# Breast reconstruction and the COVID-19 pandemic: A viewpoint

Bruno Di Pace, John R. Benson, Charles M. Malata

Dear Sir,

The COVID-19 pandemic has caused unprecedented disruptions in patient care globally including management of breast and other cancers.1 However, cancer care should not be compromised unnecessarily by constraints caused by the outbreak.

Clinic availability and operating lists have been drastically reduced with many hospital staff members reassigned to the “frontline”. Furthermore, all surgical specialties have been advised to undertake emergency surgery or unavoidable procedures only with shortest possible operating times, minimal numbers of staff and leaving ventilators available for Covid-19 patients.2 In consequence, much elective surgery including immediate breast reconstruction (IBR) has been deferred in accordance with guidance issued by professional organisations such as the Association of Breast Surgery (UK) and the American Society of Plastic Surgeons.3,4 This will inevitably lead to backlogs of women requiring delayed reconstructions and it is therefore imperative that reconstructive surgeons consider ways to mitigate this and adapt local practice in accordance with national guidelines and operative capacity.

In the context of the current “crisis” or the subsequent “recovery period”, time consuming and complex autologous tissue reconstruction (free or pedicled flap) should not be performed. Approaches to breast reconstruction might include the following options:

1. A blanket ban on immediate reconstruction, and all forms of risk-reducing, contralateral balancing and revisional/tertiary procedures.

2. Where reconstructive delay is neither feasible nor desirable, opting for simple and expedient surgery should be considered e.g.:

 a) Expanded use of therapeutic mammaplasty: as a unilateral procedure in selected cases instead of mastectomy and IBR.

 b) Exploring less technically demanding (albeit “controversial”) implant-based forms of IBR:

 i. Epipectoral breast reconstruction (fixed volume implants): this adds about 30 minutes to the ablative surgery as the pre-prepared implant-ADM complex is easily secured with minimal sutures.

 ii. “Babysitter” tissue expander/implant: this acts as a scaffold to preserve the breast skin envelope for subsequent definitive reconstruction.

3. During the restrictive and early recovery phase, either a solo oncological breast surgeon or a joint ablative and reconstructive team (breast and plastic surgeon) performs surgery without the assistance of trainees or surgical practitioners. For joint procedures, the plastic surgeon acts as assistant during cancer ablation and as primary operator for the reconstruction.

Despite relatively high rates of complications for implant-based IBR (risking re-admission, prolonged hospital stays or repeat clinic visits),5 avoiding all IBR will lead to long waiting lists and have a negative psychological impact, particularly among younger patients. This will also impair aesthetic outcomes due to more extensive scars and inevitable loss of nipples.

Whilst appreciating the restrictions imposed by COVID-19, there is opportunity to offer some reconstructive options depending on local circumstances, operating capacity and the pandemic phase. We suggest that these proposals involving greater use of therapeutic mammaplasty as well as epipectoral and “babysitter” prostheses be considered in efforts to offset some of the disadvantages of COVID-19 on breast cancer patients whilst ensuring that their safety and that of healthcare providers comes first.

# Disclosure

The authors have no financial interests to declare in relation to the content of this article and have received no external support related to this article. No funding was received for this work.

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