ABSTRACT

Ancient Indian surgeon, Acharya Sushruta, described in Sushruta samhita over 120 surgical instruments, 300 surgical procedures, classifies human surgery in 8 categories, and describes various surgical procedures viz. abdominal, ophthalmic, dental, cosmetic and orthopaedic operations. Acharya Sushruta has divided the operative procedures into three parts: poorva-karma, pradhan karma and paschat karma. In surgical context, the peri-operative procedures can be classified as poorva-karma (pre-operative), pradhan karma (operative) and paschat karma (post-operative). Pre-operative procedures include: aptarpana, aalepa, pariskeka, abhyanga, sweda, vimlapana, upnaha, pachan etc. In other words, all the procedures or actions which are performed before doing the main procedure of the disease are included in poorva-karma. This study helps to explore the methods of identification, description of poorva karma according to the ancient time. The aim of preoperative care is to do assessment and fitness of the patient before the surgery and increase the success of the surgery. Immediately before surgery the patient is physically and mentally prepared and whenever possible their anxiety is addressed to make them comfortable.

KEYWORDS

Poorva-Karma, Pradhan Karma, Paschat Karma, Ayurveda
INTRODUCTION

All the actions which are performed prior to the main procedures are categorized under pre-operative procedures. Worshiping God, Brahmin and the physician, chanting mantras, collecting all the materials required for the main procedures, intake of tikshana madhya etc are same for almost all the surgical procedures. There are different poorva karmas for different diseases such as intake of lubricated food prior to agnikarma, having thick gruel before bloodletting, shashti-upkramas in vrana-shopha reference etc. All the pre-operative procedures are meant to prepare the patients physically as well as mentally for the main procedure.

AIM AND OBJECTIVES

- To elaborate, evaluate, and discuss the preoperative care.
- To rationalize the vision of Acharya Sushruta and the principles behind these regimens in the present time.

MATERIAL AND METHODS

The data have been collected from the ancient ayurvedic literatures, authentic research journals and various websites related to the topic.

Poorva karma

1. On the day and time having auspicious stellar constellation, agni, brahman and the physician should be worshipped first with offering of curd, sanctified rice, food, drink and gems; then offer oblations, perform sacrificial rites and chant hymns of benediction1.
2. Patient is advised to have suitable light food before the procedure and the position of the patient is east-facing2.
3. In diseases such as obstructed foetus, abdominal enlargement, vesical calculus, haemorrhoids, anal fistula, oral diseases, surgical procedures should be done on empty stomach3.
4. The patient is advised to have picchila anna (lubricated food) prior to the agnikarma as described by Acharya Sushruta4.
5. Patients who are not able to bear the pain during operation and are non-alcoholic, they are advised to have tikshana madhya5.
6. The patient who has been given oleation and sudation therapies, yavagu (thick gruel) which are opposite to the aggravated doshas should be given before bloodletting6.
7. Before kshar karma in case of haemorrhoids, the patient is given little amount of unctuous, warm, predominantly liquid food7.
8. In the premonitory stage of ashmari, therapies like oleation etc are desirable8.
9. Acharya Sushruta has mentioned eleven steps of pre-operative procedures in the context of shashthi-upkrama. He has emphasised the role of aptarpan, vimlapana, swedana, snehana, vaman, virechana etc non-surgical procedures before the operation. These procedures have utter importance not only in curing the amavastha of the disease but also prepare the patient for the surgical procedure.  

10. Acharya Sushruta has also mentioned some specific groups of medicine in dravya sangrahniya adhyaya, which may be helpful as anxiolytic one night prior to the operation. Eladigana has medicines such as tagar, kuth, jatamansi etc, which may be useful for preoperative medication. Vrihatyadi gana, utpaladi gana, parushakadi gana are cardio-protective groups.  

11. Collection of the material  
The surgeon desirous of performing the procedures should collect the materials required such as blunt instruments, sharp instruments, caustic alkali, fire for thermal cautery, leeches, metal rods, horn of animals, pieces of cloth, swab, lint, thread, leaf, cloth or leather band, honey, ghee, milk, oil, decoction of drugs, paste of drugs, fan, pots, drums for cold and hot water and also attendants who are affectionate, steadfast and strong.  

12. Consent from the higher authority:  

1. Acharya Sushruta, in ashmari reference says that without surgery death is inevitable and even after performing surgery there is doubt about the successful procedure, so a wise surgeon must take consent from the higher authority (or even patient’s relative’s).  

2. In Mood garbha chikitsa, Acharya Sushruta says that extraction of obstructed labour is very difficult procedure. Since in this procedure the surgeon has to perform the surgery and he has to protect the pregnant lady as well as the foetus. So the surgeon has to take permission from the authority.  

DISCUSSION  
Worshiping God and chanting mantra before the procedure helps someone to channelize their energy. The vibration originating from chanting mantra stimulates hypothalamus, which is responsible for many body functions including immunity and releasing few hormones, which are responsible for healthy heart, better concentration and keeping the body disease free. Chanting of mantra is a part of physiological process of speech and influenced by manas (Mind), budhi (intelligence), vayu (Air) and agni (Flame).
1. Patient is instructed to have suitable diet, since after having food patient will not lose his consciousness.

2. Among children who are at normal risk for normal risk of pulmonary aspiration or vomiting during anaesthesia, there is no evidence showing that denying them oral liquids before surgery improves outcomes but there is evidence showing that giving liquids prevent patient’s anxiety.  

3. Patients who are not able to bear the pain during operation and are non-alcoholic, they must have tikshana madhya. After having tikshana madhya, the patient will not feel pain during the procedure. As per the Acharya Sushruta, time of onset of sedation is given according to the prakriti of the patient. Kapha prakriti patient takes too much time to sedate while pitta prakriti person is very effusive toward alcohol intake. Vata prakriti patient does not show very late onset of sedation.

4. In circumstances in which a doctor advises patient to avoid drinking alcohol before and after the surgery, but in which the person seems likely to drink anyway, intense interventions which direct a patient to quit using alcohol have been proven to be helpful in reducing post surgical complications.

5. As a sign of worship, patients are advised to place their head in the east direction, since according to the Hindu mythology; God resides in the east direction.

6. In diseases such as obstructed foetus, abdominal enlargement, vesical calculus, haemorrhoids, anal fistula, oral diseases, surgical procedures should be done on empty stomach. The digestive tract is made as empty as possible before surgery to prevent leakage of its contents into the abdominal cavity. Most instructions indicate that nothing is to be taken by mouth after midnight, on the night before the procedure. This precaution minimizes the risk for complications such as vomiting during surgery.

7. Picchila anna (lubricated food) is advocated to the patient prior to the agnikarma by Acharya Sushruta. Because of its jivaniya, balya, sandhaniya and guru properties, it provides adequate strength to the patient to smoothly undergo the procedure. After careful examining the disease, the related vital spots, patient’s strength and season, the physician should continue the agnikarma.

8. All the materials and instruments required for the procedure were collected before the procedure, so that the procedure can be done smoothly and time can be saved.

9. If puncturing of vein is done on a cloudy day, improper, affected with cold and breeze, without proper sudation, and after
meals, then the blood becomes thick, does not flows out freely or flows out in very little quantity. In persons suffering from intoxication, fainting and excretion, who have suppressed the urges of faeces, flatus and urine, sleepy and frightful person, blood does not flow out\textsuperscript{20}.

10. \textit{Yavagu} (thick gruel) that is prepared from sesame is best suited, since it is a quick lubricant and excitant of blood, it should be consumed many times by the patient who is desirous of bloodletting.

11. In case of haemorrhoids, the patient is given little amount of unctuous, warm, predominantly liquid food before \textit{kshar karma} in order to mitigate pain caused by aggravation of \textit{vata}\textsuperscript{21}.

12. In the premonitory stage of \textit{ashmari}, therapies like oleation etc are desirable; by these the root of the disease gets mitigated\textsuperscript{22}.

13. An informed consent must be signed by all patients form acknowledging that they are aware of all the related risks and complications and that the surgeon has explained the procedure to them. This policy is for protection of the patient and prevention of the items from being lost or damaged.

**CONCLUSION**

The aim of preoperative care is to do assessment and fitness of the patient before the surgery and increase the success of the surgery. Following the steps of \textit{poorva karma}s the patient is physically and mentally prepared immediately before surgery. Through worshiping God and chanting \textit{mantra} the anxiety of the patient is addressed to make them comfortable. \textit{Poorva karmas} are designed to prepare the patient physically and psychologically, decrease the complications, improve the outcome of the surgery, and make the surgery as safe and effective as possible. It provides him a positive hope for the betterment of his condition, removes his psychological stress and obtains health quickly. By following the proper conduct of \textit{poorva karma}, digestive power, immunity, physical and mental strength of the patient is enhanced to a great extent.
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