PROS AND CONS OF IMMEDIATE PROSTHETIC IMPLANTS VS USE OF EXPANDER FOR POST MASTECTOMY BREAST RECONSTRUCTIONS

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IMMEDIATE RECONSTRUCTIONS

- Since 1990’s
- Skin sparing mastectomies proven to be safe
- Multidisciplinary meetings better tailormade planning of treatments
- More complications than delayed reconstructions (skin flap necrosis and migration of implants)
- Reliable outcomes with higher BREAST-Q score satisfaction
- Excellent for smaller breasts and stage I – II disease
- Prophylactic mastectomies contralateral or bilateral
- Skin sparing mastectomies with reconstructions can ovoid radiotherapy treatment
IMMEDIATE RECONSTRUCTIONS

- Autologous breast reconstructions nl. DIEP flaps
- Hybrid breast reconstructions nl. Lats dorsi with implants
- Two-stage tissue expander/implant reconstructions
- Direct to implant reconstructions
AUTOLOGOUS RECONSTRUCTIONS

- Although complications is higher
- It achieved a higher score on the BREAST-Q analysis from patients (emotional, social, physical and sexual wellbeing)
- Long term follow-up patients were more satisfied with their results
- **First choice** of reconstruction if Radiotherapy is planned
Hybrid Reconstructions

- Latissimus dorsi flap with implant
- With radiotherapy implant loss was less than tissue expander /implant group but capsular contracture rate the same.
- Get complete muscle coverage
DIRECT TO IMPLANT RECONSTRUCTIONS

- Subcutaneous (results in poorer long term outcomes)

- Sub muscular, partial or complete has improved long term outcomes

- Or with use of ADM (Stratice, Artia, Permacol acellular dermal matrixes) will give better control of the inferior and lateral borders of the breast, and can withstand radiotherapy treatment.

- ADM supports the implant better with less tension on skin flaps
DIRECT TO IMPLANT RECONSTRUCTIONS

- One stage procedure
- Use for smaller breasts (A and B cup size)
- Same or smaller size of the pre mastectomy breast
- Enough skin after skin sparing mastectomies
- If mastectomy skin flaps are viable and of good quality
- Grade one to two ptosis
DIRECT TO IMPLANT RECONSTRUCTIONS

- Few Contraindications
- Patients under going radiotherapy
- Non viable skin flaps
- Implant loss in studies vary close to 10% for radiated breasts vs 1% in non radiated breasts
- Grade III and IV capsular contractions resulted in 40% and 7% of radiated breasts compared to 6% and 0.5% in non radiated breasts
TISSUE EXPANDER RECONSTRUCTIONS

- Ideal for larger breasts
- Grade III to IV ptosis of the breast
- Where skin viability is poor (can deflate the expander)
- Two stage approach that take longer and utilize more resources
- Optimum timing of the second stage can improve results and complications
- Obese patient?
Six year follow up failure rates were greater for patients with tissue expander radiation than for patients with permanent implant radiation (32% vs 16%)

Post radiation procedures increase risk of extrusion
Patients undergoing radiation to tissue expanders had a greater proportion of very good to excellent results compared to patients with implants (75% vs 67%).

Lower rates of grade VI capsular contractions.
OPTIMUM TIMING

TE-XRT

- Neoadjuvant chemotherapy
- Mastectomy and TE placement 3-4 weeks post completion of chemotherapy
- Rapid expansion starting 10-14 days postop. Expansion completed by 6 weeks
- Radiation 8 weeks after TE placement
- Exchange for permanent implant 6 months after completion of radiotherapy

IMPLANT-XRT

- Mastectomy and TE placement
- Expansion starting 10-14 days postop
- Expansion during chemotherapy
- Exchange for permanent implant 4 weeks after chemotherapy
- Radiation 4 weeks after exchange
CONCLUSION

- Direct to implant reconstructions
- Smaller breasts
- Ptosis of Grade I-II
- Enough skin
- Viable mastectomy skin flaps
- Prophylactic breast reconstructions
- ADM enhance the short and long term outcome
CONCLUSION

- Tissue expander/implant reconstructions
- Larger breasts
- Patients who request larger breast than before mastectomy
- Ptosis of more than Grade III
- Mastectomy skin flaps not viable
- ADM?
- Obese Patients BMI more than 35?
CONCLUSION

- Post mastectomy Radiotherapy
- Autologous reconstruction first choice
- Implant reconstruction alone less long term extrusion/loss of implant
- Tissue expander/implant reconstruction timing of importance
- More complications when expander is radiated
- Obese patients rather delayed reconstructions