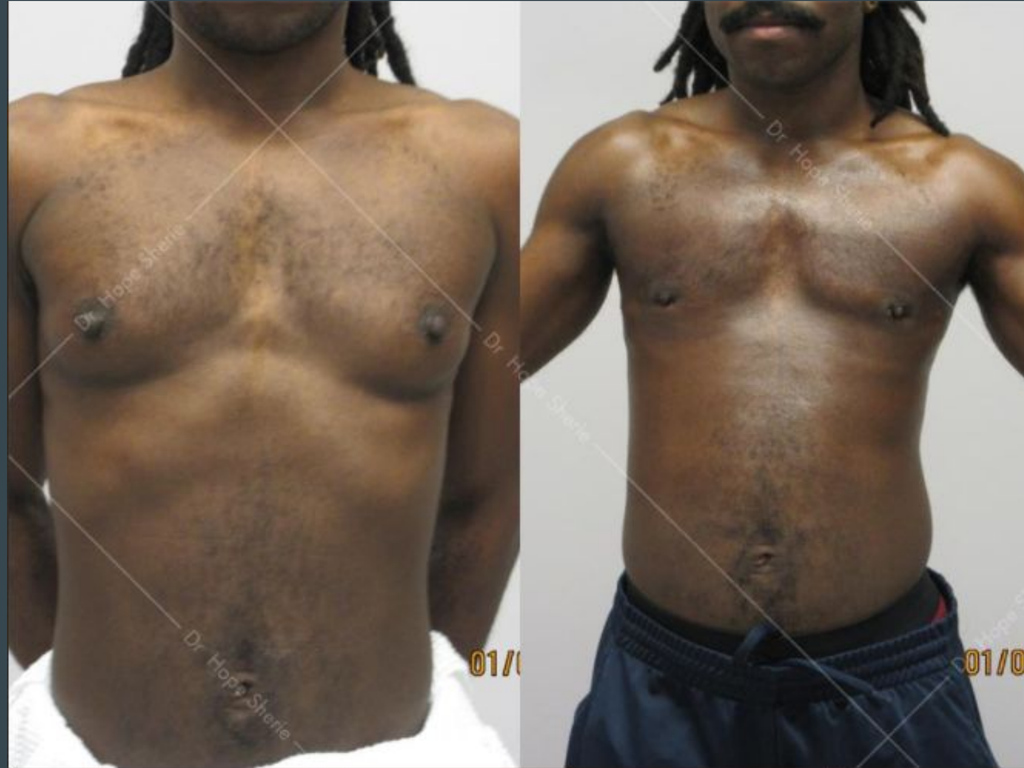


Monstrey et al, 2006



Keyhole with nipple (not areola) reduction

Dr. Mosser (SF, CA) Healing time unknown



Dr. Sherie (Charlotte, NC) healing time unknown

Periareolar:
Donut, Concentric Circle, Circumareolar, Purse String

Some skin reduction is possible

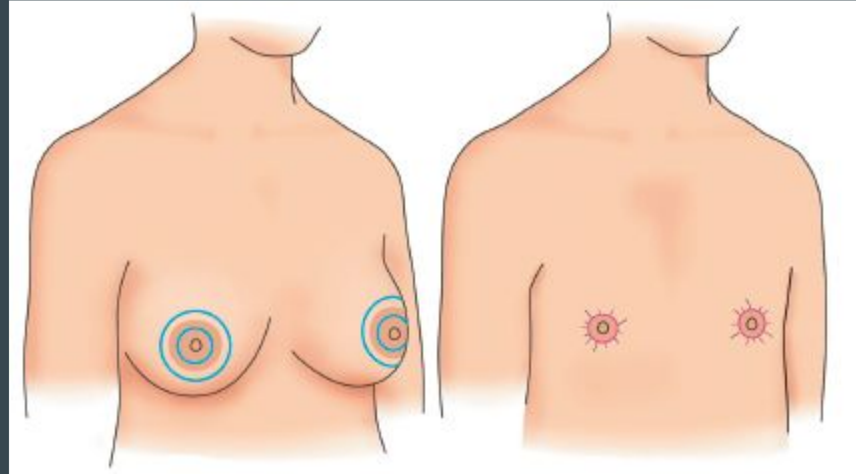
Similar chance of retaining nipple sensation to keyhole

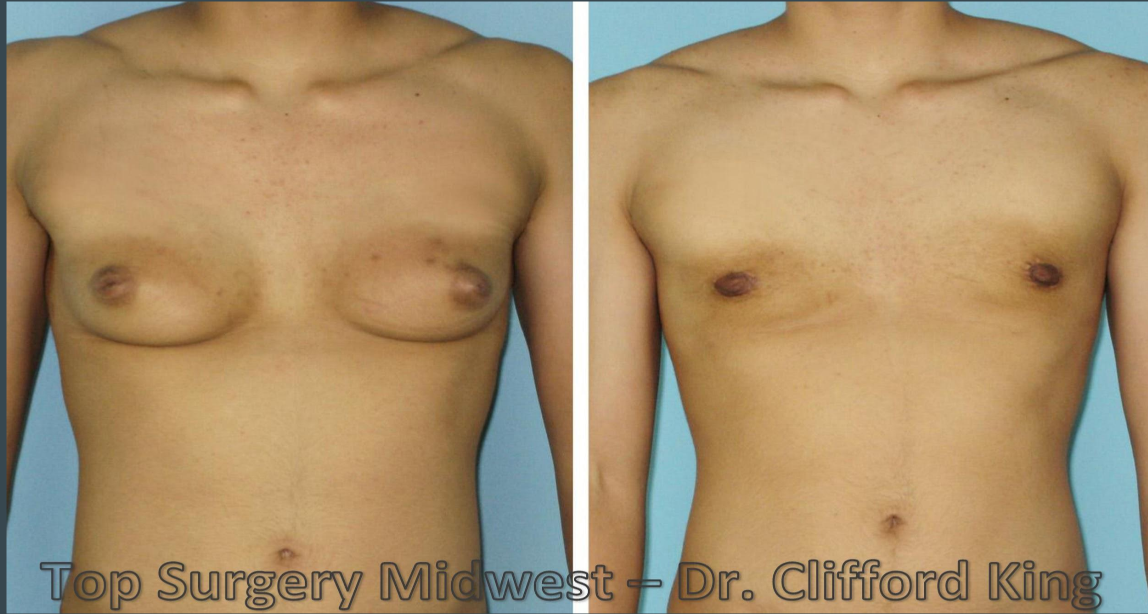
Some ability to reposition nipple

Scars all the way around the nipple

More difficult for the surgeon, small “window” through which to work, more chance of bleeding related complications

Takes long time to see full result- excess skin will contract over a year or more





Dr. King (Madison, WI) Periareolar surgery 90 days post op

Dr. Bartlett (Boston, MA) Three months post op

In his notes on the picture, Dr. Bartlett says that this person was “borderline” for peri but really wanted it, and that the patient was happy with this outcome

Double Incision

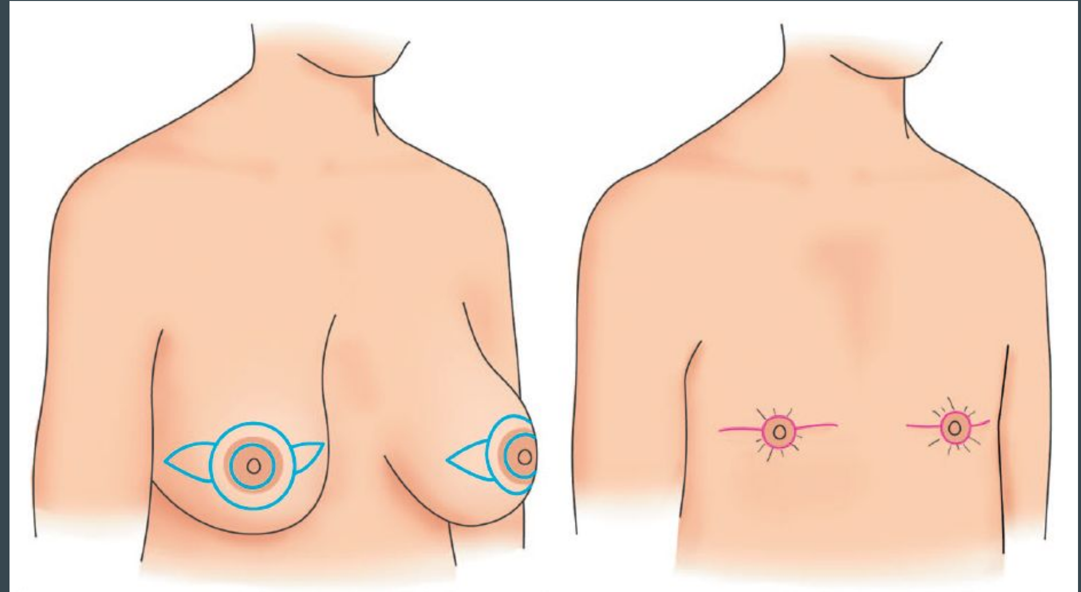
Double Incision w/o Nipple Graft (Fishmouth + Lollipop)

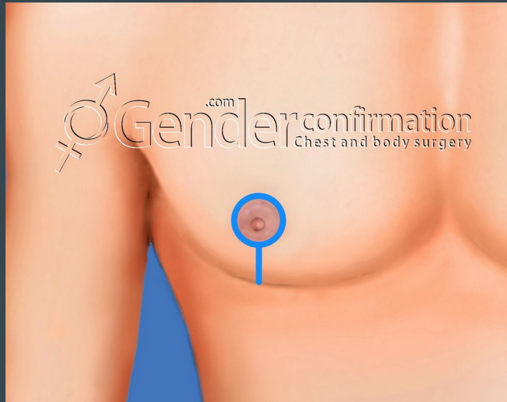
Combination of periareolar and Double Incision, allows for more skin removal than periareolar

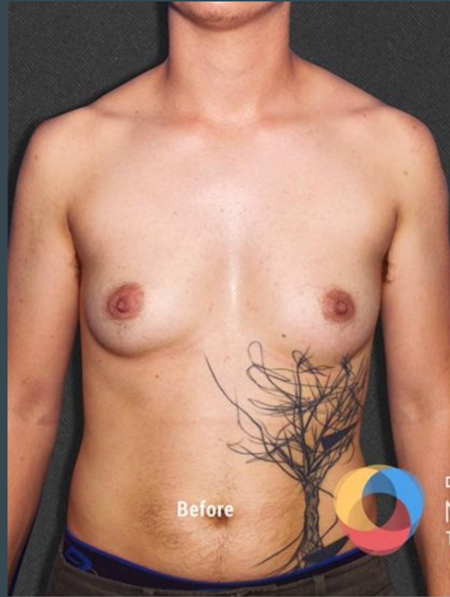
Only slight change in nipple placement possible

Scarring possibility (but scars change over years)

Aside from scars, near immediate results



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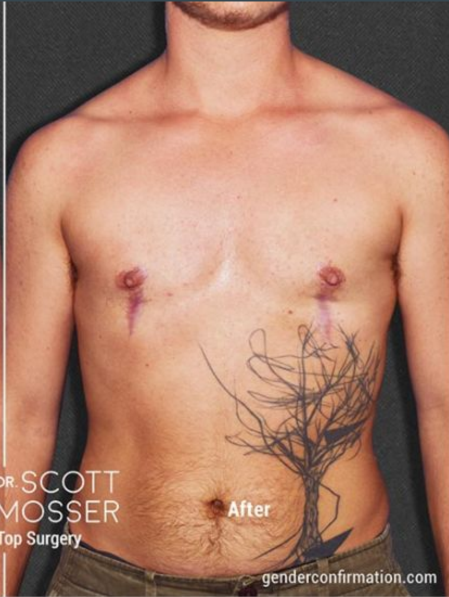
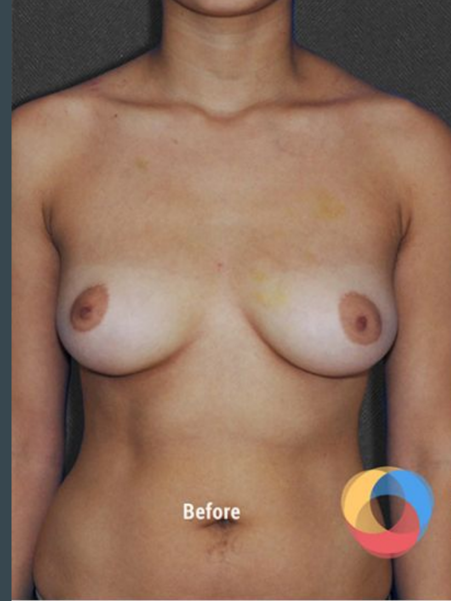

DR. SCOTT
MOSSER
Top Surgery
After
genderconfirmation.com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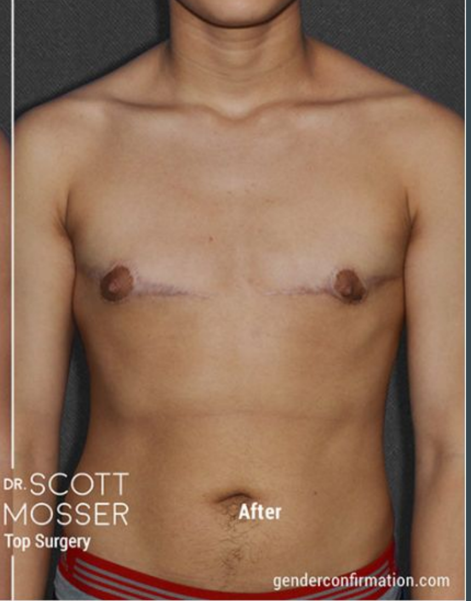
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Double Incision with “Free” Nipple Grafts

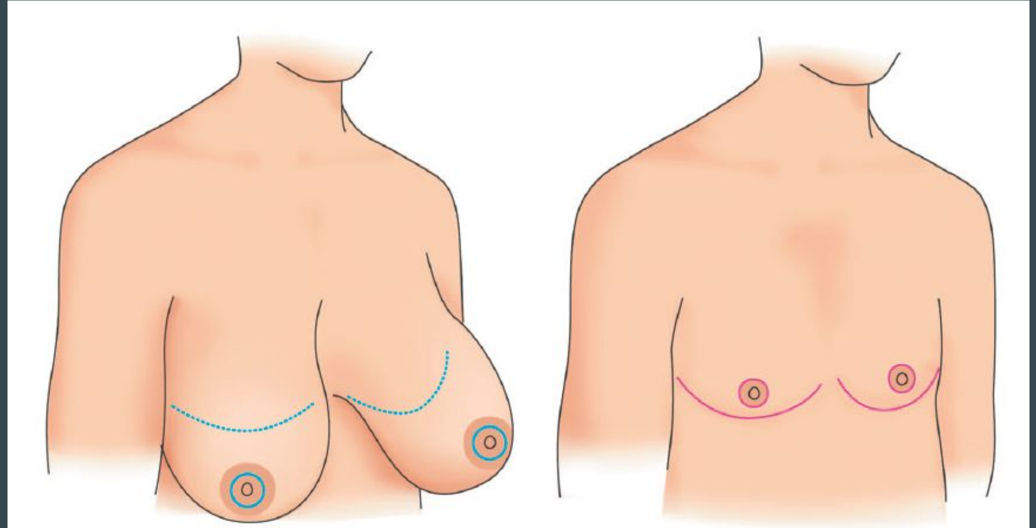
Any size or skin elasticity is eligible

Most freedom of nipple placement (or no nipples)

Most scarring possibility (but scars change over years)

Aside from scars, near immediate results

Least chance of retaining nipple sensation



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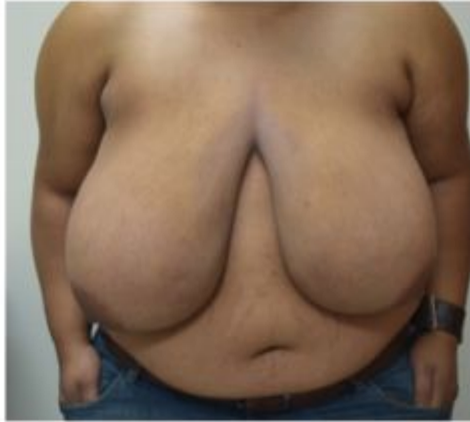

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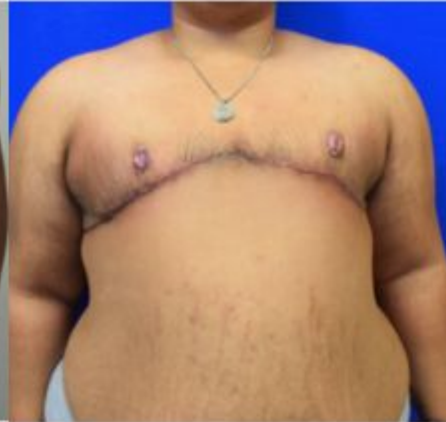
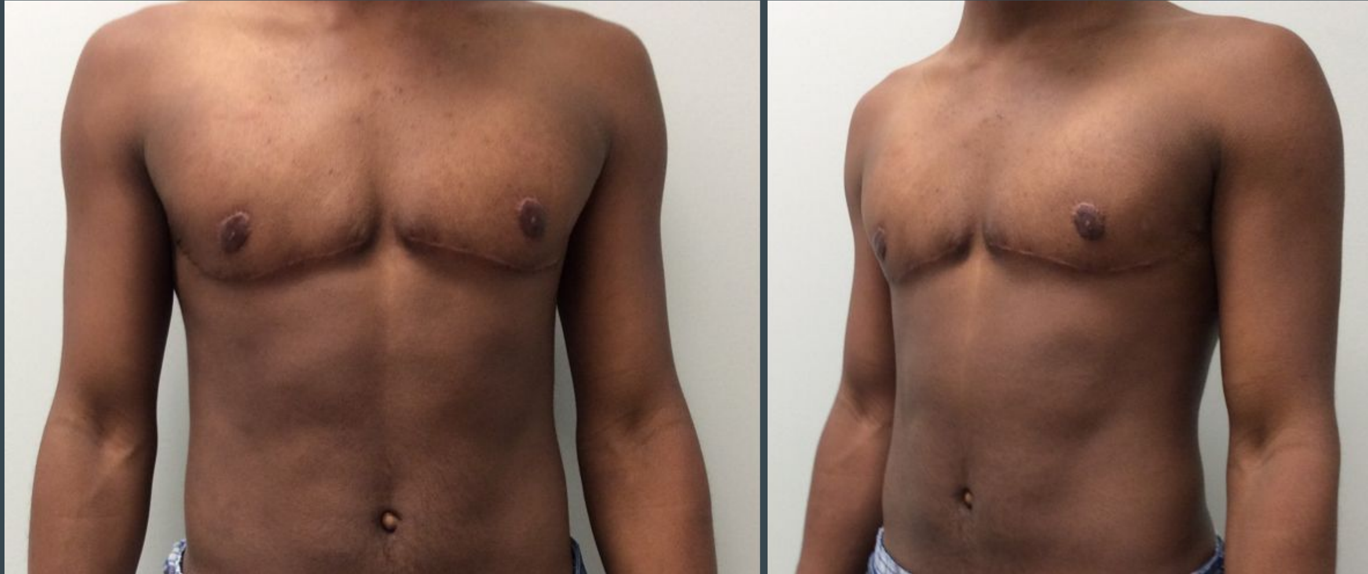


Dr. Gallagher (Indianapolis, IN)



Dr Stanwix (Richmond, VA) 4.5 Months post op

Double Incision with Pedicled Nipple Graft

- Same as Double Incision, but nipples are never cut from the nerve and blood supply supply. This nipple "pedicle" is preserved, and nipples are moved to a higher place in the skin, like a button going through a buttonhole.

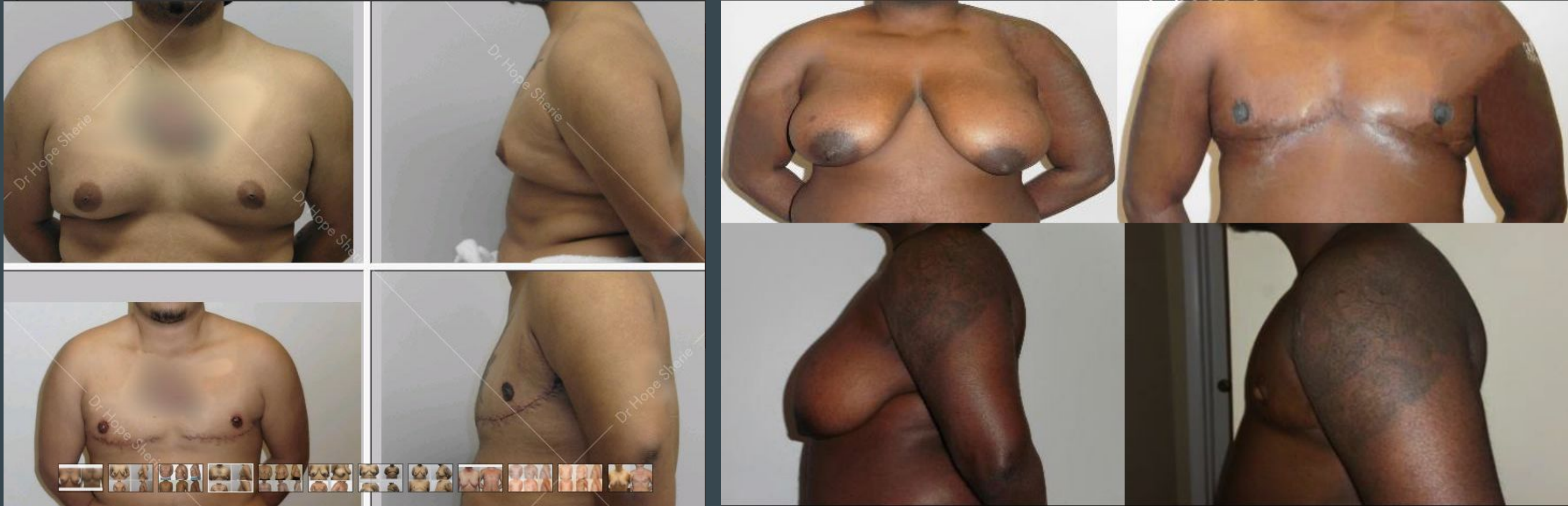
- More chance of retaining nipple sensation than with Double Incision w/ free grafts

- "Buttonhole" is name coined by one doctor, same technique is performed by many (Dr. Mosser, Dr. Weiss, Dr. Mclean, Dr. Sherie) including by those who don't advertise with this specific word.

- If your nipples are very far away, pedicle is more difficult (Dr. Weiss has a cut off of 7cm distance from fold to nipple)

- Some surgeons state that it is harder to make your chest "completely flat" with this method

Double Incision w/Pedicled Nipple ("Buttonhole")

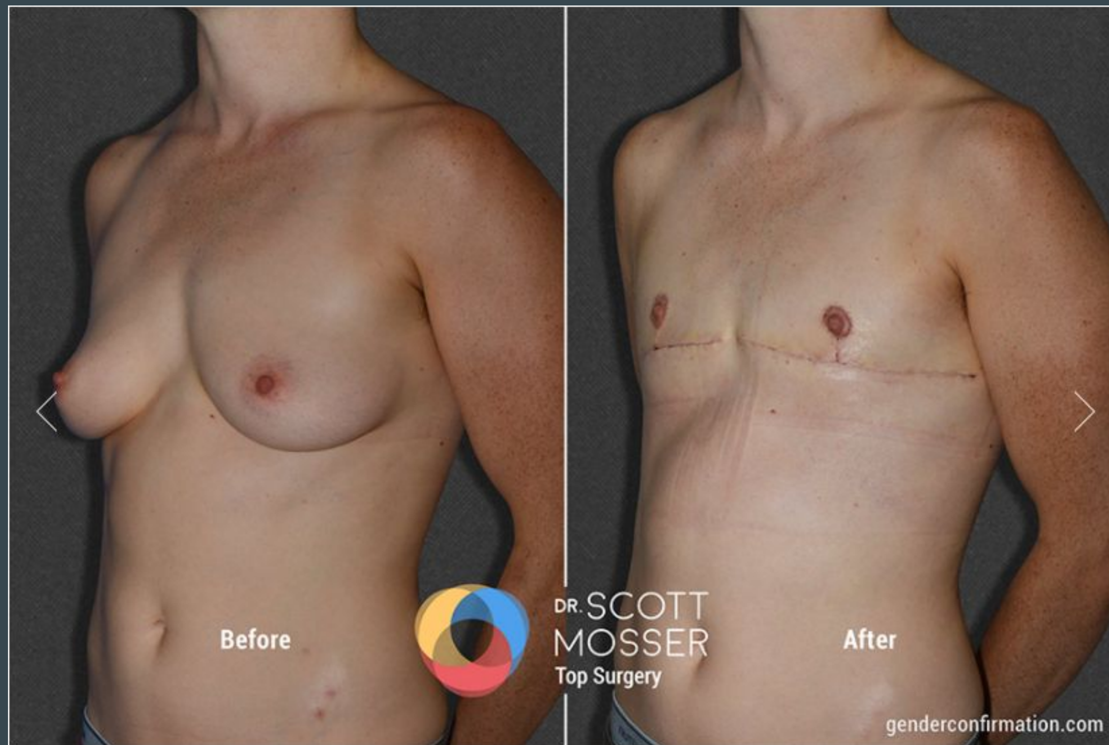


Dr. Hope Sherie (Charlotte, NC) both patients 3 months post op

Double Incision w/Pedicle Nipple Graft (T-Anchor)

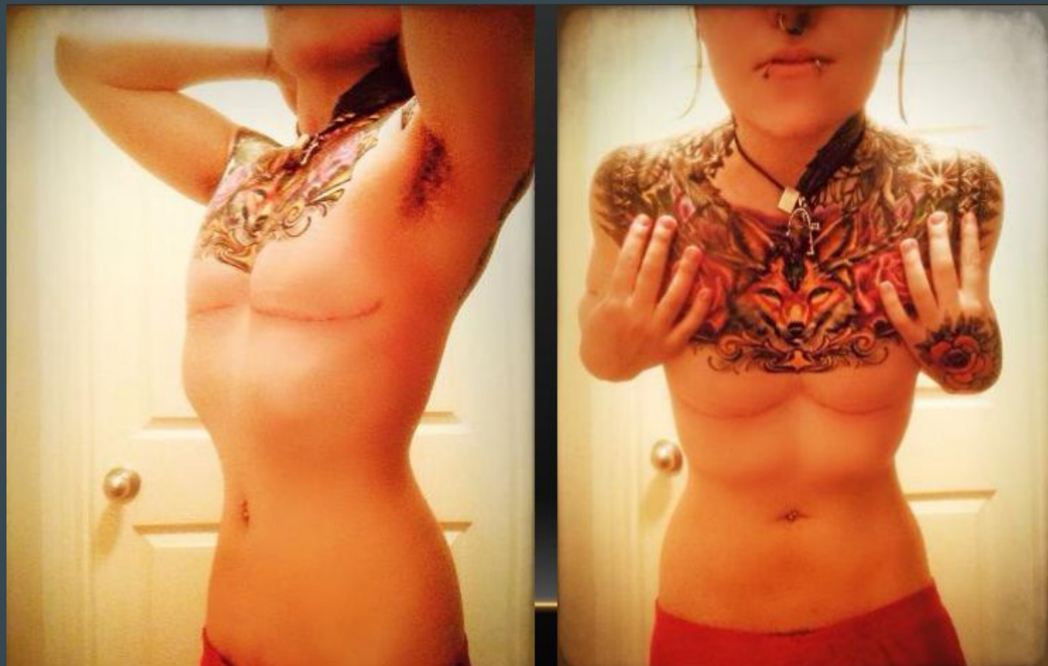
Same as buttonhole, but with extra vertical scar.

Maybe able to accommodate pedicle graft in larger-chested people.



Dr. Scott Mosser (San Francisco, CA)

No Nipple Grafts



Which Procedure is Best?

Dr. Scott Mosser’s Algorithm

Angle greater than 135 degrees = keyhole

Angle greater than 110 degrees = circumareolar

Angle 90 or lower = double incision methods

IS NIPPLE SENSATION OR CHEST FLATNESS & TIGHTNESS MOST IMPORTANT

CHEST FLATNESS & TIGHTNESS

DOUBLE INCISION

DOUBLE INCISION ALSO ALLOWS FOR THE MOST CONTROL OVER NIPPLE LOCATION

NIPPLE SENSATION

WHAT IS THE INFRABREAST ANGLE?

LESS THAN 110 DEGREES

INVERTED T, BUTTONHOLE, LOLLIPOP, FISHMOUTH

THESE TECHNIQUES ALSO KEEP YOUR 3D NIPPLE SHAPE

110-135 DEGREES

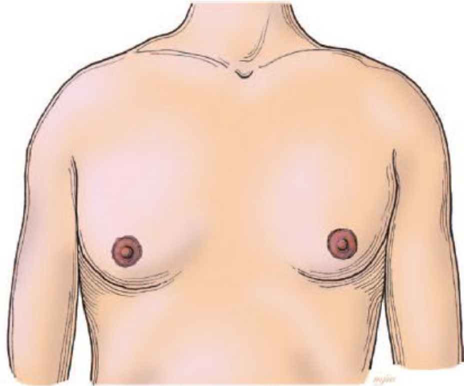
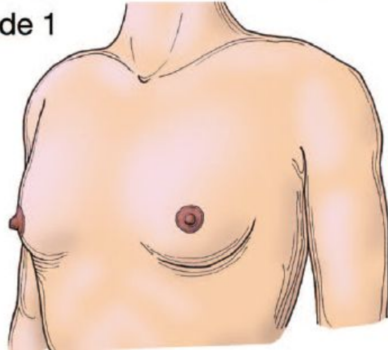
PERIAREOLAR

MORE THAN 135 DEGREES

KEYHOLE

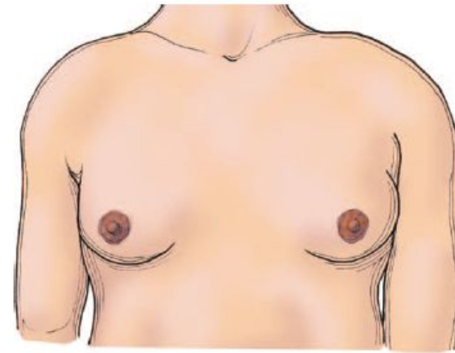
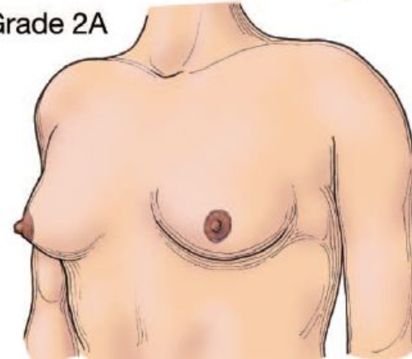
SCOTT W. MOSSER, M.D.
PLASTIC SURGERY

Ideal Candidates for Periareolar Techniques

Fischer Grade 1:

"minimal glandular tissue, no skin laxity, and with the nippleareola complex above the inframammary fold."

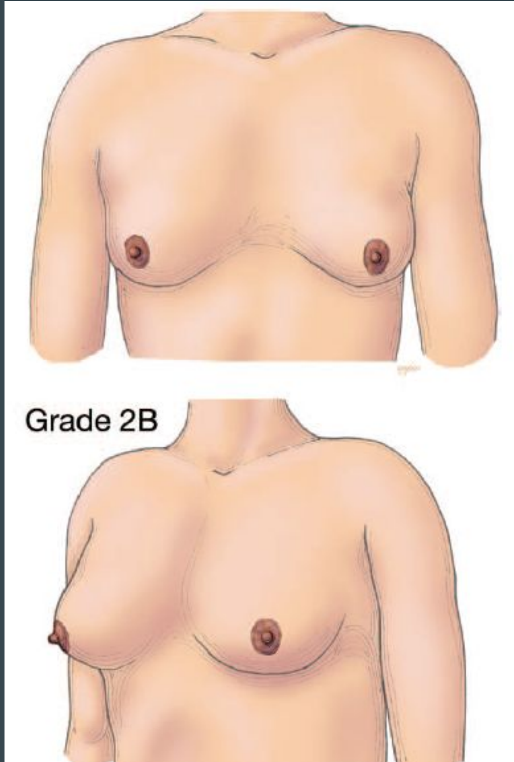



Fischer Grade 2A:

"moderate glandular tissue, little to no skin laxity, with the nippleareola complex above the inframammary fold.

"Top Surgery in Transgender Men: How Far Can You Push The Envelope?" (Bluebond-Langner, 2017)

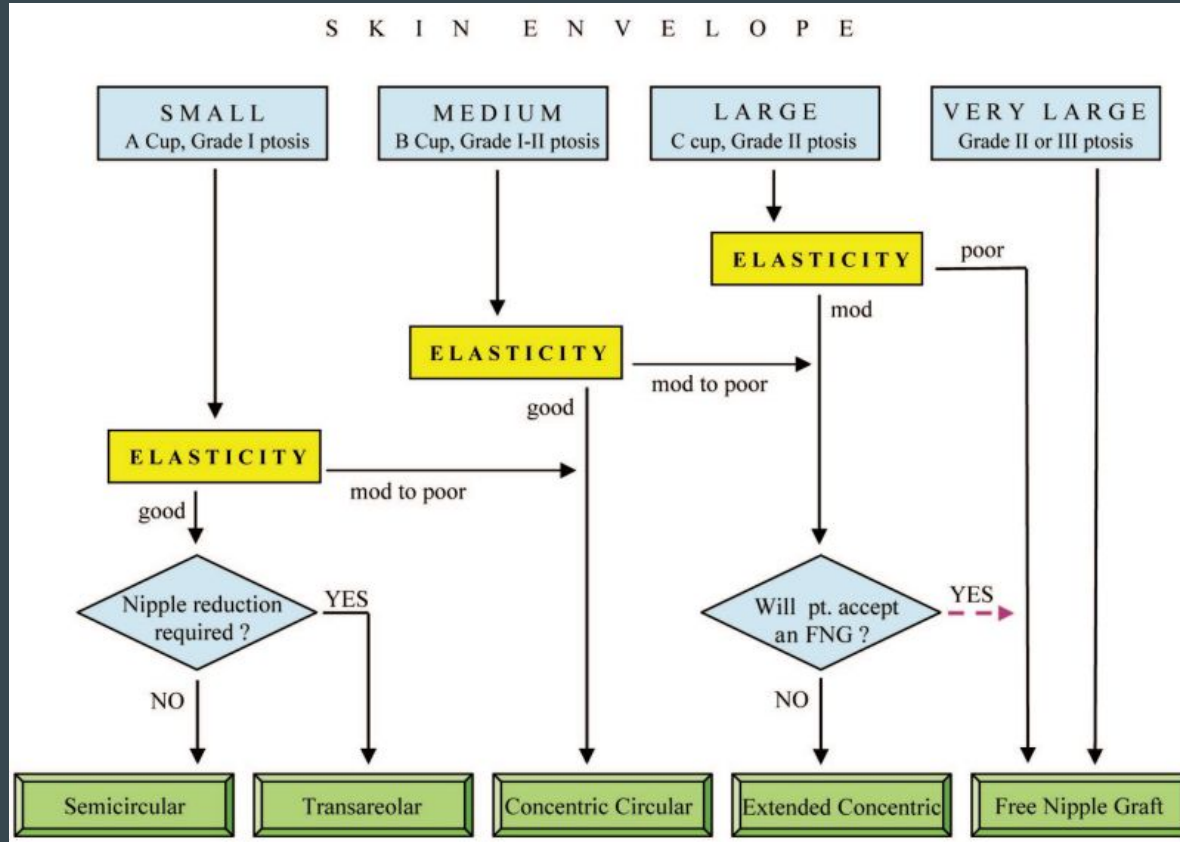
Borderline Candidate for periareolar technique



“moderate glandular tissue, increased skin laxity, with the nipple-areola complex at or below inframammary fold.”

“there was a statistically significant difference in the rate of aesthetic revisions in the grade 2B circumareolar incision group (34 percent versus 8.8 percent).”

Ghent Algorithm



(Monstrey et al, 2006)

Outcomes, Complications, and Revisions

Outcomes - Sensation

Table 4 Outcome parameters.

	Overall collective	Group 1	Group 2	Group 3	Group 4
		Keyhole	Peri	DI w/pedicle	DI
Patient satisfaction	$n = 158$	$n = 22$	$n = 29$	$n = 81$	$n = 26$
1 = very good	77 (48.7%)	12	14	39	12
2 = good	62 (39.3%)	8	11	32	11
3 = less satisfied	18 (11.4%)	2	4	9	3
4 = not satisfied	1 (0.6%)	0	0	1	–
NAC sensitivity	$n = 264$	$n = 44$	$n = 60$	$n = 160$	–
1 = very good	110 (41.7%)	50%	53%	35%	–
2 = good	102 (38.6%)	16	18	68	–
3 = moderate	48 (18.2%)	6	8	34	–
4 = not sensitive	4 (1.5%)	0	2	2	–

Outcome parameters: "Patient satisfaction" and "NAC sensitivity" (NAC: nipple–areola complex).

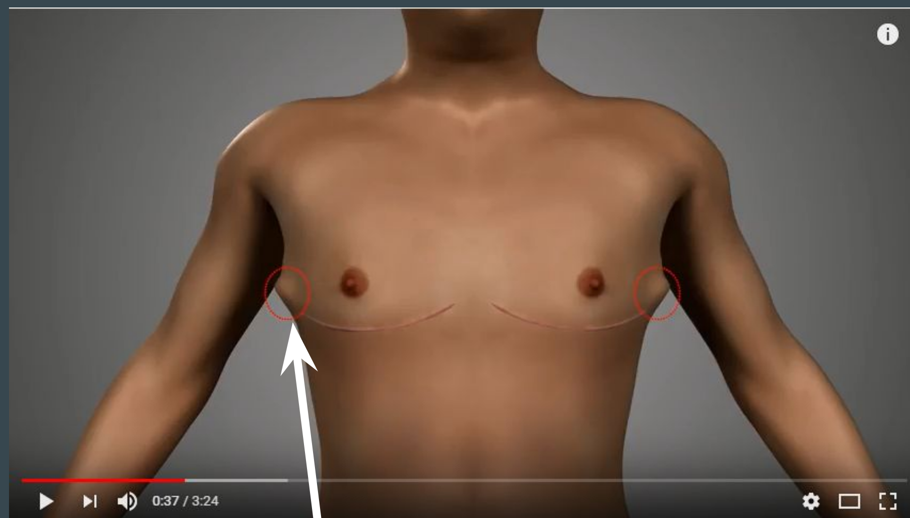
Wolter, A et al. "Sexual reassignment surgery in female-to-male transsexuals: An algorithm for subcutaneous mastectomy" *J Plastic Reconstr Surg.* 2015

Complications

- General Surgery Complications
  - Infection
  - Anesthesia problems
- Hematoma
  - Blood pocket or uncontrolled bleeding under skin
- Seroma
  - Fluid pocket, swelling
- Necrosis “losing a nipple”
  - Tissue with inadequate blood supply that dies

Visual Concerns

- Scars
  - Spitting Sutures
  - Stretched scars
  - Keloid and hypertrophic scarring
- Pigmentation of nipples and scars
- "Dog ears"
- Extra tissue and divots
  (often smooths out over time)
- Extra skin after Peri/Keyhole (may need revision)



This is a dog ear
(video still via Dr. Scott Mosser)

Complications

Table 3 Outcome parameters.

	Overall collective $n = 346$	Keyhole Group 1 $n = 48$	Peri Group 2 $n = 66$	DI w/pedicle Group 3 $n = 170$	DI Group 4 $n = 62$
Complications	41 (11.8%)	10%	10%	12%	11%
Minor	5 (1.4%)	–	–	2	3
Partial NAC necrosis	3 (0.9%)	–	–	2	1
Seroma	2 (0.6%)	–	–	–	2
Major	36 (10.4%)	5	7	19	5
Full NAC necrosis	4 (1.2%)	–	2	2	–
Hematoma with revision	32 (9.2%)	5	5	17	5
Secondary revisions	31 (9%)	4%	9%	11%	6%
Scar revisions	5 (1.4%)	–	1	4	–
Contour revisions	19 (5.5%)	–	2	13	4
NAC revisions	7 (2%)	2	3	2	–

Outcome parameters: "complications" and "secondary revisions" (NAC: nipple–areola complex).

Wolter, A et al. “Sexual reassignment surgery in female-to-male transsexuals: An algorithm for subcutaneous mastectomy” *J Plastic Reconstr Surg.* 2015

			Hematoma	Revision
Keyhole				
Semicircular				
Wolter et al (2015)[12]	48	122 (31–500)	5 (10.4%)	2 (4.2%)
Monstrey et al (2008)[1]	30	170 (70–340)	2 (6.7%)	10 (33.3%)
Cregten-Escobar et al (2012)[11]	38	87 (SD 38)	4 (10.5%)	10 (26.3%)
Transareolar				
Monstrey e al (2008)[1]	10	85 (85–120)	2 (20.0%)	2 (20.0%)
TOTAL	**126**	**120**	**13 (10.3%)**	**24 (19.0%)**
Peri				
Concentric circular				
Bluebond-Langner et al (2017)[15]	218	N/A	20 (9.2%)	
	66 of 218	N/A		31 (46.5%)
Cregten-Escobar et al (2012)[11]	86	156 (SD 127)	5 (5.8%)	32 (37.2%)
Monstrey et al (2008)[1]	70	240 (55–600)	1 (1.4%)	20 (28.6%)
Wolter et al (2015)[12]	66	130 (57–240)	5 (7.6%)	6 (9.1%)
Kääriäinen et al (2016)[13]	58	N/A	5 (8.6%)	32 (55.2%)
Fishmouth (subcategory of peri)				
Monstrey et al (2008)	38	365 (80–880)	2 (5.3%)	23 (60.5%)
TOTAL	**498**	**203**	**36 (7.2%)**	
	346 of 498	**203**		**144 (37.5%)**

Complications

(Wilson et al., 2018)

DI w/Pedicle			Hematoma	Revision
Inferior pedicle mammaplasty				
Wolter et al (2015)[12]	170	427 (88–1250)	17 (10.0%)	19 (11.2%)
Cregten-Escobar et al (2012)[11]	65	231 (SD 142)	5 (7.7%)	46 (70.8%)
Kääriäinen et al (2016)[13]	12	N/A	0 (0.0%)	4 (33.3%)
TOTAL	**247**	**373**	**22 (8.9%)**	**69 (27.9%)**
DI w/Free Graft				
IMF incision with FNG				
Bluebond-Langner et al (2017)[15]	372	N/A	20 (5.4%)	
	68 of 272	N/A		23 (33.8%)
Cregten-Escobar et al (2012)[11]	150	570 (SD 320)	6 (4.0%)	32 (21.3%)
Wolter et al (2015)[12]	62	736 (208–1700)	5 (8.1%)	4 (6.5%)
Kääriäinen et al (2016)[13]	44	N/A	0 (0.0%)	10 (22.7%)
Monstrey et al (2008)[1]	36	550 (150–1312)	1 (2.8%)	4 (11.1%)
TOTAL	**664**	**517**	**32 (4.8%)**	
	360 of 664	**517**		**73 (20.3%)**

Complications continued

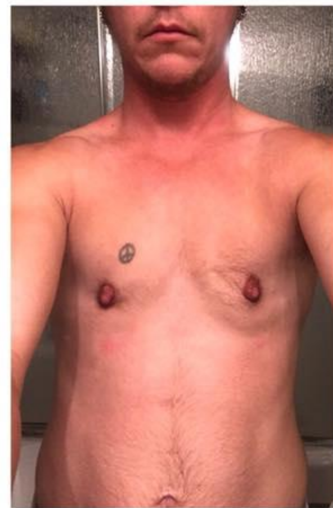
(Wilson et al., 2018)

Peri, then Double Incision

- Had keyhole, had a hematoma
- Didn’t like result at one year (“before”)
- Had double incision to revise procedure

All procedures with Mclean Clinic in Toronto, Canada

Before



After

PIC•COLLAGE

Finding Surgeons and Resources

Online Forums

1. Topsurgery.net
   a. Featured surgeons are paying advertisers
   b. Great wide listing
   c. Information is accurate but also serves advertising function

2. Transbucket.com
   a. Community members only (make an account to see pictures)
   b. Read comments and narrative to hear about people's experience beyond pictures

3. "Top Surgery Support (Reduction/Removal) " Facebook Group
   a. Use search function to look up surgeons you are interested in

Consultation, Surgery Day, and Recovery Expectations

What to expect

- This is an opportunity to establish trust and comfort
  - Assert what language you like to use

- The surgeon will want to physically examine your chest to see what surgery is best for you
  - You can put this off to another day
  - You can show pictures instead, or
  - do it at the beginning or end and get dressed again before discussing

- Might request that you take pictures for before/after pictures

- Bring a list of questions! (see hand out for prompts)

SURGERY CONSULTATION QUESTIONS

⇨ Bring a friend to take notes for you
⇨ Find pictures of ideal results to reference
⇨ Arrive early and expect the visit to run late

A consultation is your chance to learn if a surgeon will meet your needs. This list is a starter guide for getting the most out of it! Ask ***specific questions*** *in order to get specific answers. You might not get all the answers in an initial consultation, or need to ask every questions, but these are all reasonable things to want to know before you commit.*

It is best to consult with more than one surgeon before making a decision.

The Surgeon

1. What training have you had in this surgery? What training did you have for offering this surgery to trans people?
2. How many have you done total? How many do you perform in a year?
3. How many patients are satisfied with the outcome? What kind of long term follow up do you do with patients who had this surgery?
4. What percentage of your patients are trans? Are you involved with advocacy for the trans community?

Funding and Forms

1. Will your office help fill out disability paperwork? Will you sign a letter to update my gender marker?
2. Will the office negotiate directly with my insurance? When I can expect updates regarding the insurance negotiations? Who is my contact person? When will I know the out-of-pocket costs for using my insurance?
3. Will the office help me with the appeal if surgery is denied by my insurance?
4. If I am not using insurance to pay for the procedure, does the office accept financing plans? When are the payments due? Is the deposit to hold a surgery date refundable?
5. Are there ways to lower the cost? Does the total cost include hospital fees, anesthesia, all aftercare supplies, or medications? Does the total cost include revisions?

The Surgery

1. What is your most popular technique? Why? Do you offer other techniques? Are there other techniques you do not offer?
2. How will the surgery impact sensation?
3. How do you choose size and placement? Can I make specific requests?
4. How long will I be under general anesthesia? Who is involved in the surgery? Who does what?
5. Can I look at before and after pictures?
6. Will staff use my preferred name and pronoun even if my documents are not updated?

Before Surgery

1. How does my medical history impact this procedure? How far in advance should I quit smoking? Is there a minimum or maximum weight?
2. Do you require a pre-op physical or bloodwork? Do you require that I stop hormones before surgery? Stop shaving the area or electrolysis?
3. Are there any diet or lifestyle changes to help with healing?

After Surgery

1. What medications will I be prescribed? What dressing changes and rehab exercises will I need to do after surgery? How often? What scar care routine do you recommend?
2. How soon after surgery can I walk a mile? Take public transportation? Drive? Exercise? Drink Alcohol? Smoke pot? Have sex?
3. How long am I required to stay nearby after surgery? What appointments will we have after surgery? Do I need medical care at home to help with my recovery?
4. What complications can occur? How many of those complications heal on their own? How many people end up needing another surgery?
5. How soon after surgery will I see my final results? How much do complications impact the final result? What are my options if I don't like the final result?

www.HealthyTrans.com

https://www.healthytrans.com/surgery-consult-questions/

A general word of advice:

Do your research, but don't believe the hype. Someone can be amazing, empathetic, kind, skilled, etc and still not the right surgeon for you.

Trust your gut in your consultation.

Is the surgeon listening to you? Willing to explain "no's" and adjust for your specific needs?

Do they claim to have never had a complication ever? (red flag)

Is the office a madhouse and you see post-op people waiting forever to get called back into a room?

Day of surgery

What setting is the surgery performed in? Large hospital? Small outpatient surgery center?

- Check-in
  - Hospital co-pays
  - Possible misgendering by support staff
  - Nurses being confused, thinking paperwork error
- Check-in with surgeon + anesthesiologist before operation
- Wake up in recovery room
  - Sometimes you can leave the same day as surgery
  - Need a person to escort you home

Recovery

FOLLOW YOUR SURGEON'S INSTRUCTIONS

- ❖ Drains? Managing Drains? When do you get drains removed?
- ❖ You may be instructed to:
  - ➢ Not raise your arms over a certain height
  - ➢ Wear a surgical binder or wrap
  - ➢ Dress your wounds/grafts in certain ways
- ❖ Can’t shower until your surgeon tells you
  - ➢ Baby wipes!
- ❖ No exercise or lifting over ______ pounds until allowed to by surgeon

WHEN IN DOUBT- CALL YOUR SURGEON

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Questions?

www.healthytrans.com