



Role Of Sushruta In Ancient Indian Ayurved

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Many followers of Sushruta were known as Saushrutas, and they were mandated to study for six years before they could even begin receiving education in surgeries. They were required to swear a formal pledge, comparable to the Hippocratic Oath, before they could begin their training, promising to dedicate themselves to healing and to do no damage to others. Sushruta would teach the trainees surgical techniques after accepting them, making them practise cutting on vegetable or dead animals to perfect the length and depth of an incision. Students were only permitted to carry out their own operations until they had demonstrated their proficiency with living things, dead animals, or soft or decaying wood, as well as after attentively watching real surgical procedures on real patients. Their teacher instructed these pupils in every facet of the medical sciences, including anatomy.

Sushruta distributed his Samhita into five sections, each covering a different area of medicine. These sections are -

- (1) Sutrasthana, or the primary principles, which contains 46 chapters outlining the fundamental principles of medical sciences, technical nomenclature, and pharmacological classifications;
- (2) Nidana, which includes 16 chapters outlining the pathological concepts of disease;
- (3) Sarirasthana, which has 10 sections on human anatomy;
- (4) Chikitsasthanam, which has 34 sections on the medicinal and surgical management of various diseases



processes;

(5) Kalpasthana, which has 8 sections on toxicology.

The Sushruta Samhita lists 1120 ailments, 700 herbal remedies, 64 mineral formulations, and 57 preparations that originate from animal sources.



The Samhita's most notable field of medicine, however, was surgery.

Sushruta provided minute details about the production process and upkeep of at least 125 surgical instruments, with high precision, advising the metal to be used, cleaning with alkalies and caustics, and storing the instruments in separate boxes. This information was provided in describing and classifying various surgical operations.

Sushruta highlighted the importance of clinical education as a crucial component of medical training and the most significant of the eight Ayurvedic divisions. The surgical indications and contraindications for a variety of disorders, including intestinal perforation, hernia, obstetrical injuries, anal fistula, and extremities fractures, were methodically described in the Samhita. He identified 13 different alcoholic concoctions and soporific substances used as anesthetics, including henbane (*Hyoscyamus niger*) and Indian hemp. He also divided surgical techniques into eight main categories: incision, excision, scarification, puncturing, probing, extraction, draining, or evacuation, and suturing (*Cannabis indica*).

Sushruta also advocated sanitizing the operation room with the first known antiseptics, salts, mustard, and clarified butter fumigation. Sushruta continued to support the value of surgery in the Samhita: "Surgery has the substantial advantage of delivering rapid results through surgical tools and equipment. As a result, among all the medicinal tantras, it has the most value. It is everlasting, a source of limitless devotion, attracts celebrity, and grants its devotee's access to Heaven. It increases the amount of time people may live on Earth, helps them complete their objectives effectively, and helps them become somewhat capable of performing their assigned tasks.

Sushruta made a significant contribution to the field of plastic surgery, particularly in the area of nasal reconstruction



employing a cutting-edge technique that recreated the nose's component parts using flaps. He expertly explained skin grafting, the categorization of burns, wound management, and wound healing in addition to repairing a cut earlobe, piercing an earlobe, repairing a lacerated lip, and rebuilding of the nose using a pedicled cheek flap. Sushruta discussed many techniques for reconstructing the nose with flaps, including

- (1) releasing the surrounding skin to hide minor flaws (slide flap),
- (2) Rotating the flaps to account for a partial loss, and
- (3) Pedicle flaps to replace the whole loss of skin from a region (pedicle flap).

It is originally claimed that Sushruta Samhita was the first text to distinguish the median forehead flap, sometimes known as the "Indian way," as the first nasal reconstructive procedure. This, however, is incorrect because the description clearly refers to a pedicled cheek flap as a primary nasal reconstructive procedure. Even back then, Sushruta established the fundamentals of nasal reconstruction by highlighting the need of precise pattern cutting to the size of the defect, proper flap cutting and suturing to the nose, and tube preservation of the airway.

As Sushruta explained

- (1) Gather a creeper leaf that is long and wide enough to completely cover the damaged or clipped area;
- (2) From the cheek area, a piece of live flesh that is the same size as the leaf used before should be excised;
- (3) The flesh is quickly adherent to the amputated nose once it has been debrided;
- (4) Place two little tubes into the nostrils to improve breathing and stop skin from drooping;
- (5) The adhesioned section is sprinkled with a mixture of powdered pattanga, yashtimdhukam, and rasanjana.
- (6) Karpasa cotton should be used to cover the nose, and pure sesame oil should be repeatedly poured on it.
- (7) Trim the extra skin once the healing is finished and the pieces have fused.

This is the traditional "Indian approach" of nose

reconstruction, often known as a pedicled cheek flap in modern use. The description of Sushruta can be credited as the first description of a flap. The term "flap" was first used in English in the 16th century to refer to something that hung loosely and was only tied on one side.

Sushruta was a pioneer in surgery, according to Frank McDowell, who wrote about him in his book *The Source Book of Plastic Surgery*. "Through all of Sushruta's flowery language, an incantation, and irrelevancies, there shines the clear picture of a superb surgeon," McDowell said. He continued to seek the truth and passed it on to others who came after him, unfazed by his failure and unimpressed by his accomplishments. With reason and reasoning, he ruthlessly combated sickness and deformity. He created a road when there was none.

Even though the above said technique used a flap taken from the forehead rather than the cheek as Sushruta had it done, it is likely that this method of restructuring was passed down through families in India and travelled to Europe via various routes. As a result, it may be considered a continuing application of an ancient art from Sushruta's time. Along with the cheek flap, the forehead flap was first done in Europe and eventually spread to other regions of the world. Even after 2500 years, the principles put out by Sushruta continue to guide plastic surgeons in their search for effective reconstruction, even if the cheek flap and forehead flap for nasal reconstruction have been updated and improved.

Sushruta undoubtedly set the groundwork for plastic surgery, and the modern surgical world still finds his precise descriptions of numerous treatments to be accurate. Sushruta is now regarded as the founder of plastic surgery, making India the genesis of the discipline. This has earned him the title "The Father of Plastic Surgery."

References -

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