AGADA CONCEPT OF SUSRUTA SAMHITA : A REVIEW STUDY

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ABSTRACT

"AGADA" the term that literally means "anything against Gada –poison" can be synonymized as "ANTIDOTE" mentioned in Modern Toxicology . An Agada is a combination of a number of ingredients having different qualities that ultimately works synergistically and gains the capacity to make poison / poisons neutral as mentioned in the Ayurvedic classics . An antidote , as mentioned in Modern Toxicology , is one or combination of more than one drugs that , when applied in poisoning acts against the poison . In Modern Toxicology the concept of universal antidote , chemical antidote , physical antidote , physiological antidote etc. are explained . But Ayurvedic classics indicate the agada for a number of situations related with poisoning . The agadas mentioned in the Ayurvedic classics are formulated as multi ingrediant , herbal or herbo-mineral preparations having a wide range of activity specially related with poisoning . Here , the author is trying to highlight the concepts of Agada as mentioned by Susruta , in his famous "Susruta Samhita", basically a book on surgery, and draw the attention of the scientific community to explore more in future .

Key words: - Agada, antidote, poisoning, Susruta Samhita, scientific community
INTRODUCTION:-

Poisoning is an emergency situation experienced by the physicians that needs prompt and expertise action . Delayed / deficient handling of such patient may lead to serious consequences even fatality . Recognition of visha (poison) as "sastra ashanibat" (like sharp weapon and thunder) and recognizing the vishavaidya (toxicologist) as "pranacharyya" indicates the knowledge of the ancient Ayurvedic scholars on the seriousness and severity of the condition . Modern toxicology introduce "antidote" as antagonist of poison . Use of antidote is mentioned as an important step of the management principles of poisoning . It directly acts on the poison and destroy it's harmful effects . One among the 24 visha upakrama (management procedures of poisoning) mentioned as "AGADAPRAYOGA" has close similarity with "Application of antidote" in modern toxicology .

In the context of vishachikitsa (treatment of poisoning) the pioneers of Ayurvedic science mention a number of herbal / herbo —mineral multi component compositions with their preparation method and indications . In this article , to reduce the volume , the author is giving effort to lay a brief discussion on the agadas mentioned by Susruta , the father of surgery, with special importance on ingredients and indications . Hope this effort will be welcomed by the scientist forum and further steps will be planned to authenticate the utility and applicability of the classical agadas with special reference to Susruta Samhita .

AIMS AND OBJECTIVES: -

The present literary study is conducted with the following aims and objectives –

- (1)To study the concepts of Susruta on agada as available in Susruta Samhita
- (2)To develop a concept on the ingrediants , their number , actions , preparation method and indications of the agadas mentioned
- (3)To discuss the findings of the study scientifically basing upon Ayurvedic as well as modern available informations , where possible
 - (4)To create a summary and a conclusion of the study
 - (5)To arrange the findings of the study as per the protocol of scientific article
- (6)Finally , to send the prepared article to a popular well circulated peer reviewed journal for publication

MATERIALS AND METHODS: -

The material used for the study is Susruta Samhita available in the Central Library of I.A. Ayurvedic Medical College , University of Science and Technology , Techno City , Baridua , Ri-Bhoi , Meghalaya , India .

The study was conducted by following the below mentioned method –

- (1)Susruta Samhita was studied at the Central Library of I.A . Ayurvedic Medical College , University of Science and Technology Meghalaya , India and gathered the informations available in relation to agada
 - (2) All the informations available were collected as the result of the study
- (3)A discussion of the findings was made basing upon the available Ayurvedic and modern background as per availability
 - (4)A summary and conclusion of the study was incorporated and references were added
- (5)Ultimately , in the form of a scientific article , the work was submitted for publication in a wide circulated , peer reviewed , popular journal for publication with the expectation to appraise the informations to the scientific forum as matter of further scientific study .

OBSERVATION AND RESULT: -

The present study revealed the below listed findings –

- (1)AJEYA GHRITA It contains 24 ingrediants . Method of preparation Make kalka (paste) of the mentioned ingrediants and cook with Ghrita (ghee) . It's efficacy has no option (In no condition it fails) [1]
 - (2)DOOSHIVISHARI AGADA It contains 8 ingrediants . Preparation method and anupan (vehicle) All ingredients should be made fine powder and should give with honey . Indication Dooshivisha (slow acting /cumulative poisons) specially . It is also applicable in other poisoning conditions . Purbakarma samyak swedana and sodhana by vamana (induced vomiting) [2]
 - (3)For treatment of Sarpavisha Dugdha (milk), Ghrita (ghee) and Madhu (honey) are mentioned as anupana (vehicle) of agada[3]

- **(4)In the dwitiya vega** (2nd stage) of Darvikara and Mandali sarpavisha (both are hooded poisonous snake) Agada is advised to use with madhu (honey) and ghrita (ghee) [4]
- **(5)In Rajiman Sarpavisha** (one type of hoodless poisonous snake) madhu and ghritayukta agada (antidote should be given with honey and ghee) is advised to apply in the prathama vega (1st stage) and also in the dwitiya vega (2nd stage) after proper vamana (induced vomiting) [5]
- (6)RISHABHA AGADA It contains 27 ingredients . All should be made fine powder, mix with pitta (baraha , godha, shikhi , shallaki , marjara , parshata , nakula etc.– bile of pig, one type of snake , peacock , one type of see fish , cat , one type of deer , mangoose) and madhu (honey) and should keep in shringa (horn). This agada is said to have the strength to keep the insects away . As said if this agada is applied over the mugical instrumrnts and played then also visha is destroyed . Rishabha agada , if applied on flag (pataka) then also vishanasha occurs [6]
- (7)SANJEEVAN AGADA It contains 9 ingrediants . Preparation Make fine powder of the ingrediants , mix with ghee and honey and keep in goshringa (cow's horn) covering with same type of cover . After 15 days take it out and use as anjana (collyrium) , nasya (nasal application) and pana (orally) . This agada is said to have the capacity to revive the critical patients [7]
- **(8)AGADA FOR DARVIKARA AND RAJIMAN SARPA (poisonous snakes)** It contains 6 ingrediants. Preparation Make the ingredients fine powder, use with tanduliyaka (Prickly amaranth). This agada is said to have strong efficacy for Darvikara and Rajiman sarpa [8]
- **(9)**AGADA FOR MANDALI VISHA It contains 12 ingrediants . This agada should be taken with honey . It is said to be most effective in mandali sarpavisha [9]
- (10)VANGSHATWAGADI AGADA It contains 11 ingrediants . Preparation All ingrediants should be made fine powder , mix with gopitta (bile of cow) . Use as lepa (external application) , anjana (collyrium) and nasya (nasal application) . Indications lutavisha (spider poison), unduravisha (rat poison) , sarpavisha (snake poison) and some other conditions like mala-mutra-vayu-garbhaavarodha (obstructed stool, urine , flatus , fetus) , kacha , arma , kotha (some types of eye diseases including cataract, inflammation) etc. [10]
- (11)AGADA YOGA FOR KITAVISHA (insect poison)—It contains 6 parts of shirisha (Albizia lebbeck). Preparation kwatha (decoction) of the ingrediants should be prepared . Additive Trikatu (long pepper, black pepper and ginger), madhu (honey) and lavana (salt). Route of application —Oral. Special indication kitavisha [11]
- (12)AGADA FOR MUSHAKA VISHA (rat poison)— It contains more than 10 ingrediants. Preparation The ingrediants should be made paste with kapittha (Feronia limonia) rasa (juice), madhu (honey) and sharkara (sugar). Should be mixed and used. It is specially indicated for mushaka visha [12]
- (13)KSHARA AGADA Contains 74 ingrediants . Preparation method ksharavat (like the method of classical alkali preparation) . Use As lepa in dundubhi , pataka, torana etc. (different types of musical instruments , flag, gate etc.) . Use as pana (orally) , nasya (through nostrils) and abhyanga (as massage) . Special indication Sarpavisha (snake venom) . Also beneficial in sarkara (renal crystals), ashmari (calculi) , arsha (piles) , vatagulma (unstable tumours) , kasa (cough) , shoola (Pain) , udararoga (abdominal diseases) , ajirna (indigestion) , grahani (diseases involving the duodenum) etc.[13]

(14)KALYANAKA SARPI – It contains 26 ingrediants . Preparation – As per ghritasiddhi (method of classical ghee preparation). Indications – vishanashak (anti poisonous), grahanivarak (acts against the harmful planets), apasmarnashak (anti epileptic) . Also applicable in pandu (anaemia) , garavisha (artificial poison) , swasa (breathing difficulty) , mandagni (weak digestion), jwara (fever) , kasa (cough) , shosharoga (emaciating diseases) , alpasukra (seminal deficiency) , bandhyatwa (infertility) etc. [14]

(15)AMRITAGHRITA – It contains 5 ingrediants. Preparation – Make paste of the ingrediants with gomutra (cow's urine) and make ghritasiddhi (prepare ghee as per classical method) and use. Indications – best vishanashaka (anti poisonous) [15].

(16)MAHASUGANDHI NAMA AGADARAJA – It contains more than 70 ingrediants. Preparation – All ingredients should be made fine powder, mix with gopitta (cow's bile), madhu (honey) and ghee and keep in goshringa (cow's horn). Indications – In all visha (poisoning) it is effective [16].

(17)CAUTION FOR USE OF AGADA – Agada should always be used in vishajusta purusha (poisoning state). If used in nirvisha purusha (who is not poisoned) it may cause complications. Hence proper diagnosis of vishapita (poisoning) is to be kept in mind as a strict caution of agada prayoga (application of antidote) [17]

DISCUSSION -

The findings of the study can be justified with the following discussion — (1)Susruta, though a practitioner and scholar of Shalyatantra (surgery), has discussed a number of facts related with visha vigyana (toxicology). The discussion about definition, classification, signs — symptoms etc. is followed by treatment principles and medicines to be used.

(2)Agada are multi ingredient , herbal or herbo – mineral preparations that is said to have the effect on the poisons . The term "Agada" itself indicate "the substance that can act against "gada" . Gada is a synonym of "visha" (poison).

(3)The agada mentioned in Susruta contain a number of ingrediants . To say containing more ingredient is a character of the Ayurvedic medicines . There are very less number of Ayurvedic medicines that are prepared with less than 3 ingrediants . The agadas mentioned in Susruta Samhita are seen to contain even 70 ingrediants . The idea behind mixing of such a huge number of ingrediants needs some more study .

(4)In the study it is observed that , some of the agadas are advised to keep inside cow's horn after preparation . The background of this instruction needs some more study .

(5)In the context of the agadas the individual dose is not mentioned . Hence there is some confusion related with the dose . In this context it is assumed and suggested that, the dose should be fixed as per the form of the preparation , like churna (powder), ghrita (medicated ghee) etc.

(6)In relation to the indications of the agadas it can be understood that , the conditions mentioned are to be taken as the associated symptoms of poisoning . Since the author has instructed not to use the agadas for the non poisoned states , in the same manifestations that are not due to poisoning should not be used .

(7)A thorough review and research on the agada concept of the Ayurvedic classics can be considered as the need of the time .

SUMMARY -

The study can be summarized as follows –

- (1)Agada concept of the Ayurvedic classics can be considered as an unique contribution to the field of toxicology
- (2)The pioneers of Ayurveda Charaka , Susruta and Vagbhata discuss agada with top priority as an important tool of management of poisoning . Interestingly , Susruta , a scholar of Shalyatantra (surgery) , did extensive study and research on toxicology and contributed a lot .
- (3)There are many aspects in the agada concept of the Ayurvedic scholars that needs further study, research and evaluation which, if done properly, can explore many valuable facts and may prove to be invaluable contribution to not only the field of toxicology but also to the whole human society.
- (4)Analysis of the ingrediants of the agadas individually and combinly specially on their anti poisonous effect should be the target of the scholars and researchers , specially of the Ayurvedic field .

CONCLUSION -

As conclusion it can be said that , agada concept of Susruta Samhita has wide range and scope of study with strong potency to contribute invaluable facts not only towards the field of toxicology but also to the whole human society . Let us involve ourselves in the study and research in the direction .

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