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A Review Study of Significance of *Yogyasutriya Adhyaya*

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ABSTRACT

Background- *Acharya Sushruta* is called the father of surgery even now, but if we undergo the ancient text, necessity of human anatomy are very absolutely described by *Sushruta*, so he has named *Yogyasutriya adhyaya* to knowledge about surgical techniques on different items before practicing of same techniques on human.

Objective/Purpose- The object of this study is to analysis the principles mentioned for preliminary surgery and accomplish these thoughts in present teaching manner.

Methods- *Acharya Sushruta* was a powerful promoter of human dissection as noticeable from his texts. He mentioned a fundamental techniques for the dissection of the cadaver in his text. *Acharya Sushruta* named Eight kinds of surgical techniques are:-*Chedana*(surgical excision), *Bhedana*(incision & exploration), *Lekhana*(scraping), *Vyadhana*(puncturing), *Esana*(probing), *Aharana*(extraction), *Visravan*(drainage), *Sivan* (suturing) and application of *Kshara*(alkaline substance), *Badhana*(bandaging), *Agni* (cautery) etc.

Results- As per to *Acharya Sushruta*, if a practitioner has fully understood all surgical methods, but he cannot be knowledgeable without *Yogyasutriya*. To gain knowledge and to solve this problem as a surgical practitioner, he has described and indicated different types of *Yogyasutriya Vidhi*.

Conclusion- '*Yogyasutriya Adhyaya*' is a introductory brainstorming context hence a new surgical practitioners can grow his surgical capability in a safe and regulated atmosphere.

KEYWORDS

Yogyasutriya, Teaching Manner, Surgical Procedures, Yogyasutriya Vidhi



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INTRODUCTION

Anatomy is widely admired as being one of the foundation of medical field. Studying anatomy by the dissected cadaver is observed as the uniquely explain property of medical courses.

Explosion of knowledge in the area of medicine was suitable due to examination of human body by human cadaver dissection. *Acharya Sushruta* was a strong promoter of human dissection as conform from his *samhita*. Systematic procedure for the dissection of the human dead body (cadaver) is included by him in his books. *Sushruta* is called as the father of surgery in present era also, but *Sushruta* should also called as the father of human anatomy because he described the essentials of human anatomy very precisely. He has paid great attention concerning the structural organization of the human body. It shows that if a surgeon is not sensible about human anatomy, he should not start his carrier. He also stressed on the importance of observational and practical experience in surgery. For this he mentioned a separate chapter named 'Yogyasutriya' in *SushrutaSamhita*. *Acharya Sushruta* may be the first men to support the dissection to obtain the first hand knowledge of the human anatomy. He said that for expert and fruitful practice a

surgeons should be first an anatomist. For any practitioner practical education along with theoretical education is very important. *Acharya Sushruta* has remarked in his text to knowledge about surgical techniques on different items before practicing of same techniques on human. 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 scriptur¹.

अधिगतसर्वशास्त्रार्थमपि शिष्यं योग्याङ्कारयेत् ।
स्नेहादिषु छेधादिषु च कर्मपथमुदिशेत् ।

सुबहुश्रुतोऽप्यकृतयोग्यः कर्मस्वयोग्यो भवति ॥

Acharya Sushruta indicated eight kinds of surgical procedures are as follows:-

1. *Chedana* (surgical excision)
2. *Bhedana* (incision & exploration)
3. *Lekhana* (scraping)
4. *Vyadhana* (puncturing)
5. *Esana* (probing)
6. *Aharana* (extraction)
7. *Visravan* (drainage)
8. *Sivan* (suturing))

and application of *Agni* (cautery), *Kshara*(alkaline substance), *Badhana*(bandaging) etc¹.

NEED OF THIS STUDY

The aim of this study is to analysis the idea mentioned for experimental surgery and



implement these thoughts in present teaching methodology.

REVIEW OF LITERATURE

In *Sushruta Samhita, Sutrasthan*, 9th chapter, 'YogyasutriyaAdhyaya' has mentioned some references regarding how to make a student suitable for surgical work¹.

1. Chedana Shastrakarma (surgical excision)

पुष्पफलालाबूकालिन्दकत्रपुसैर्वारुककारुकप्रभृ
तिषु छेध्यविशेषान् दर्शयेत्,
उत्कर्तनपरिकर्तनानि चोपदिशेत्।

It is a method to excise a damaged part by using surgical knife (like *Mandalagra Shastra* (circular knife), *Vridhipatra* (Scalpel), *Karapatra* (bone saw). For this method, different objects like bottle-gourd, pumpkin-gourd, cucumber, water melon etc. are used by *Acharya Sushruta*. Different excision techniques like *utkartan*, *parikartan* must be practiced on these items. these types of fruits have not so hard outer surface and inner part is soft or bulky i.e. *Sushruta* selected these fruits. So that a new practitioners can know about to hold a surgical blade for doing excision in different directions and feel the pressure which is required to excise. he can perform this technique in the clinical conditions like -

- 1) अपाकेषु तु रोगेषु कठिनेषु स्थिरेषु च (fixed non supportive hard swelling)
- 2) स्नायुकोथादिषु (Necrotizing soft tissue lesion)¹.

2. Bhedan Karma (Incision)

दृतिबस्ति-प्रसेकप्रभृतिषु उदकपंकपर्णेषु
भेध्ययोग्याम्।

It is a method to be reveal the hidden contents and to expose the structures by using *Ardhadhara* (single edged knife), *Vridhipatra* (Scalpel) etc. For example proper incision and exploration is useful to treat a case of *Pakwa vidradhi* (absces). So to learn this procedure, incision should be practiced on a leathern pot or urinary bladder, leather bag filling full of water and mud. Whenever, a medical student tend to practice incision over this object, he will feel the exact pressure which is necessary to incise and examine a cavity.

By this method, scholar will be able to tackle the conditions like-

अन्तःपूयेष्वक्त्रेषु (deep / superficially seat-
ed abscesses), गतिमत्सुचरोगेषु (pocket of pus
in fistula / sinus tract)¹.

3. Lekhana Karma (Scraping)

सिरोमणि चर्मण्यातते लेख्यस्या।

Scraping is helpful to remove unwanted tissues like Hyper granulations, epithelized tissue, sequestrum etc. *Lekhana Karma* should be performed on part of hairy skin



for clinical experience. It is very small surgical method, but to escape injury to surrounding structures so many awareness is required. For examples, during surgery scrapping of an ulcer, there is chance of damage to its arteries, veins etc.

After application of *Lekhana Karma*, practitioner can do the surgical conditions like –

कठिनान् स्थूलवृत्तौष्ठान् दीर्यमाणान् पुनःपुनः
(Hard ulcerative lesion with thick rolled margins and tendency to repeatedly cracking)

कठिनोत्सन्नमांसांश्च (solid and granular surface)¹.

4. *Vyadhana Karma* (puncturing)

मृतपशुसिरासूतपलनालेषु च वेध्यस्या

This method is used to perforate the superficial veins, epithelial surface etc. A very fine hand is necessary for this method. So this method should be apply on the lotus stalks (*kamalnaal*) which are smooth, spongy in nature and using veins of animal. This method is applicable to remove the fluids from any cavity. example. Abdominal paracentesis¹.

5. *Esana Karma* (probing)

घुणोपहतकाष्ठवेणुनलनालिशुष्कालाबूमुखेष्वेष्य
स्या

This method should be apply on bamboos, holes in parts of wood damage by moths, and opening of dried gourd. These objects

having various holes and passages through which a probe can be passed without any blocking. By this method new scholars can be developed clinical skill to assess the cavities in humans and path way of sinuses¹.

6. *Aharana Karma* (extraction)

पनसबिम्बीबिल्वफलमज्जामृतपशुदंतेष्वाहार्यस्
या

Taking away of a foreign body by extraction technique is called *Aharana Karma*. This technique can be applied on fruits having seeds like pulp of *bilwa* or jack fruit, the dead animal's teeth. This technique is useful to remove the foreign body which is impacted, faecolith, stone etc. in surgical practice¹.

7. *Visravan*(drainage)

मधुच्छिष्टोपलिप्ते शाल्मलीफलके विस्राव्यस्या

This technique is used to eliminate the abnormal storage of liquids in body cavities and to reveal the vitiation of blood (vitiated *Rakta Dosa*). This procedure should be applied on a part of *Salmali* wood covered with beeswax. The thought behind the selection of beeswax for this procedure because it is a soft substance, to incise this give the same feeling of skin incision. There are lot of liquid substances in bark of *Salmali* wood. So when a medical scholar can perform *Visravan Karma* on this object,



he will be expert on this procedure to take a appropriate incision for free flow of fluids¹.

8. Sivan (suturing)

सुक्ष्मघनवस्त्रान्तयोमृदुचर्मन्तयोश्च सीव्यस्या

This technique is resembling of cut edges of wound, which are produced by operative or non-operative process. Anatomically approximation of margins has first importance in surgical practice. This method should be applied on the edges of smooth leather and on the edges of fine nearly tied cloths¹.

• Bandhana Karma (Bandaging technique)

पुस्तमयपुरुषाङ्गप्रत्यंगविशेषेषु बंधनयोग्याम् ।

Acharya Sushruta mentioned fourteen *Bandhanas* in *Sushruta Samhita* according to the nature of disease and nature of season. A proper *Bandhana* supports for advance healing of lacerated, crushed wound and to maintain the dislocation, fracture etc. So wounded human can able to walk, sit comfortably and sleep well. The medical practitioners who wants to learn *Bandhana*, he should apply this procedure on various parts of the dummies prepared of cloths¹.

• Karnasandhibandhana

मृदुचर्ममांसपेशीषूत्पलनालेषु च कर्णसंधिबंधयोग्याम् ।

Acharya Sushruta mentioned about *karnasandhi bandhana*, for its practice he

used soft skin, muscles and hollow stalk of lily plant for fabricating the ear, joining the severed ear and bandaging¹.

• Kshara & Agnikarma

मृदुषु मांसखण्डेष्वग्निक्षारयोग्याम् ।

Kshara & AgniKarma, are of the most important parasurgical tools mentioned in *Ayurveda*. One who want to become expert to use *Agnikarma* (thermal cautery) and *Kshara Karma* (alkaline therapy), should apply this procedure on similar models like a soft muscle part. Because the *Samyak Dagdha* signs can be seen better in muscle piece¹.

• Miscellaneous procedures

उदकपूर्णघटपार्श्वस्त्रोतस्यलाबू-मुखादिषु च नेत्रप्रणिधानबस्तिव्रणबस्तिपीडनयोग्यामिति ।

Same as to become expert in other miscellaneous techniques like *Vastikarma* (enema therapy), *Vranaprakshalana* (wound cleaning), new scholars should be apply this procedure on the side hole of an earthen pot filled full of water or on the mouth of gourd¹.

DISCUSSION

According to *Acharya Sushruta*, though a practitioner has fully understood all surgical parameters, but he cannot be competent without *Yogya*. He will be failed to conduct surgical methods in human. To solve this problem and to acquire



knowledge as a surgical scholar, he has explained and demonstrated various kinds of *YogyaVidhi*.

(एवमादिषु मेधावी योग्यार्हेषु यथाविधि, द्रव्येषुयोग्यां कुर्वाणो न प्रमुह्यति कर्मसु).

Sushruta has clearly explained that an intelligent practitioner can be selected other suitable objects to gain accurate, precise knowledge in particular method i.e. *ShastraKarma, Ksharakarma, Agnikarma*.

(तस्मात्कौशलमन्विच्छन्शस्त्रक्षाराग्निकर्मसु, यस्य यत्रेह साधर्म्यं तत्र योग्यां समाचरेत्)

Above line consider that *Sushruta* has thought very fine and planned this subject. There is no confusion that *Sushruta's* view was very right in that time to make every scholar comfort and genius. This precious concept of experimental training has been included in present medical education and recommended to gain basic surgical skills outside the operating environment prior to techniques on live patients. Because large numbers of scholars are not obtained the basic surgical principles after graduation². Various dummies ,models etc. have been practiced as teaching and learning tools³.

CONCLUSION

‘*Yogyasutriya Adhyaya*’ is a introductory brainstorming context hence a new surgical practitioners can grow his surgical

capability in a safe and regulated atmosphere.



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