# The Evolution of Plastic/Cosmetic Surgery in Ancient India from Vedic Period

C.L. Avadhani

### I. Abstract

Tracing origin of Vedic Period in India, there is a eminent historical development of Plastic/Cosmetic Surgery which highlights the significant contributions of Acharya Sushruta, father of Plastic Surgery around 600 B.C. and the works that are documented in Sushruta Samhita. The various procedures like Rhinoplasty and Skin Grafting show cases advanced knowledge of anatomy and surgical practices that were practiced from Ancient times. This article aims to explore the evolution of Plastic/Cosmetic Surgery in Ancient India since Vedic Period. Plastic Surgery roots can be traced back to ancient civilizations where as early practices included forms of reconstruction and rhinoplasty. The evolution of reshaping practices gained momentum during the World Wars particularly in World War I, was significant need there a for reconstructive surgeries to treat soldiers with facial injuries. This is a root cause that was developed in present form of Cosmetic Surgery to reshape the parts of the body especially face to enhance the appearance. Today healthcare professionals mainly surgeons use skin grafts to restore areas that have lost protective layers of tissues due to trauma, infection, burns and in addition to restore areas where surgical intervention has created loss of skin where dents have appeared. Not only that after the breast cancer surgery to augment the breast to the original position these grafting techniques that includes blood vessels and muscles are being used in reconstructive breast surgeryp

and the technique is based on the principles laid down by Vaidyar Sushruta in Ancient India which was documented in Sushruta Samhita. To conclude, enlightenment also fostered a growing interest in individualism self-improvement, and influencing of perceptions beauty physical and appearance as the society began to value aesthetics more in the ideas of reshaping the human body. This cultural move paved the way for plastic surgery to evolve from purely reconstructive practices aimed at restoring function to procedures focused on enhancing beauty. one can say with authority that the birth of Plastic/Cosmetic Surgery was from India only. One can look into the Vedic rituals that contains knowledge of Plastic and Reconstructive Surgery was known by Brahma, Vishnu, Maheswar, Indra, Dhanvantari etc.

**II.** Plastic/Cosmetic Surgery, Rhinoplasty, Reconstructive Ear Lobule, Sushruta Samhita, Skin Grafting, Surgical Techniques and Procedures.

### **III. Aim and Objective:**

To explore the evolution of Plastic/Cosmetic Surgery in Ancient India since Vedic Period.

### **IV. Introduction:**

Plastic Surgery / Cosmetic Surgery is one of the specialized surgical process involving the restoration, reconstruction or alteration of the human body; in a way it is nothing but shaping the body and to make it more attractive than what it was before procedure. Though it has gained importance, priority due to upsurge of this type of procedure in the past three decades because many of the voungsters (females and males) want to reshape their body especially face to make it more attractive. However, this Plastic Surgery is not new in India and it is having its roots even in Ancient India namely Vedic Period under the able guidance of Acharya Sushruta who is considered to be the father of Plastic Surgery. In this article, an attempt is made how this type of Surgical Procedure was adopted and once was flourishing in Ancient India. Plastic/Cosmetic Surgery/Procedure can be divided into two main categories namely a). Reconstructive Surgery and b). Cosmetic Surgery.

In Reconstructive Surgery a wide range of specialties/procedures that includes craniofacial Surgery, hand Surgery, micro surgery and the treatment of burns. This type of Surgery/Procedure has to be carried out by specialists who have well versed with this procedure because it involves restoring a body part or improving its function. On the other hand, the other procedure namely Cosmetic Surgery (Aesthetic Surgery) mainly focuses on improving the physical appearance of the body, especially the face and such other body parts that enhances the appearance and beauty after the procedure.

There is no comprehensive definition of Plastic Surgery because it has no distinct anatomical object as such overlapse with other surgical specialties. At a nutshell the essential feature of Plastic Surgery / Cosmetic Surgery, and that it involves the treatment of conditions that require or may require tissue relocation skills.

# 1). Etymology:

The word Plastic in Plastic Surgery is in reference to the concept of "**reshaping**" and comes from the Greek Plastike (tekhne) that means "**the art of modeling**" of malleable flesh. This meaning in English is seen as early as 1598. In the surgical context, the word "**Plastic**" first appeared in 1816 and was established in 1838 by Eduard Zeis, preceding the modern technical usage of the word as "**engineering material made from petroleum**" by 70 years.

Historical evidence shows that the origin of Plastic Surgery first developed in Ancient India during "Samhita Period" when the all-time great Vaidyars namely Sushrata, Charaka, Vaghabatta who have mastered the medical procedures in its enterity when the west has not opened their eyes. However, due to various reasons this healthcare procedures have lost their presence in India but the roots and the procedures that were developed in those days are still are the basic procedures that are presently applied. Written evidence in history reveals that healthcare procedures for facial injuries used to be a normal procedure nearly 4000 years ago in Ancient India. In Ancient India, the Vaidyars (Physicians/Surgeons) utilizing the techniques of skin graft used to reconstruct he damaged/ugly parts of the body as early as 800 B.C. In this regard, descriptions regarding the methods of transplantation was first found in Sushrutha Samhita (600 B.C.) because one of the punishments that are awarded by the rules for the sins committed by the public for various wrongs is to "cut away the ear lobule, nose etc." These unfortunate incidents are being taken as a challenge by the Vaidyars in those days for correction and reconstruction of those parts adopted such techniques by shifting the skin flap to reform the nose and ear lobule. In addition, the Vaidyars in those days have also developed procedures for wound healing for a successful plastic operations.

In Ancient India, the Vaidyars have appreciated the importance of wound healing for Plastic/Cosmetic procedures. In Ancient India especially during the period of Sushruta, Charaka, Vagabhatta acquired

proficiency in Surgical procedures that is the revival procedure can be traced to report from India in 1974 and illustrated accounts of Rhinoplastic Operation upon a bullock driver was published in Gentleman's Magazine in England. It is well documented and the procedures are acclaimed by the present healthcare professionals especially in Plastic and Cosmetic Surgery that "the basic principles led by Sushruta was even now-a-days followed bv modern Plastic/Cosmetic Surgeons". However, due to the impact of Buddhism and Jainism in India as the Dharma of those religions are different, this branch of Surgery/Procedure (Plastic/Cosmetic) slowly losts its presence in India: As such the knowledge of Surgery/Procedure Plastic/Reconstructive was slowly diminished during this period. However, this knowledge of specialty procedures expanded its wings to Arab Countries by the travelers from there to the European Countries. In 14-15<sup>th</sup> Century this procedural Plastic/Reconstructive Surgeries was further expanded to other countries of the Globe.

# V. Literature Review:

According to the information available with respect to the Plastic/Cosmetic Surgeries in India through various sources especially in Ancient India during Vedic Period "Body Shaping was primarily focused on physical fitness achieved through activities like hunting, horse riding, chariot racing, wrestling and such other martial arts which were considered essential for a body shaping".

Plastic Surgery was practiced in Ancient India, especially during and after Vedic period the great Vaidyar namely Sushruta who is known as "**the father of the Plastic Surgery**", and Vaidyars works are documented in "**Sushruta Samhita**", a clinical text on Indian Surgery. The evolution of Plastic Surgery in Ancient India dates back to the Vedic Period and one of the most prominent figures in those days who is considered father of the Plastic Surgery was Vaidyar, Sushruta whose detailed description of Surgical procedures that includes "Rhinoplasty" and "Skin Grafts", are documented in the "Sushruta Samhita", text believed to be from around 600 B.C.; this ancient Indian Medical Treatise is considered the foundation of Plastic Surgery practices, showcasing techniques like "Flap Surgery and Tissue **Reconstruction**", that are still relevant today.

# 1). Vedic Period Roots:

The earliest records of Plastic Surgery practices are found in the Vedic Texts especially in Rigveda where procedures like "**Nasal Reconstruction**", were mentioned as one of the procedures to correct facial deformities, often resulting punishments like nose amputation.

# The renowned Vaidyar Sushruta's contribution:

The exponent of Plastic Surgery in Ancient India namely the great Vaidyar Sushruta in his documentation in "Sushruta Samhita" provides a detailed instructions on various surgical techniques/procedures, including "Skin Grafts, Flap Procedures and methods for reconstructing the nose, ear and lip". This Sushruta's technique of Plastic Surgery is believed to have spread to other civilizations like the Greeks and Arabs to trade and cultural exchanges. While the practice of Plastic Surgery continued in India throughout history, a significant revival occurred in the Post World War – II the influence of with British. era Maxillofacial Surgery Techniques and the establishment of dedicated Plastic Surgery Departments in Indian Medical Institutions.

2). Following are some of the techniques that are being developed Vaidyar Sushruta in Ancient India are Rhinoplasty. Sushruta is famous for his Rhinoplasty,

a. Technique which involved using a Flap of Skin from the cheek or forehead to reconstruct a nose. This technique is still used today in a modified form.

b. Wound care: Sushruta described how to treat wounds including using heat to sterilize wounds and prevent bleeding.

c. Skin Grafting: Sushruta described how to repair Cut Carlobes.

d. Earlobe Repair: Sushruta described how to repair Cut Earlobe.

e. Lip Repair: Sushruta described how to cut Lips.

f. Anesthesia: Sushruta described using "Alcoholic decoctions" and "Soporific agents" for anesthesia.

The above techniques that are documented that are traced from (a). Charaka Samhita, a text on Medical aspects of Ayurveda and (b). Ashtanga Hridyans Samhita, a text book by Vagabhatta that recounted Plastic Surgical Procedures.

The earliest replantations according to Puranas and Vedic Literature were done by "Lord Shiva", by attaching an Elephant's head on his son's body (Lord Ganesha) and by "Ashwini Kumars" (the two brothers with a horse face) who successfully replanted the served head of Yagna. This account of documentation proves that Plastic Surgery in India is evident even before Vedic Period.

# **3). Tools Developed and Used in Plastic Surgery in Ancient India:**

During period of Vaidyar Sushruta, who is known as father of the Plastic Surgery has developed a variety of tools for Plastic Surgery/Procedures that includes, "**Scalpes**, **Forceps, Probes, and needles**"; these tools were made from metals like Iron, Bronze and Silver.

Following are the descriptions of the above mentioned tools:

a. Scalpes: used to make clean cuts.

b. Forceps: used for tissue manipulation and came in different shapes and sizes

c. Probes: used to explore wounds or cavities

d. Hooks: used to retract tissues and improve visibility.

e. Cauteries: used to treat conditions by burning or gearing tissues

f. Specula: used to inspect body cavities and passages

g. Tubes: used for various Surgical purposes h. Levers: used for various Surgical

purposes

i. Saws: used for various Surgical purposes

j. Drills: used for various surgical purposes

k. Respatories: used for various surgical purposes







#### For Nasal Reconstruction:



A reading from the Sushruta Samhita documented by Vaidyar Sushruta regarding the tools that are developed and used in Ancient India it is surprising to see that Twenty Sharp Instruments that should have an edge so find that it should divide the hairs on the skin and 101 blunt instruments. Sushruta described atleast 125 yantras (Surgical Instruments) including 28 types of dilators, Catheters, and Syringes. This clearly shows the relevance of the some of the instruments that are used in modern surgery. The design and usage of Bhagandara Yantra were identical to anal dilator or speculum.

### VI. Analysis and Discussions:

Though, it is new phenomena and latest science in the Western World. It is as old as the existence of civilized human beings in India. A review of the relevant documented information by those exponents of medicine namely Acharya Susrutha, Acharya Charaka, Acharya Vagabhatta who have dominated the healthcare in Ancient India when the other parts of the Globe are not even have the knowledge of healthcare. Perhaps this development has come from our Puranas and Vedas right from Aswini Devathas who are considered to be divine healthcare professionals used to treat the Devi Devatas has described in our mythological books. We have ample evidence in the Indian **Mythological** inscriptions regarding health and healthcare and related procedures with a detailed descriptions. One has to believe the Mythological Inscriptions, Vedas and Puranas where the healthcare procedures are described are identical in the present healthcare procedures and at times they are more sophisticated than the present system. That is why Acharya Sushruta who has surgeries/procedures perfected intricate surgery/procedures and subsequently Vagabhatta in the 4<sup>th</sup> Century A.D. who expanded horizon surgical the of procedures/knowledge and continued in the foot prints of Acharya Sushruta. This information has been documented in Acharya Vagabhattas work "The Ashtanga Hrydayam Samhita", crediting Maharshi Atreva dwelled the subject in detail.

One can find the existence and expansive landscape of Indian Medical knowledge in its roots from Atharvaveda from where one of the best branches of Indian Medicine namely Avurveda was developed. In addition, the other eminent personality in Medicine namely Acharya Charaka who wrote Charaka Samhita mainly focusing on medical/medicinal aspects whereas Acharya Sushruta's Sushruta Samhita dwelved the subject in intricate surgical procedures. Acharya Devadas who is the guiding force and Acharya of Sushruta meticulously documented Plastic Surgical Procedures in their treatise that clearly shows the Surgical wisdom of the Ancient Indians which is considered to be the Golden era of Indian Medicine.

In those days, it is believed that there are plenty of restrictions regarding healthcare procedures because people have different faiths about birth, death and the physical body and the mortal remains. It is very difficult to overcome those faiths because those faiths are practiced in Toto and anybody who fails to follow the religious customs and faiths are barred from the society; hence it is a difficult tasks for the Vaidyars in those days to convince the people, the society and the religious leaders by establishing such procedures though barred by the religious feelings but they are able to convince the people the importance of human body when it is alive and after death how the mortal remains can make an impetus in developing surgical procedures so that the longevity of the people can be extended. The other factor that is to obstruct this Vaidyars is rebirth. There is a strong belief and notion that rebirth is a reality and after the demise of the human beings they should be given a procedural way to the other world (according to their belief) without disturbing the body after the death. It means no human part of the body could be separated from the dead body. If it is done it

is nothing but a sin and doing injustice to the departed soul. In such religious conditions the erstwhile Vaidvars in those days namely Vagabhatta, Sushruta, Charaka and Atreya have faced lot of difficulties in convincing the religious personalities who are dominating the society. To teach a person about the functions of the parts of the body can be done only when the dead body is postmortemed and opened but which is prohibited under religious customs in those days. In such conditions, the Vaidyars developed such procedures without putting the knife on the dead bodies.

In such situations where belief of Sastras are predominantly in force, Sushruta is able to bypass these obstacles to acquire knowledge of Anatomy by using Brush-type-Broom which scraped off the skin and flesh without using any dissector so that the dead body need not be cut. Sushruta with his acumen knowledge and concentration able to identify 300 bones, joints, ligaments and muscles from various spots of the human body (Hoemle 1907). Though there is a controversy regarding number of bones of human body is largely due to the Cadavers that Sushruta observed. However in those Ancient days where nothing is available like today's modern equipment. Acharva Sushruta is able to offer in depth understanding of the various parts of the body and their function, that is far more better than the present knowledge acquired by the present generation with latest equipment. Sarira Shastra which is the part of Sushruta Samhita contains 10 chapters illustrating the study of human anatomy

As already mentioned in 16<sup>th</sup> B.C.E the father of the Plastic Surgery Vaidyar the Sushruta widely regarded in Ancient India as the father of Surgery/Plastic Surgery documented in his book by name Sushruta Samhita a compendium of Surgical Procedures including Plastic Surgery in

which the Vaidyar described around 1100 diseases and use of medicinal plants that are available in those days. In addition not only procedure of performing surgeries and also designed various instruments based on which the present surgical instruments are made. Sushruta developed skin grafting and reconstruction of nose and ears in those days which is unknown to the other part of the Globe especially in skin grafting he developed the technique of taking out part of skin from other parts of body and is being grafted to another part. Sushruta treatise provides the first written documentation of a forehead flap, rhinoplasty, a technique is being used to till date. This is a root cause that was developed in present form of Cosmetic Surgery to reshape the parts of the body especially face to enhance the appearance. Today healthcare professionals mainly surgeons use skin grafts to restore areas that have lost protective layers of tissues due to trauma, infection, burns and in addition to restore areas where surgical intervention has created loss of skin where dents have appeared. Not only that after the breast cancer surgery to augment the breast to the original position these grafting techniques that includes blood vessels and muscles are being used in reconstructive breast surgery and the technique is based on the principles laid down by Vaidyar Sushruta in Ancient India. This can be authenticate mentioned because these techniques are already documented in Sushruta Samhita that was written in long long back.

One of the great scholars by name NK Pattenshetty, who specialized in clinical research methodology and engaged in rural medical services in Karnataka and also taught Ayurveda at degree and post graduate levels in his review article namely "**Mandala of Indic Traditions**" elaborately mentioned about the Indian Surgery in Ancient India. He mentioned about Indian Surgery in Ancient India "that forms one of the eight speicalities of Avurveda, was known as Shalya Tantra in ancient texts and that Shalya Tantra had along with other seven specialities of Ayurveda had reached the zenith of achievement at an early stage of Indian History out of the four Vedas namely Rigveda, Yajurveda, Samaveda and Atharvaveda" that are held sacred by the Indians: "Avurveda is said to have its origin in Atharvaveda compiled something during 1000 B.C.....Sushruta who authored the Sushruta Tantra around 400 B.C. is usually called the father of Indian Surgery." According to the inscriptions that are available it appears that Sushruta was the son of Viswamitra and a disciple of Kasi Raja Dividosa Dhanvantari, a renowned surgeon simply known as Dhanvantari. It appears that Sushruta's Sushruta Tantra is probably the earliest records on the procedure; prior to this there was no systematic record of the treatment procedure but many scholars believed that there is a procedure adopted in Ancient India through Surgery as treatment of wounds much earlier to sushruta. However, Sushruta the Vaidyar systematized the scattered knowledge of the various aspects of procedures that are adopted Obstetrics. Gynecology, in Pediatric, Geriatrics and Ophthalmology anatomy. including а description of physiology and pharmacology. Thus making the Sushruta Tantra one of the most comprehensive compendia of his times. However, much of this treasure was lost due to the passage of time but in 15<sup>th</sup> century A.D. another exponent in Healthcare procedures by name Nagarjuna is able to reedit that knowledge which is now presently available. Sushruta in his book Sushruta Tantra elaborately documented many of the procedures on Surgery including Plastic Surgery. In addition, diagnostic aspects of different diseases, physiological and

embryological, therapeutics, poisons and science of nutrition. In addition reproduction and social hygiene are also part of Sushruta Samhita. At a nutshell, Sushruta Samhita documented by Vaidyar the Sushruta is a total comprehensive book of knowledge on healthcare procedures and such other information relating to healthcare. This Sushruta Samhita written by Vaidyar Sushruta has number of chapters that like includes subjects pediatrics. ophthalmology, bariatrics, reproduction and virility. In addition a whole chapter was dedicated to study and treatment of ailments through physiotherapy, which has been accorded recognition and happens to be rapidly growing science in the modern world.

The Sushruta Samhita is also embodied, the information regarding the fundamental concepts of Shalya Tantra or Surgery into number of chapters.

With due respects to the author Pattanshetty I give below the extracts and request the author to treat this as a personal acknowledgment.

"1) Vrana and Vranasopha which this paper describes as Wounds and Inflammation. After the identification of wounds and inflammation separately, the Samhita describes sixty types of management 'Sasti Upkrama' of these. The subject of inflammation, ulcer and wound, their process of repair and management occupy relatively greater space in the Samhita.

2) Dagdha-Vranas or Burns and Scalds. Accidental burns are grouped into four categories depending upon the tissues burnt, which are described as partial epidermal first degree burns, dermo-epidermal second degree burns, whole skin thickness third degree burns and fatty and muscle layer fourth, fifth and sixth degree burns. It is recognized that special kinds of burns such as asphyxiation by hot fumes, sun stroke, frost-bite and chilblain, burn by extremely hot objects and burn by lightning required specialized treatment.

3) Sonita sthapanam or Haemostasis is bleeding wounds. The Samhita divides the procedures detailed of controlling hemorrhage into groups four Sandhanam – approximation as of wounds, Skandanam – use of coagulants, Pacanam or cauterization by using caustic drugs and Dahanam cauterization by use of hot objects. Pattenshetty tells us that each one of the above measures is more potent than the previous one and is indicated one after the other to bring about homeostasis.

4) The next section in this first volume is devoted to Bhagna - fractures and dislocations. Here Susruta necessarily had to describe the types of bones found in the body. Pattenshetty says that today we are able to examine an injured bone directly under radiological examination but in the absence of this Susruta had evolved this useful and most logical method of determining the types of fractures by inference. Susruta classified the skeletal injuries into two broad groups (1) sandhi bhagna or dislocation of joints and (2) asthi bhanga or fractures. Under this section Susruta also discusses the management of iniuries through skeletal traction. manipulation by pressure, by reduction or apposition and immobilization. Mention of the management of compound fractures, physiotherapy and use of splints is also found in this Samhita. Susruta had also identified the barks and wood of various trees that were found to be useful to serve as splints. Pattenshetty says that what Susruta suggested several centuries ago with meager facilities of carrying clinical out investigations is so perfect that there is hardly any room to permit any alteration at present. The principles laid down by him

indicate the height of development of Indian Surgery during that remote period.

5) Karna-nasa-ostha Sandhanam or the Ear. Nose and Lip reconstructive surgery. It is most surprising here to find the mention of Plastic Surgery by Susruta who described fifteen varieties of repairing torn or defective earlobes. Pattenshetty says Susruta may be called the father of Plastic Surgery. addition. Rhinoplasty or Nasa-In Sandhanam and Ostha-Sandhanam or labioplasty have also been elaborately described by Susruta which are his outstanding contributions. Till the 19th century this branch of surgery had made little advance anywhere in Western Countries.

6) Anusastra Karma or Para-Surgery. In para surgery as a specialty Susruta has advocated the use of Ksara – medicinal caustics and agni – thermo cauterization. Pattenshetty says there is no cure for these in modern surgery. He says except for a few varieties of bhagandara – fistula in anoand arsus – haemorhoids where surgery was indicated a majority of these ano-rectal conditions were subjected to para-surgery.

7) Rakta Visarvanam or Rakta Moksanam that is Blood letting. Susruta seems to have been of the opinion that the onset of a number of diseases could be prevented by following a proper method of bloodletting. He advocated five types of different methods to let out the vitiated blood. 1. Siravyadha-vene puncture by certain surgical instruments, 2. Visana – by applying horn, 3. Tumbi – application of bitter gourd, 4. Jalauka - the application of leeches, and 5. Pada or pracchana – incising by a surgical instrument. In this section a description detailed of the surgical instruments and accessories used for the surgical procedures described later in the paper is given, which can make even the most distinguished of surgeon's wonder at the ingenuity of the ancient Indian surgeons.

Pattenshetty also gives the diagrammatic representation of these and also describes the medicaments and types of bandages utilized by Sushruta".

In Ancient India, the healthcare procedure mainly surgeries are the shining examples of development of not only healthcare procedures to treat the ailments but also Aesthetic Procedures which is nothing but the present form of Plastic/Cosmetic Surgeries are the order of the day. Even today many of Plastic/Cosmetic Surgeons who are performing this type of surgeries globally have resemblance of that taught by Vaidvar Sushruta and documented in his Samhita resemble them that was documented 3000 years ago.

It is a globally accepted information that Atharvaveda is the root of Ayurveda. This Atharvaveda is the root for the development of Sushruta Samhita by Sushruta and Charaka Samhita by Charaka. The Two Vaidyars are the exponents of medicinal treatment and surgical procedure.

A translation of the Sushrutas words by Srinjoy Saha, (Plastic Surgeon, Clinical Professor in Aesthetic Surgery, Cosmetic treatment, Reconstruction, Hand Surgery) I quote,

"The physician who has only the book of knowledge but is unacquainted with the practical methods of treatment or one who knows the practical details of the treatment but from self-confidence, does not study the books, is unfit to practice his calling -Sushruta", I unquote.

Sushruta, the Vaidyar has clearly described the operative techniques that are to be adopted to earlobule (reconstruction of injured ear) in fifteen ways, of which some are mentioned below:

- 1. NemiSandhanaka
- 2.Utpalabhedyaka
- 3. Valloorka
- 4. Aasangima

- 5. GandKarna
- 6. Aaharya
- 7. Nirvedhima
- 8. Vyayojima
- 9. Kapata Sandhika
- 10. Ardha Kapata Sandhika

In addition to all these procedures, Sushruta the Vaidyar also described about

- a. Post Operative procedures
- b. Dressing,
- c. Post Operative Care

d. Reconstruction methods of different parts of the body etc that are important and vital to be followed during and after Plastic Surgery.

Aspect	Ancient Procedures	Modern Developments
Technique	Manual techniques with basic tools	Advanced technology (lasers, RF- assisted liposuction)
Focus	Reconstruction after trauma or punishment	Aesthetic enhancement and wellness
Recovery Time	Lengthy recovery with high complication rates	Shorter recovery times with fewer complications
Patient Experience	Limited understanding of patient comfort	Emphasis on patient satisfaction and comfort
Customization	Generalized approaches	Highly personalized treatment plans

### **VII. Conclusion:**

From the above material one can draw a conclusion that, Plastic/Cosmetic Surgery is

a very old science that was developed in India when the other part of the Globe are not aware of it but there is no documentary evidence to show that when this Cosmetic/Plastic Surgeries on human beings are performed, though it is known in the Puranas and Vedas. However, one can say authority that the birth with of Plastic/Cosmetic Surgery was from India only. One can look into the Vedic rituals that of Plastic contains knowledge and Reconstructive Surgery was known by Vishnu. Maheswar. Brahma. Indra. Dhanvantari etc.

I quote the valuable information provided by Panigrahi, Hemanth Kumar, Ayurveda Central Research Institute, PunjabiBagh West, New Delhi, India in his article titled, "Origin of Surgery: A History of Exploration of Plastic and Reconstructice Surgery"

"In Rigved (1-158, 4-6), Dakshya cut the hed and trunk of Rishi Chyavan. Then Ashwani Kumaras perform the first Plastic Operation and give life to Rishi Chyavan. At the time of war when enemies cut the leg of Bispala, wife of King Khela, Ashwani Kumaras transplant the leg by a leg made with iron (Rigveda I-116.95), In Rig-Veda (1-117-14). Besides this hetero transplantation was also performed by Ashwani Kumaras during Vedic period. Ashwani Kumaras interested to learn Madhu Vidya from Dadhyancha. So Ashwani Kumaras cut the head of Dadhyancha; kept separately. Then transplant the head of a horse and learn Madhu Vidya rom the horse. After learning Madhu Vidya again they separate the head of horse from Rishi Dadhyancha and transplant his own head 1-116-13/19-117-17). (Rig-Veda In Padmapuran the written evidence of transplantation is also found. In Padmapuran (2-66/212-215) Ashwani Kumaras transplant the head of Yagna. Bhairav Cut the head of Bramhaand Dadhichi. In this condition

Ashwani Kumaras rejoined their heads with the irrespective bodies. Shivji cut the head of Ganesh and after the request of Mata Parvati Shivji transplant the head of an Elephant. This is a typical example of hetero transplantation", I unquote.

### As Vaidyar Sushruta mentioned,

"We restore, rebuild, and make whole those parts which nature hath given, but which fortune has taken away. Not so much that it may delight the eye, but that it might buoy up the spirit, and help the mind of the afflicted."

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