

GETTING INTO ONE'S SKIN: THE HISTORY OF SKIN AUTOGRAFTING

Daud Lodin MD MPH¹, Luc Lanteigne MD¹, Matthew Gatewood MD¹, Alexander Young MS3¹, Jessica Buicko MD¹

¹Department of Surgery, Florida Atlantic University, Schmidt College of Medicine, Boca Raton, FL

Introduction: Trauma, burn, and reconstructive surgeons use many techniques to help close wounds. A central tenet of surgical wound care regards skin autografting: the use of skin grafts or rotational flaps. This presentation details the long history of skin autografting dating back to thousands of years ago.

Methods: This presentation was completed by performing a literature review of autografting using PubMed and Google Scholar, examining both ancient works as well as review articles on the matter.

Conclusion: Thousands of years of innovation and work has gone into refining and developing the wound reconstruction techniques of autografting we utilize today.

1500BC – Ebers papyrus, the first medical textbook, detailed complex wound transfer and the first recorded skin autografts.

1000-600BC – Sushruta, the father of plastic surgery, wrote *Sushruta Samita*, a medical textbook with a great emphasis on surgery, detailing the treatment of nasal reconstruction using buttock grafts as well as other skin conditions.

150-200AD - Galen wrote several treatises and textbooks, detailed cervical and fascial reconstruction. Celsus 's *De Medicina*, a textbook that contained many treatments, describes the local use of flaps to restore circumcisions.

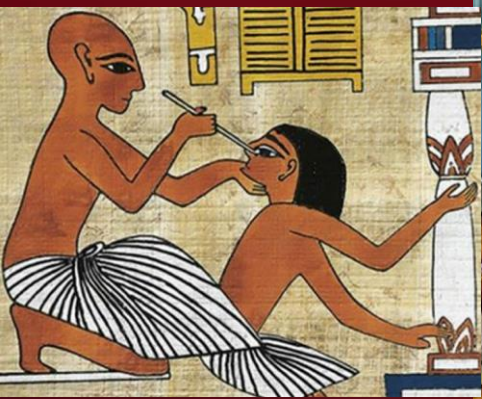
1400-1500 – The Branca's and the Viano's, two Italian families that brought back ancient techniques of nasal surgery, but never made them mainstream

1500-1600 – Taglicozzi took their work and brought it to the academic level, creating the science of rhinoplasty a studied phenomenon.

1800s – Many practitioners worked to advance the free skin graft, most notably Drs. Ollier and Thiersch, who made the Ollier-Thiersch graft, known as the modern split thickness graft.

1910-20s – Dr. Gillies pioneered facial reconstruction with local flaps during/after WWI.

1900-60s – Multiple blade iterations for harvesting were developed, beginning with Dr. Humby's knife, followed by advancements from Braithwaite, Watson, Goulian, Finochietto to name a few. Padget and Brown also developed electronic and pneumatic harvesting devices.



Ancient Egypt, nasal reconstruction.



Sushruta, nasal reconstruction.



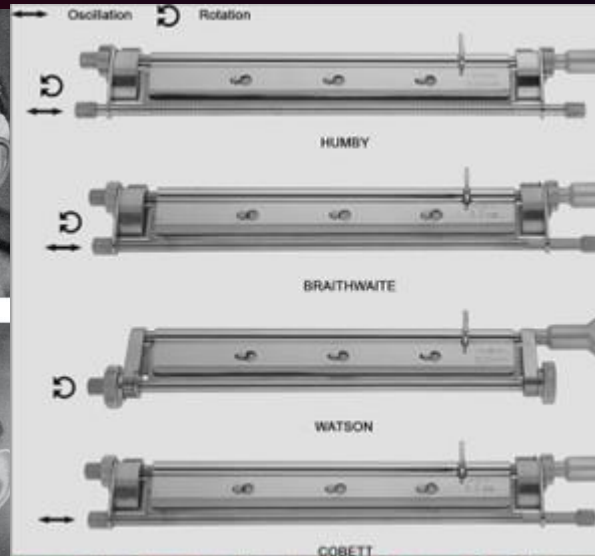
Galen, Wound Care of the Scalp.



Tagliacozzi, flap from the arm.



Dr. Gillies, explosive injury repair.



Various iterations of Humby's original Knife