IMPORTANCE OF YOGYASUTRIYA AS PER SUSHRUT SAMHITA- A REVIEW

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ABSTRACT

In *Ayurveda, Sushruta* was the first person, who learnt and practiced various surgical procedures in approximately 300 BC. He compiled a surgical compendia including other branches of medicine is known as '*Sushruta Samhita*, he has been known as 'Father of Indian Surgery' after the development of modern surgical era. The teaching principles which are mention by *Sushruta* is unparalleled even today also. He has contributed a special chapter for new practitioners of surgical training is named as '*Yogyasutriya Adhyaya*' 9th chapter in *sutrasthan*. This study focuses on how to learn '*Astavidha Shastra Karma*' (eight surgical procedures), *Bandhana Karma* (Bandaging technique) on suitable or easily available objects.

Keywords: Yogyasutriya Adhyaya, Astavidha Shastra Karma, Bandhana

INTRODUCTION

Sushruta has mentioned a chapter to learn surgical techniques on objects before practicing of similar techniques on human beings. He has been emphasized so seriously for new practitioners to practice similar procedures on similar objects for obtaining highest rate of success, otherwise he cannot be a life giver even after thoroughly learnt all the scriptures.

Sushruta mentioned Eight types of surgical procedures are as follows:- Chedana (surgical excision), Bhedana (incision & exploration), Lekhana (scraping), Vyadhana (puncturing), Esana (probing), Aharana (extraction), Visravan (drainage), Sivan (suturing)) and application of Kshara (alkaline substance), Agni (cautery), Badhana (bandaging) etc.

NEED OF THIS STUDY: The aim of this study is to review the principles mentioned for experimental surgery and execute these ideas in current teaching methodology.

REVIEW OF LITERATURE: In *Sushruta Samhita, Sutrasthan*, 9th chapter, '*Yogyasutriya Adhyaya*' has mentioned some references regarding how to make a student fit for surgical work.

1.Chedana Shastrakarma (surgical excision)

It is a procedure to excise a damaged part by using surgical knife (like *Shastra* eg. *Mandalagra* (*circular* knife), *Karapatra* (bone saw), *Vridhipatra* (Scalpel)). For this procedure, various objects like pumpkingourd, bottle-gourd, water melon, cucumber etc. are used by *Acharya Sushruta*. Different excision techniques should be practiced on these objects. Such types of fruits have not so hard outer surface and inner part is bulky / soft i.e. *Sushruta* selected these fruits. So that a new practitioners can know how to hold a surgical blade for performing excision in different directions and feel that what much pressure is required to excise.

2. Bhedan Karma (Incision & exploration)

It is procedure to be made to expose under-lying structures and to let-out the content by using *Shatra* i.e. *Vridhipatra* (Scalpel), *Ardhadhara* (single edged knife). For example, An appropriate incision and proper exploration is useful to manage a case of *Pakwa Bidradhi* (absces). So to learn this technique, incision should be practiced on a leather bag, urinary bladder or leathern pot containing full of water and slime. Whenever, a practitioners has tend to practice incision over this model, he will judge the exact pressure is required to incise and how to explore a cavity.

3. Lekhana Karma (Scraping)

Scraping is useful to remove undesired tissues like Epithelized tissue, hyper granulations, sequestrum etc. For clinical experience, *Lekhana Karma* should be practiced on piece of hairy skin. It is very small surgical procedure, but to avoid injury to nearby structures so many attention is required. For examples, during surgical scrapping of an ulcer, there is chance of damage to its base, arteries, veins etc.

4. Vyadhana Karma (puncturing)

This procedure is used to pierce the epithelial surface, superficial veins etc. For this procedure very fine hand is necessary. So this procedure should be practiced on the lotus stalks which are smooth, spongy in nature and using veins of animal. This procedure is applicable to remove the fluids from any cavity. For e.g. Abdominal paracentesis.

5. <u>Esana Karma (probing)</u>

This procedure should be practiced using holes in pieces of wood eaten by moths, bamboos, and mouth of dried gourd. These substances containing multiples holes and passages through which a probe can be passed

without any resistance. By this procedure new practitioners can be developed clinical skill to assess the path way of sinuses and cavities in humans.

6. Aharana Karma (extraction)

Removal of a foreign body by pulling method is called *Aharana Karma*. This tecnique can be practiced on fruits containing seeds like pulp of *bilwa*, jack fruit or the teeth of dead animals. This procedure is useful to remove the impacted foreign body, stone, faecolith etc. in surgical practice.

7. Visravan (drainage)

This procedure is used to remove the abnormal collection of fluids in body cavities and to let-out the vitiated *Rakta Dosa* (vitiation of blood). This technique should be practiced on a piece of *Salmali* wood coated with beeswax. The idea behind the selection of beeswax for *Visravan Karma* because it is a soft material, when incision can be taken, it will be similar feeling like skin incision. The bark of *Salmali* wood contains plenty of liquid material. So whenever a practitioners can practice *Visravan Karma* on this model, he will be experienced on how to take a fine incision for free flow of liquid.

8. Sivan (suturing)

This procedure is defined for approximation of cut margins of wound, which are produced by surgical or non-surgical process. Anatomically approximation of margins has prime importance in surgical practice. This technique should be practiced on the borders of fine closely knitted cloths and on the borders of soft leather.

• Bandhana Karma (Bandaging technique)

Acharya Sushruta mentioned fourteen Bandhanas in Sushruta Samhita according to the nature of disease and season. An appropriate Bandhana helps for early healing of lacerated, crushed wound and to stabilize the fracture, dislocation etc. So that a wounded person can able to walk, sit comfortably and sleep well. The practitioners who desire to learn Bandhana, he should practice on different parts of the dummies made up of cloth.

• <u>Kshra & Agnikarma</u>

Ksara & AgniKarma, are of the most important parasurgical tools mentioned in *Ayurveda*. One who desires to become skilled to use *Kshara Karma* (alkaline therapy) and *Agnikarma* (thermal cautery), should practice on similar objects like a suitable soft muscle piece. Because the signs of *Samyak Dadha* can be observed better in muscle piece.

• Miscellaneous procedures

Similarly to become skilled in other miscellaneous procedures like *Vastikarma* (enema therapy), *Vranaprakshalana* (wound cleaning), new practitioners should be practiced on the side hole of an earthen pot contain full of water or on the mouth of gourd.

DISCUSSION

According to *Acharya Sushruta*, though a student has fully understood all surgical principles, but he cannot be competent without *Yogya*. He will be failed to conduct surgical procedures in human. To solve this problem and to gain knowledge as a surgical scholar, he has explained and demonstrated different kinds of *Yogya Vidhi*. *Sushruta* has also clearly defined that an intelligent scholar can be selected other suitable objects to obtain accurate, precise knowledge in particular procedure i.e. *Shastra Karma, Ksharakarma, Agnikarma*.

There is no doubt; *Sushruta's* vision was very right in that time to make every student comfort and genius. This valuable concept of experimental training has been incorporated in current medical education and recommended to acquire basic surgical skills outside the operating environment prior to procedures on live patients. Because large numbers of students are not acquired the basic surgical fundaments after graduation. Various dummies ,models etc. have been used as teaching and learning tools.

CONCLUSION

Yogyasutriya Adhyaya' is a preliminary brainstorming context; a new practitioners can develop his surgical skill in a safe and regulated environment.

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