A Timeline of Plastic Surgery up to 1914

BY ROBERT BOYLE MONKMAN

here did the name 'plastic' surgery come from? It is probable that the first use of the term was by the German von Graefe in his book *Rhinoplastik* published in 1818. The intention was to describe the moulding of tissue by surgery and has nothing to do with the use of plastic as a material. The name was used again by another German surgeon, Zeis, who in 1863 published an index of plastic surgery recording literature relevant to plastic surgery from 900 years BC. This was translated by TJS Patterson and published in 1977.

Many people inaccurately equate plastic surgery solely with cosmetic surgery and, although surgery for appearance is an important part of the repertoire, even more so is the treatment and reconstruction of injuries, including burns, cancer and congenital deformities.

Many reconstructive and aesthetic surgical techniques have been described over a period of 2000 years as part of the repertoire of all surgeons. Occasionally there were surgeons who concentrated their skills on what we would now call plastic and reconstructive surgery but it was at the time of the First and Second World Wars that the current concept of a speciality of plastic surgery emerged. Faced with horrendous injuries and aided with modern advances in anaesthesia, resuscitation and antisepsis, groups of surgeons developed ways of reconstruction. Their inventive minds took on problems that had eluded others and their range of work expanded so that some claimed that they were the true 'general surgeons'. Now the wheel is turning again with the advent of super specialisation. Some parts of plastic surgeons' traditional repertoire are being claimed by other speciality groups.

The plastic surgeon is faced with many unique and novel reconstructive problems without any exact precedent and as the father of British plastic surgery, Sir Harold Gillies, taught, it is the principle that is important. Nevertheless, it is important for the surgeon to know what has gone before and study different ways of tackling a problem. There are many instances where opportunities have been lost by the lack of knowledge of what has gone before. Here are two illustrations; Tanisini in 1901 reported a reconstruction using a myo-cutaneous flap from the back. His report went unnoticed and it was not until 1972 when Olivari described his latissimus dorsi flap that this method of tissue transfer was reborn. Again, Manchot in 1889 wrote a treatise on the anatomy of cutaneous circulation but it was 80 years before this was reinvestigated and the importance of this knowledge used to design so many of the present flap reconstructions.

The developments in reconstruction and aesthetic surgery have been gradual but there have been notable steps frequently

associated with a single name, although it often seemed to need two people to bring a new technique into general usage. The first description is amplified by a second person, either knowingly or in ignorance, who then brings the procedure into common use. The tube pedicle technique of tissue transplantation is a case in point. It was originally described by the Russian, Filatov, on 9th September, 1916; independently Gillies devised a tube pedicle to reconstruct the face of a severely burnt sailor on 3rd October, 1917. It was Gillies who influenced reconstructive surgeons to use this technique over the next 50 years.

A 'timeline' of developments of surgical techniques with the associated names and dates is shown below. Space does not allow a comprehensive list. Apologies made for errors and omissions and it is hoped that readers will correspond with this publication to give suggestions and corrections.

Study of the timeline below is humbling. It shows the great number of ideas and techniques that have been used in surgery of repair and in correction of deformities by so many inventive surgeons. It illustrates how one person can have several developments to his name and how a new technique described by one person needs a second surgeon to develop and publicise it. Also highlighted are the lost opportunities resulting from a failure to study what has gone before and also the difficulties of language where reports published in obscure journals, in another language, are overlooked. The problem of our time is that the vast number of publications and literature could result in important contributions being missed.

RECOMMENDED READING

- The Zeis Index and History of Plastic Surgery 900 BC to 1863 AD, translated by TJS Patterson, 1977.
- The Progress of Plastic Surgery, AF Wallace, 1982.
- A History of Plastic Surgery, P Sanoni-Rugiu and PJ Sykes, 2007.

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Declaration of competing interests: None declared.

