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British Association of Plastic Reconstructive and Aesthetic Surgeons

Restarting Breast Reconstruction Services - Immediate Reconstruction

BAPRAS Breast Reconstruction Working Group
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Background

In response to the COVID-19 pandemic NHS hospitals were told to suspend all non-urgent elective surgery for 3 months from 15 April. In a letter to NHS staff on 17 March, NHS England's chief executive, Simon Stevens said that these measures were needed to free up general and acute capacity. He advised that emergency admissions, cancer treatment and other clinically urgent care should continue unaffected. Extra capacity was bought at private hospitals to enable this.

The NHS has managed COVID-19 patients well and capacity has not been exceeded to the extent that the new facilities in the Nightingale Hospitals have largely not been needed. Simon Stevens issued a further statement on 29 April allowing planning for the resumption of elective surgical activity (reference). The relaxation of lockdown alongside this means that the services must remain flexible and able to respond to any potential new surges in COVID-19.

In restoring services we need to consider how to deal with pre-existing waiting lists alongside patients who have had their treatment plans altered or surgery denied because of the crisis. Consideration needs to be given to the resources available in terms of staff, facilities and equipment and the systems needed for infection control.

Breast reconstruction encompasses a range of surgical techniques to reconstruct and help rehabilitate patients who are undergoing or who had had treatment(s) for this very common condition. The benefits of breast reconstruction are functional, psychological and aesthetic.

Breast reconstruction is performed by Breast Surgeons, Oncoplastic Breast Surgeons and Plastic Surgeons. Reconstruction occurs in the NHS and private hospitals. Not all reconstructive teams are integrated within the breast MDT process despite NICE guidance suggested in July 2018 (NG101).

Understandably, breast reconstruction stopped as part of the pandemic arrangements although breast cancer surgery has not. The purpose of this document is to identify a way forward for the restoration of breast reconstruction services and the intention is to enable breast services to not only give women full access to the options for reconstruction as outlined in NICE guidance NG101 but to improve access, efficiency and standards in a manner consistent with the GIRFT process. This may be supported by consideration of the new ways of working and communicating that have been developed during the COVID crisis and have allowed healthcare teams to manage so effectively.

Issues to be addressed

1. **Capacity for free flap breast reconstruction** (pre covid). Unpublished data (from KA) has shown that out of 56 Plastic Surgery units in the UK, 52 out of 56 responded across 13 regions. 7 / 52 do not offer free tissue breast reconstruction. 161 Plastic Surgeons offer free tissue transfer and on average 22 free flaps per year each. 3209 free flap breast reconstructions were performed last year with a 54% / 46% split of immediate to delayed procedures. Clearly there is variation in the numbers and split of procedures performed across the UK. This study suggested that there was a surgeon predicted requirement for an additional 78 Plastic Surgeons performing this type of surgery.

2. **Gap in the provision of breast reconstruction of all types**. In some units in the UK, services are completely integrated with no differentiation between General or Plastic Surgery training, Instead all surgeons are subspecialist in Oncoplastic Surgery and able to see and treat any breast cancer patient, referring only free flap reconstruction to another service or carrying out in house with one of their Oncoplastic Surgeons who has microvascular training. Other units follow traditional Breast Surgeon and Plastic Surgeon models and some units are a mixture of skillsets.

3. **Number of patients currently awaiting free flap breast reconstructions** There is great regional variation in the proportion of patients having immediate versus delayed reconstructions and some areas have more patients awaiting delayed reconstructions than others. SW unpublished survey of units suggests that there are 1500 waiting surgery.

4. **Initiating breast reconstruction in collaboration with our General and Oncoplastic Breast surgery colleagues.**

    1. Logic suggests starting with immediate breast reconstruction on the basis that breast cancer surgery is already taking place and reconstruction is currently triaged as a category 4 procedure.

    2. Address delayed reconstruction as an evolution as soon as circumstances permit.

Challenges

1. The provision of breast reconstruction is not uniform over the UK. Some services deliver 75% of reconstruction as immediate surgeries but others less than 10%. This relates to historical referral pathways to Plastic Surgery for reconstruction, geographical variation in the participation of Plastic surgery in the breast MDT and a lack of capacity / provision for free flap breast reconstruction.

2. Availability of free flap breast reconstruction is not sufficient to meet the demand nationally.

3. Despite 2018 guidance regarding discussion of patients and sharing expertise for the best care of the patients, many breast surgery services are still not NICE compliant in respect of having combined breast and plastic surgery specialist MDTs.

4. Where therapeutic mammoplasty, free flaps and chest wall perforator flaps are not available, patients may be offered breast implant procedures only with a variable associated re-operation implant loss rate ranging from 1-2% to 10%.

5. The current lack of Immediate reconstruction is adding to already significant waiting lists for delayed reconstruction in many units (1-2 year wait). This situation will have worsened following Covid. These patients are likely to be further discriminated by the prioritisation of immediate free flap reconstruction due to Cancer Waiting times).

6. Consultants and trainees risk becoming deskilled during the current period when no (or very limited) Immediate Breast Reconstructions are being performed. For trainees this is likely to be aggravated after services re-start as many of these cases will have to be carried out by Consultants accommodating reduced theatre time, resources and need for efficiency

Opportunity

1. Most elective surgery was cancelled following the onset of the covid 19 pandemic. Breast cancer surgery has continued but in many cases with mastectomy and no reconstruction. The resulting decrease in clinical commitments for free-flap surgeons has provided an opportunity for Plastic and Breast surgery colleagues to act together to improve the patient access to joint decision making in "new" or "improved" MDTs.

2. Any patient considered for Oncoplastic Breast Surgery or Immediate Breast Reconstruction (IBR) should be discussed at a combined MDT. In the initial phases the criteria of patients who undergo IBR should be conservative in order to optimise outcomes and minimise the risk of complications.

3. Immediate reconstruction should be started subject to national guidelines set out by our professional bodies (reference BAAPS, ABS, RCA documents) and with informed consent of our patients to reflect the additional risks associated with Covid 19.

4. With existing and new relationships we aim to increase the number of patients able to undergo breast conservation surgery through oncoplastic techniques thereby avoiding the need for lengthier and repeat operations. For patients in whom mastectomy is the only option we want to be able to offer all breast reconstruction techniques in a timely manner avoiding any delay in adjuvant therapy.

5. For those patients requiring elective surgery we should look to operate in Covid Protected sites and or follow a pathway as suggested in East Grinstead and Norwich and make use of UKNFR to record data.

6. As we build up data and hopefully establish safe outcomes for the immediate then we can then apply the same rules for the delayed patients.

References

- Anaesthetic / ITU Association – Restarting Planned Surgery
- RCS documents – Recovery of Surgical Services During and After COVID

Pathway

1. Patient referral into breast team

2. Assessment/diagnosis by breast / oncoplastic breast / radiology

3. MDT discussion
    - Move to zoom or Skype or such like model because pictures and imaging can be viewed.
    - This MDT can be shared by all and it allows remote working for teams that are not co-located.
    - Separate oncoplastic MDTs can work well and are also potentially a good place for audit, M&M and teaching. The problem with the main MDTs is that the volume of cancer patients to be discussed and the number of people in the MDT make it unwieldy and prolonged. Certainly the complexity of reconstructive options and the addition of clinical photographs to be considered would not be easy to fit in to our normal MDT as it currently runs. Reconstructive options should be an integral part of the whole process not a secondary consideration and so maybe we do need to push for this.
    - Plastic Surgery, Breast surgery and Oncoplastic should all be present. No MDT without the Plastic Surgeons. There will be some Plastic Surgeons with a breast oncology workload that contribute to the MDT from a cancer perspective but there will also be "pure reconstructors" who work within an MDT who do not have the skillsets to be the interpreter of the imaging etc, that's the role of the MDT to each put there experience and not for everyone to be an expert in everything.
    - Potential treatment plan /options decided here although the patient is integral to the final decision.

4. Arrange to meet the patient with the suitable case mix of staff. It may be possible to conduct these remotely also. Clearly examination of the patients breast in terms of what can be moved where has to take place at some point!

5. Given current concerns with COVID19 and General Anaesthesia patients must be explicitly consented as to potential risks of the procedure, COVID and the possibility that they may not have usual standards of care available post-operatively. There are some good examples of these consent forms already available.

6. The place of surgical treatment can be decided on the basis of theatre capacity and i think that surgeons should be able to flexibly work across the sites that their patients go to. This may require some NHS / Trust Passport and indemnity figuring out.

7. E-mailable / online information leaflets

8. Priorities of reconstruction.

- Offer every suitable patient immediate reconstruction (this protocol should be dynamic and re-assessed on a regular (4 weekly basis at present)
    - < 60 years
    - ASA 1 or 2. No pre-existing respiratory disease, no cardiac conditions, no diabetes.

    - BMI <30
    - Non smokers / Non vapers / Non nicotine therapy (Ex >2 months)
    - Unilateral skin sparing mastectomy only in patients requiring autologous reconstruction
    - No obvious indication for chest wall radiotherapy or ER- and HER2+ cancers greater than T1 should have received neoadjuvant chemotherapy.
    - It should be acknowledged that there is an increased complication rate for bilateral free flap breast reconstructions.
    - Favourable Pre-operative CT/MRI angiogram for free tissue transfer

- Keep the number of operations to a minimum
- Cancer surgery and reconstruction done together
- Symmetrisation should occur at the same time as the main reconstruction

- Use two consultant operating to facilitate speed and amount of surgery performed.

- At present patients undergoing GA surgery have to self isolating 14 days prior to surgery, be Covid swabbed and have a CXR or CT (depending on local guidelines for access to the operating theatre), be without symptoms etc before surgery.

- Use the most appropriate form of reconstruction for the patient and involve the patient in the decision making.

- In all patients consider the following and decide which is the most appropriate for the patient
    - Breast conservation Surgery Therapeutic mammoplasty (including contralateral symmetrisation surgery) or Chest wall perforator flaps for those patients who are suitable.
    - Autologous tissue based reconstruction, Free tissue transfer or ELD flap
    - Tissue expander / implants / ADM (Avoid using high complication and return to theatre techniques)

- Early removal of drains or no drains

- Early discharge (3 days in several centres after DIEPS)

Aim to get patients out of hospital asap. Several units have good models for this and it also builds the case for department / community specialist nurses. The initial medical follow up can be conducted over video conferencing or social media platforms.