



Editorial

Revisiting the reconstructive surgery framework: The reconstruction supermarket



Plastic and reconstructive surgeons apply a variety of techniques throughout the body with analogies having evolved to provide a conceptual framework for the selection of techniques. Well-known examples include: the reconstructive ladder with increasingly complex rungs, the reconstructive elevator where the surgeon moves directly to the most suitable reconstruction, the reconstructive toolbox, and the reconstructive triangle.^{1,2} Extended models have been proposed to incorporate developments such as negative pressure wound therapy, and include the extended ladder,³ the reconstructive solar system,⁴ and the reconstructive clockwork.⁵ All have advantages with individuals favouring particular models when learning or teaching. However, other factors influence reconstruction decision-making, and do not always fit within these existing analogies. These include awareness of variants of flap options, insight into one's level of experience with different flaps, and the rise of value-based health care, in which patients may have individualised requirements and interpretations. We propose an alternative framework that may help to incorporate these issues while supporting a patient-centred approach to reconstruction.

The reconstructive supermarket

The great variety of reconstructive options that plastic surgeons may deliver are classified in different ways. Many reconstructive algorithms focus on the technique employed, such as grafts versus flaps. Flaps themselves are subdivided into pedicled or free, or by composition for example. It is notable that many different flap compositions and options can be harvested as variants on a theme, or from nearby sites. Such sites include the thoracodorsal axis, the groin, the anterolateral thigh, and the medial thigh. Each of these anatomical areas can be considered analogous to an aisle within a supermarket that comprises all of them.

Surgeons visit the supermarket with the aim of putting the options needed in the shopping basket for the reconstruction. The first key principle is that we shop on behalf of the patient, who ultimately foots the bill. Good clinical care and respect for the nature of this arrangement is essential to remember. Some supermarkets are less well-stocked with fewer options available and some patients are less able to afford an expensive shopping bill. The surgeon should have insight to the context of the patient's case.

Supermarket aisles and anatomical regions

Related products tend to be located near to each other within an aisle of a supermarket. The same applies to many of the anatomical regions from which many flaps are harvested. In the anterolateral thigh, a perforator flap, a fasciocutaneous flap, a fascial flap, a myocutaneous flap, a muscle flap, a reverse flow flap, and a flow through flap can all be raised. Other "aisles", such as the groin, include graft options (skin or bone) and flap options such as the deep circumflex iliac artery flap and the groin flap. Some exemplar reconstructive supermarket "aisles" could include:

- Anterolateral thigh
- Medial thigh
- Groin
- Axilla
- Abdomen
- Neck

Selecting combinations of items

When selecting items, several may be needed to meet the requirements of a defect, just like shopping to follow a recipe. These may be related products, found in the same

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