ABSTRACT:

_Sandyanash_ is very important concept regarding surgery. Not a single surgical intervention or procedures can be imagined without anesthesia. _Sushruta samhita_ the classical ayurvedic literature written by acharya Sushruta described the various surgical instruments, their utility as well as different procedures of surgery along with plastic surgery. The description of _sandnyanash_ is not described in details in _sushruta samhita_ as well as other classical literatures. _Sushruta_ is also called as the 1st founder of surgery and father of plastic surgery. Various surgical procedures can not be done without the use of _sandnyanash_(anesthesia) in ancient time too. But the description of _Sandyanash_ in the ancient text is not in details. It is one of the reason why the modern surgical knowledge have been so developed and how the Ayurvedic surgeries lag behind in this era of diseases. Anesthesia (_sandnyanash_) has play a very crucial role in the surgery from thousands years. Acharya Charak, Sushruta, Vaghbata proposed that _madya_ has very important role in _sandnyanash_ as a pain relieving medicine which is thoroughly matched with the _anaesthetic_ effect of the alcohol. The present review paper is the effort to show the role of _madya_(alcohol) in _sandnyanash_ or anesthesia.

**Keywords:** _Sandyanash_, Alcohol, Surgery, Anesthesia, _Madya_.

INTRODUCTION

Definition of Sandnyanash:
Sandnyanash means,
Sandya – sensation/stimulation
Nash – loss,
So the definition is loss of sensation. But in context of surgery, Reversible loss of sensation, especially, pain is known as Sandnyanash (Anesthesia). In ancient times madya play the role of anesthetic agent in surgical procedures. The ancient scholar chosen madya due to its action as tamogunatmak substance\(^1\) which is responsible for buddhi vinash i.e. loss of governing or intelligence power of brain.
Modern science also believes that alcohol causes anaesthetic effect\(^2\). Hence, madya has very important role in sandnyanash as it’s action is more similar with the modern anaesthetic drugs. Acharya described that when sandnyavah nadi is obstructed by different doshas, which are viatiated due to tamasika aahar, madya, bhanga causes unconsciousness. When due to effect of madya unconsciousness occurred it is called as madyaj murcha and this is nothing but temporary loss of consciousness\(^3\). As sharangdhar also defines the term madkari in the guna of madya. The definition of madkari drugs as per acharya sharangdhar is the drug responsible for loss of consciousness and being tamapradhan just like madya sura etc. This leads to increase in tamo gun which is responsible for loss of sensation and general ability of a person to respond to various stimulus.

MADYA GUNA\(^4\)
- Laghu
- Ushna
- Tikshna
- Sukshma
- Amla
- Vyavayi
- Aashukari
- Ruksh
- Vikasi
Vishada

All the guna of madya is opposite to oja the essence of all dhatu. Madya due to its properties acts so much quickly, reach the end tissue and producing its anaesthetic effect. Madya can be produced in various form such as asav, arishta, sudha, etc., in the way by which it can be useful for Vednanasha Or Sandnyanash.

Mode Of Action Of Madya And Ethyl Alcohol

Madya due to the guna like laghu, vyavayi, ashukari, vikasi travels through the sira, dhamni and reaches to the hrudaya where it detoriates and dominate over the gun of ‘Oja’.

This leads to “Man Sankshobh”

Modern concept also says that – Alcohol produces CNS depression by stimulating inhibitory GABA (Gamma aminobutyric acid)

Stages Of Anaesthesia And Madavastha:-If we corelate Anaesthesia and Sandnyanash, it is found that, Stages of Anaesthesia and Madavashta according Madhav Nidan and Charak are thoroughly matched.

<table>
<thead>
<tr>
<th>STAGES OF ANAESTHESIA</th>
<th>STAGES OF MADAVASHTA</th>
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</thead>
<tbody>
<tr>
<td>1. Stage of Analgesia</td>
<td>1. Prathamavashta 7</td>
</tr>
<tr>
<td>- Pain is progressively abolished in this stage</td>
<td>- Na cha buddhasmruti haro - no loss of consciousness</td>
</tr>
<tr>
<td>- Patient remain conscious, can hear see and all functions work normally</td>
<td>- Sukh nidra prabodhash – shows the sedative property</td>
</tr>
<tr>
<td>2. Stage of Delirium</td>
<td>2. Dvitiyavashta 8</td>
</tr>
<tr>
<td>- Apparent excitement</td>
<td>- Sa unmat leela – behaves like unmadi or mental person.</td>
</tr>
<tr>
<td>- Patient may shout, stuggle, or hold his breath.</td>
<td>- Avyaktbuddhismrutivagvichesta – there is no co-ordination between memory and other physical activities.</td>
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<tr>
<td>- Breathing in jerky.</td>
<td></td>
</tr>
<tr>
<td>3. Stage of surgical anaesthesia</td>
<td>3. Tritiyavashta 9</td>
</tr>
<tr>
<td>- Loss of eye reflexes</td>
<td>- Nashtsandnya – loss of consciousness</td>
</tr>
<tr>
<td>- Low pulse and respiration</td>
<td>- Bruyachguhyani – uncoordinated speech.</td>
</tr>
<tr>
<td>- HR increases</td>
<td></td>
</tr>
<tr>
<td>- In this stage, surgery is performed</td>
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<tr>
<td>- Pupils widely dilated</td>
<td>- Nishkriya - no movements</td>
</tr>
<tr>
<td>- Muscles become flabby</td>
<td>- Jivnaati mrutesam- appears like dead body</td>
</tr>
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<td></td>
<td>- Bhagnadarviv – falls down due to loss of body tone.</td>
</tr>
</tbody>
</table>

Table 01: Correlation of stages of anaesthesia and Madavastha.
DISCUSSION

Use of madya by a scholar of surgery in thousands of years back acts as anaesthesia and help in proper conduction of surgical procedures with minimum suffering to the patient. Ancient text described that before the surgery, the surgeon must give the pischill, abhishyandi and tamas aahar to the patient who is unfit for madya (alcohol) consumption and for those who are fit for 'Madyapan' (alcohol consumption), should be given a concentrated madya in the dose that will cause mild unconscious but not any complications.\textsuperscript{11,12}

The dose of madya didn’t hamper the patient instead help the ancient scholar to conduct the procedure. Without any complications, Acharya described the role of madya in garbhapata. It is mentioned in the text that in case of abortion or garbhapata, after removing apripakva garbhashalya, for the purpose of garbhashay shodan, vednashaman, harshan, surgeon must give the sura, Sidhu, arishta, madira or aasava to the patient\textsuperscript{13,14}.

All these highlighted the role of madya as anti-inflammatory and the drug of choice for anesthesia in ancient times.

CONCLUSION

Due to its availability in various form which contains different percentage of alcohol madya is useful in different doses as per the patient. Due to its properties like tam guna, moh, vyavyi, vikasi, Madya has very crucial role in sandnyanash as well as vednashamana\textsuperscript{15,16}. There is a need of more research on various forms of Madya which can be easily used for Sandnyanash and Vednashaman, without deteriorating the condition of patient.

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REFERENCES:

1. Rudrabattta (Ayurved dipika), Sharangdhar samhita, purvakhandha [4/4]
5. Acharya Priyavat Sharma, Vaidya Vijay Kale, Charak Samhita Chaukhamba sanskrit prakashan, delhi 2016, Chikitsasthaan [24/29],
8. Madhav Nidan, Madhukosh tika, Madatyay/7, Chaukhamba prakashan, Varanasi 2002
9. Madhav Nidan, Madhukosh tika, Madatyay/8, Chaukhamba prakashan, Varanasi 2002
10. Madhav Nidan, Madhukosh tika, Madatyay/9, Chaukhamba prakashan, Varanasi 2002
12. Vd. Anantkumar shekokar, Shalyatantra, part 1, chpt 6, Shantanu prakashan, 2011