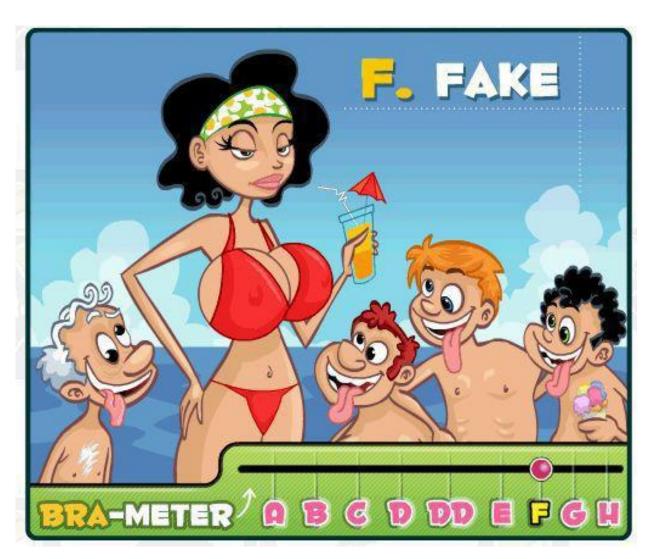
Prophylactic Mastectomy: Who, when, how much and what is the longterm outcome



C Benn

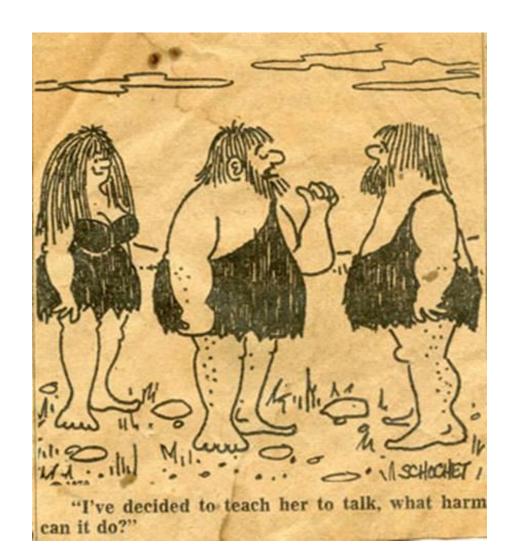
Introduction

- Removal of socalled healthy breast tissue creates an intensive debate, amongst both clinicians and women themselves
- This procedure is usually accomplished today with an associated immediate reconstruction



Definitions

- Prophylaxis means to prevent
- The techniques used for mastectomies today, over 98% of breast tissue can be removed, this is still never 100%.
- Therefore the correct terminology would be a risk-reducing mastectomy



Who

There are 2 types of risk reducing surgery

- Women who wish to undergo bilateral skin sparing mastectomy, with usually immediate reconstruction
- Women diagnosed with breast carcinoma who wish to undergo an opposite side mastectomy

Who is at high risk

- Risk models for predicting high-risk patients are many
- Familial "who's"
- Genetic testing can be done to look for certain mutations, testing may however not result in positive results even in women with significant family histories and the pros and con's should be discussed in details with patients

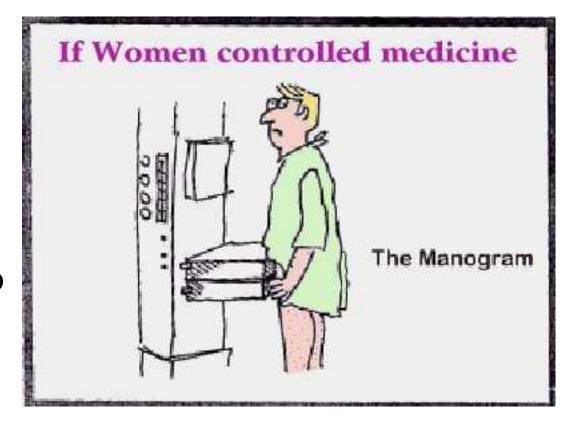
Pathological "who's

- Atypical ductal hyperplasia
- Lobular carcinoma in situ

 Family history and pathological risk factors increase the risk a further 10 fold

Radiological "who's"

- Radiological density
- Inability of radiologists to discern changes in breast tissue, may result in repeated core biopsies, and can contribute to a woman's decision to undergo riskreducing surgery

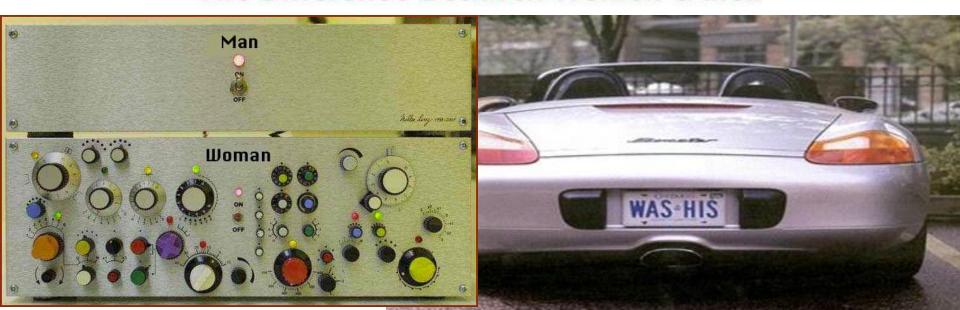


Psychological "who's

- Women who have repeated core needle biopsies, and "difficult " to assess breast tissue may experience psychological stress when being called in for repeated biopsies or reassessments
- Death of a family member or close friend from breast cancer
- Patient anxiety and cancer fear
- Special emphasis needs to be made about counseling regards decreased nipple areola sensation should nipple sparing mastectomies be performed
- Assessing the patient's body image and personality typing prior to the procedure also ensures better patient satisfaction



The Difference Between Women & Men



Psychological "who's

- Patients with Narcissistic type personalities are not good candidates for risk reducing surgery
- The women should have a combined appointment with her partner to determine whether the decision is correct for this patient
- The psychologist must recap the principles of this surgery, its impact on quality of life, its psychological, aesthetic, sexual, functional and pain repercussions should be addressed
- It should not and must never be offered in an emergency situation.
- Multi-disciplinary unit patient counseling involving discussions with other patients and discussions around the reconstruction should occur prior to patients undergoing the procedure.

Aesthetic "who's

- A small percentage of women, who still elect to go for a mastectomy and no reconstruction, may elect to undergo a bilateral mastectomy for symmetry, particularly if large breasted
- Women undergoing opposite side risk reduction may make the decision based on wanting similar looking breasts (Barbie Doll breasts)

Aspire to be Barbie – the b**ch has everything!







Patient contra-indications for immediate prosthetic reconstruction

- smokers;
- relative contra-indications are patients with conditions resulting in poor blood supply or tissue healing (diabetics, systemic lupus and other connective tissue diseases).
- Women who are at higher risk for complications are advised to undergo expander reconstruction

 The appointment with the reconstructive surgeon is made looking at issues around long-term prostheses complications, prosthetic failure and whether the patient would make the same decision should no reconstruction be offered.

 The reconstructive surgeon is mainly in the firing line.....



TEAMWORK

Share Victory. Share Defeat.

General "Who" principles

- There is no such thing as an emergency mastectomy, in particular when faced with a decision around risk reduction (once the breast is in the bucket you cant return to sender)
- Most breast carcinomas once spread to axillary lymph nodes are more likely to reoccur elsewhere in the body, than for a second primary to develop
- The safety belt of good radiology, mammography, ultrasound, MRI and breast tomosynthesis, will detect 95% of all suspicious lesions

Chemoprophylaxis

- Patients on endocrine therapy for their breast carcinoma have a 50% risk reduction to the opposite breast with regards to developing second primaries
- Tamoxifen has been well shown in the risk reducing setting to decrease breast carcinoma presentation by 50%
- Aromatase inhibitors can also be used as risk reducing agents
- Evista (Raloxifene) class SERM has also been used as an agent to decrease the onset of breast carcinomas in high risk individuals

Problems with SERMS



Surgical prophylaxis

- bilateral oophorectomy has been shown to decrease the development of breast carcinoma.
- The long term side effects of early menopause with regards to bone and cardiac health must be discussed in detail with patient

When

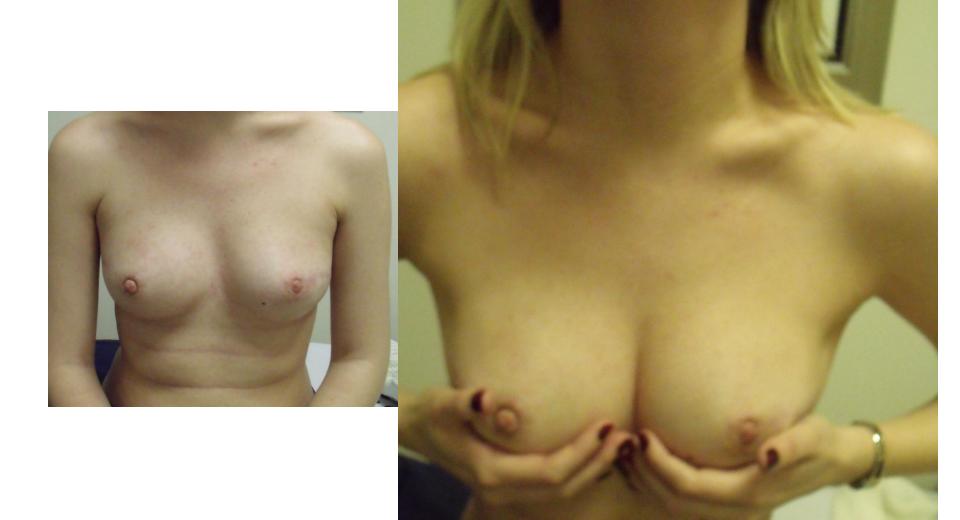
- The decision to undergo a risk reducing mastectomy at the time of opposite side breast cancer management is difficult particularly when a women is at her most vulnerable (post diagnosis)
- Careful consideration to this decision should be made by the patient and her family and not by the treating physician
- Multi-disciplinary unit guidance, however is advisable, as well as repeated appointments with the oncopsychologist in the unit
- Should the women not be sure of this decision, it is always advisable to delay the decision and surgery on the other breast

There are no rulesonly guidelines





How Much more is better than less



Skin sparing mastectomy techniques



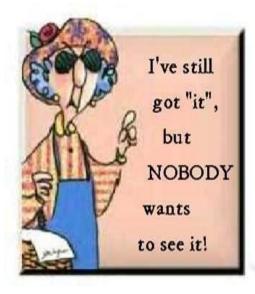
nipple sparing mastectomies





Long term outcome

- Post skin sparing mastectomy the recurrence risk is less than 1%
- the actual incidence of these patients developing breast cancer post mastectomy cannot be accurately quantified





Aesthetic Outcome

- Studies looking at patient satisfaction with objective observer assessments are few. Important aspects to assess are appearance, symmetry, colour, position, and breast texture as well as nipple sensation and arousal.
- Most studies are small, and most patients are satisfied with the appearance, symmetry, colour, position of the nipple and the breast texture

Conclusion

- Risk reducing mastectomy is an important procedure that can and should be discussed with women who consider themselves to be of high risk.
- It should only be offered in multi-disciplinary units, after careful consideration is given to all the cons of the procedure and should never be offered as an emergency.
- Opposite side risk reduction mastectomy, although on the increase should be entirely a patient based decision, after extensive counseling, as the risk of contralateral disease is low

