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Immediate Breast Reconstruction Post Mastectomy and Axillary Clearance – Autologous or Prosthetic??

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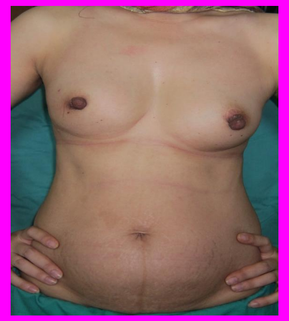
Introduction

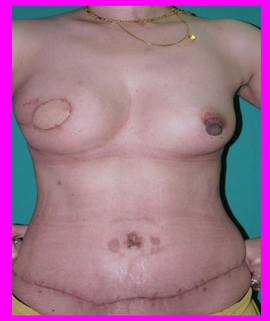
Breast carcinoma is the number one life threatening cancer and leading cause of death in the women population in Malaysia. Some women are avoiding the ultimate treatment which is mastectomy as the loss of a single breast will reduced their confidence and hallmark as a woman. Introduction of immediate breast reconstruction either by autologous or synthetic breast reconstruction has been offered to improve their psychosocial well being and confidence as a woman after mastectomy. Throughout the years, there has always been a debate on which type of breast reconstruction is the ideal most in a long term run - Autologous or prosthetic breast reconstruction?

Case report

An immediate breast reconstruction that was performed in University Sains Malaysia using an autologous tissue - deep inferior epigastric perforator (DIEP) flap immediately post mastectomy and axillary clearance for a 31 years old Malay lady. She presented to us with a right breast carcinoma (T3 N1 Mx). Her main concern was her appearance after mastectomy. Her breasts are of cup B size. After the offer of breast reconstruction immediately post mastectomy, she agreed and opted for a more natural looking breast using autologous tissue. Postoperatively she progressed well with complete flap survival. The size of the newly breast mould was of adequate size and maintained its natural looks after 1 year post operatively.



Before surgery



After surgery (2 months)

Discussion

With evolution, deep inferior epigastric perforator (DIEP) flap (a perforator flap discovered in 1989 by Koshima and Soeda) has become the gold standard for autologous breast reconstruction. It has large volume of tissue consisting of skin and subcutaneous fat without sacrificing the rectus muscle from the lower abdomen. The number of perforators generally range about one to three with a caliber of 1.5mm and a pedicle length of 8-15cm. Breast tissue of less than 750g can sufficiently depends on one perforator while if the breast tissue is 750-1000g, two perforators are needed in a DIEP flap. However if the breast volume is more than 1000g, free transverse abdominis muscle (TRAM) flap is a better choice due to its ability to provide higher vascular perfusion. There is a reduced in the morbidity of abdominal wall herniation and laxity to about 0-4% in DIEP flap as compared to the traditional TRAM flap (3-10%).

Another option to breast reconstruction is the use of breast implants such as silicone implants which started as early as in 1962. Silicone was once thought to be inert but it was found that silicone implant may induce both local and systemic complications which spark off some controversy. Local complications that may occur are wound infection (50%), capsular contracture (21%), implant rupture or leakage. Its risk ranged from 24-64%. About 10% will lose the prosthesis in 3 years. One has to bear in mind that besides the complications of silicone, the total cost for breast implant is higher than autologous breast reconstruction and may need a conversion to autologous reconstruction in the future.

Conclusion

Autologous reconstruction of the breast post mastectomy is the preferable and cost effective reconstructive procedure as compared to implant reconstruction. Autologous breast reconstruction will give a more natural appearance and feeling as compared to implant reconstruction.

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