Nipple areola reconstruction
A Brief Outline for Patients following Breast Reconstructive Surgery

Introduction

Nipple reconstruction is the final stage following reconstructive surgery of the breast. This leaflet will clarify the technique most commonly used by the Plastic Surgical Reconstructive Surgeons at Frenchay Hospital. It is an operation performed under local anaesthetic often as a day-case or with a single night hospital stay.

The Nipple Areola Complex

The complete breast consists of a breast mound and a nipple with its halo known as the areola, collectively called the nipple areola complex or NAC (Fig. 1).

The NAC is usually darker in colour than the surrounding skin of the breast. The exact colour varies from individual to individual depending on their natural skin tones.

Fig.1: The Breast

NAC Reconstruction

The nipple areola complex, NAC, may be formed either by temporary non-surgical (i.e. stick-on) synthetic means or through surgical treatment designed to be permanent.

Non-Surgical Nipple

Stick-on nipples are commercially available in a range of colours and sizes or custom moulded by skilled medical technicians out of...
silicone. These may be matched in size, colour and shape to the patients remaining nipple if present or as desired.

**Surgical NAC Reconstruction**

There are many described ways to reconstruct the nipple; most employ a small flap of skin lifted up from the breast mound itself. At Frenchay Hospital, the Plastic Surgery department reconstructs the NAC as its two component parts: **the nipple** and **the areola**. Picture a broad brimmed hat consisting of a ‘crown’ and ‘brim’.

**Reconstruction Stages**

**Stage 1: Positioning**

The nipple position should be as symmetrical as possible to the opposite breast. Patients are encouraged to use stick-on nipples in the weeks leading up to surgery. The stick-on position should be tried with as well as without clothing until the patient is happy with their ‘ideal nipple position’ on the day of surgery.

**Stage 2: The Nipple Flap**

The nipple, or ‘hat crown’ is fashioned from a small breast mound skin-flap at the ‘ideal nipple position’.

**Stage 3: The Areola**

The natural areola, or ‘hat brim’, has a soft but unsmooth texture compared to the surrounding breast skin. To recreate this, it is made from an ellipse of skin taken from the lower abdominal wall. There may already be excess skin as a ‘dog-ear’ a side effect of breast reconstruction having also left a scar (Fig. 2).

**Fig.2: The Graft Donor Site**
The ‘hat brim’ is attached over the nipple-flap on the breast as a full thickness skin graft (Fig 2 & 3). A graft is skin or other tissue taken from one part of the body and placed elsewhere to cover a defect or gap. It needs to “grow” back onto the body at its new position. We call this “graft take”. To assist with this, the graft “hat-brim” is quilted into position using non-dissolvable stitches and a protective foam dressing. These dressings should remain dry and undisturbed to maximise the chances of successful graft take for the initial two weeks. Our specialist breast care nurse will monitor these dressings in our outpatient clinics, thereafter following clear instructions the patient is able to do their own dressing changes as required.

Fig.3: The Graft Placement over the New Nipple

Fig.4: The Final Nipple with Quilted Areola Graft in Position
Tattooing

Once the new nipple areola complex has healed, settled and matured at 3-6 months it may be tattooed to colour match the opposite breast. Initially the tattoos may fade, necessitating repeated sessions until the correct tone has been achieved. Our experienced, trained, specialist breast care nurse performs all tattooing.

Risks and Complications

It should be remembered that no matter how straightforward and routine a surgical procedure may be, all have their risks of complications and limitations albeit very rare.

The specific risks applying nipple reconstructive surgery are those of post-operative bleeding, bruising and infection. These may lead to graft failure or nipple flap skin death and loss. The donor site of the graft on the lower tummy wall will also leave scar. Should the tummy wall have been used to reconstruct the breast this scar will invariably be incorporated in the old one at the same site.

Photographic Example: NAC Reconstruction at 2 weeks after operation

NHS Constitution. Information on your rights and responsibilities. Available at [www.nhs.uk/aboutnhs/constitution](http://www.nhs.uk/aboutnhs/constitution)
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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