



PHARMACOKINETICS OF VAMANA

Yadaiah P.

HOD, Kayachikitsa & Panchakarma

Postgraduate Dept. R.T.Ayurvedic College Akola-444005, M.S., India

Email: dr.yadaiah@gmail.com

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ABSTRACT

In Ayurveda, Acharya Charaka has explained very clearly regarding the drug absorption, distribution, metabolism and excretion while describing the vamana karma. Further he says that, the drug acts not only by virtue of qualities but also acts by virtue of dravya prabhavat, guna prabhavat and dravya guna prabhavat and also described the general principles of drug action such as where it acts, on what basis it acts etc. The drug, which possesses the characters of Vyavahi (diffuse) Vikasi (spreading nature -without digestion), Ushna (hot) and Teekshna (acute), Anupravana bhava and Urdwabhaga hara (agni and vayu predominant), when it is administered to the patient after preparation, it induces the vamana karma (expels the increased kapha dosha through mouth). Chakrapani was having the idea of embolism in those days itself. Asajjannamiti (Na kwachidapi Sanga Gacchati) the detached malas (toxins) from the cells are not obstructing anywhere even in smallest capillaries, indicates the detached malas should not form embolism. It explains metabolism and absorption of the drug. After administration of vamana drug within 1-2 hours we can observe the total procedure with signs & symptoms and results of samyak vamana. On the contrary, when physician is not taking proper care in selection of the drug & dose and preparation of the patient, leads to so many complications. In this paper, the emphasis has been made to explain the pharmacokinetics of vamana drug with conceptual and as well as clinical experience. In this way, one should study and understand each and every drug action before using it.

KEY WORDS: Vamana, Vyavahi, Vikasi, Anupravana bhava, Lomaharsha, Asajjannamiti, Sanga, samyak vamana.

INTRODUCTION

Pharmacokinetics includes the study of the mechanisms of absorption and distribution of an administered drug, the rate at which a drug action begins and the duration of the effect, the chemical changes of the substance in the body (e.g. by enzymes) and the effects and routes of excretion of the metabolites of the drug. Pharmacokinetics is divided into several areas including the extent and rate of absorption, distribution, metabolism and excretion.

However recent understanding about the drug-body interactions brought about the inclusion of new term *Liberation*. Now Pharmacokinetics can be better described as LADME. The process of release of drug from the formulation is known as Liberation. Absorption is said to be, the process of a substance entering the blood circulation. The dispersion or dissemination of substances throughout the fluids and tissues of the body is said to be distribution of the drug. Whereas the irreversible transformation of parent compounds into daughter Metabolites is known as metabolism of the drug and lastly, the elimination of the substances from the body is known as excretion of the drug from the body. In rare cases, some drugs irreversibly accumulate in body tissues. In other words Pharmacokinetics describes how the body affects a specific drug after administration.

Ayurvedic acharyas have explained very clearly and elaborately regarding the pharmacokinetics of the vamana drug. After administration a drug how it is absorbed in to the body cells where it goes, how it works, observation of signs & symptoms in the body, final effects of the drug and excretion of the drug.

While describing vamana karma Acharyas have explained whole procedure in to three stages.

- Poorva karma (Pre-operative stage) includes the examination of the patient, selection of the drug, preparation of the drug and preparation of the patient.
- Pradhana karma (Operative procedure) includes administration of vamanaopaga dravyas, administration of the vamana drug, observation of the signs and symptoms.

- Paschat karma (post-operative stage) includes diet and rest. Before administration of vamana drug the patient should be given internal snehapana 3 days or 5 days or 7 days as per the patient constitution, disease, season and kosta (Mrudu, Madhyama and Krura). After observing the samyak snigdha lakshanas the patient should be kept on kaphotklesha ahara, abhyanga and sarvaga swedana

(Morning and Evening) On vamana day patient should be kept on abhyanga, sarvaga swedana and hot water bath. After stomach full of Vamanopaga dravyas (Milk, Yasthimadhu quath or sugar cane juice) Vamana drug (anternakha musti-15-25grams of Madana pala pippali mixed with yasthimadhu quath) should be administered in the morning hours (8am-9am)

Vamana dravyas are having the characters of Vyavahi (diffuse) Vikasi (spreading nature -without digestion) by virtue of veerya (Potency) they get quickly absorbed and circulated into cells (srotas) through hridaya (Heart) and large & small capillaries of the body (sakaladehagata dhamanya anusaranam- sthula anu srotobhya). It pervades all over the body like synod poison. By virtue of its ushna (hot) and Teekshna (acute) the accumulated doshas get liquefies and breakup into small pieces at cellular level. (Agnayatvat vishyandayati vilinam kurvanti, Teekshnat vichinnam kurvanti).

Whenever we observe the perspiration (sweda pradurbhava) on patients forehead it indicates that, Doshas are started melting in the body due to ushana guna. For example, whenever a chemical action is under progress we can observe the fumes coming out from the test tube.

When patient gets Horrification (lomaharsha) one should infer that the malas are detached from cells and tissues because of its vikashi guna (sandhishathilyata). For example, in malaria millions of RBC cells bursts and liberates sporozoids, at that time patient feels shivering. Malas or endo-toxins which are present in cells are cleaned quickly and spontaneously hence patient feels some type of shivering in the body

This can be explained that, imbalance of sodium, potassium and other electrolytes in intra-cellular as well as in extra-cellular fluids and also cleaning of waste materials leads to horrification in the body. Detached malas (toxins) float in extra cellular fluids (Pariplavan- itastato gacchan).By virtue of sookshma guna and Anupravana (anutvat pravana bhavaccha-anutvam anumarga sancharitwam) the malas or doshas (Endo toxins) float because already body has got smayak snigdhta (internal oleation) and pass through smallest capillaries and ultimately reache to stomach due to osmotic pressure.

It is a question mark in every body's mind that, Why the detached malas or toxins are coming in to the stomach only? Why not to other parts of the body?

Acharyas have clearly described that; vamana drug should be administered only after akantha pana.

Before administration of vamana drug patient should be asked to take stomach full of Hypertonic solution (milk/yasthimadhu qwatha/sugar cane juice, lavana jala etc.). Chakrapani was having the idea of embolism in those days itself. Asajjannamiti(Na kwachidapi Sangha Gacchati) the detached malas (toxins) from the cells are not obstructing any where even in smallest capillaries, it indicates that detached malas should not form embolism.

When patient feels adhmana(fullness of stomach), one should infer that, doshas are shifted to stomach. Vamana dravyas are predominant of Agni and Vayu Mahabhutas. When patient feels nausea (Hrillas) it indicates the doshas are urdhwagami and he may get vamanaveg at any time.

After getting samyak vamana vegas, patient should be kept on paschatkarma i.e. peya, vilepi in diet whenever he gets good appetite up to 2-3 days with complete rest.

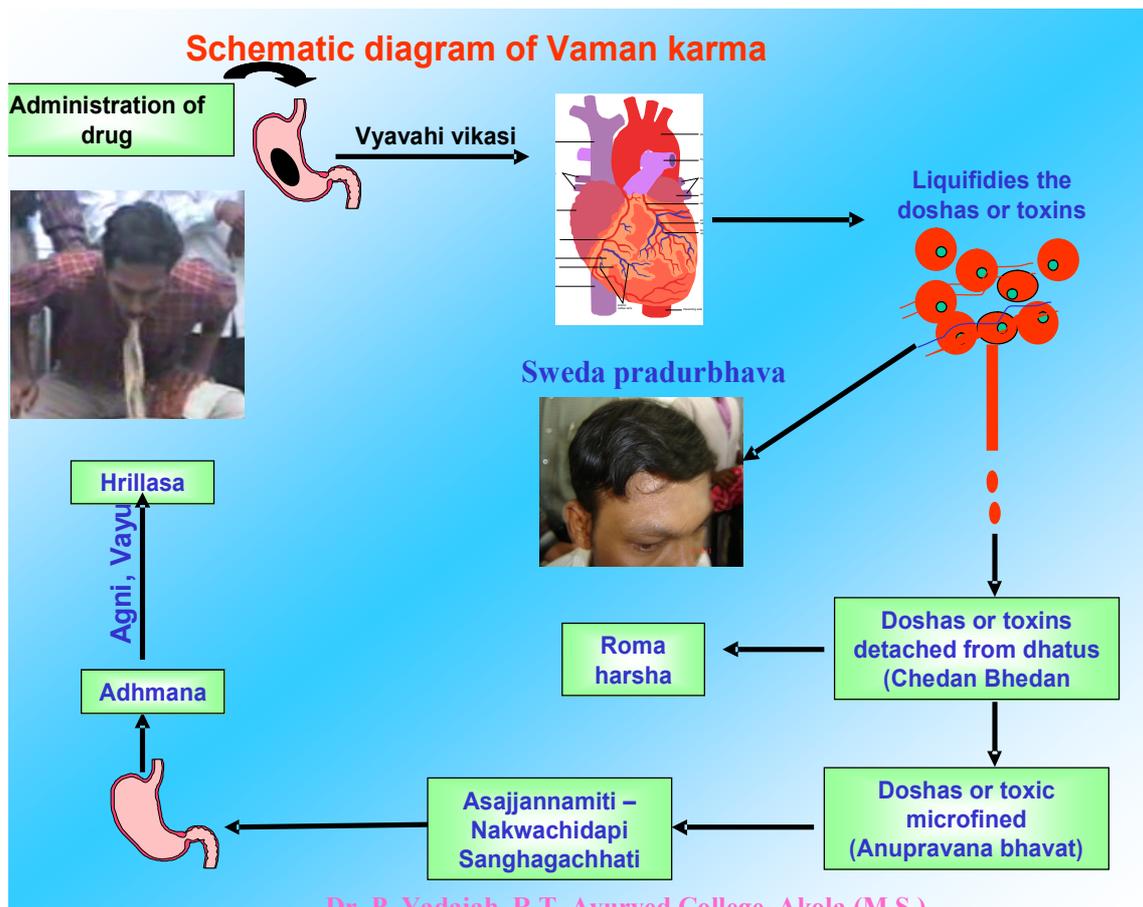
To complete the vamana procedure one should follow strict rules and regulations then only patient gets good vamana otherwise he may get so many complications.

CONCLUSION

From above description it is clear that Ayurvedic Acharyas were having the knowledge of Pharmacokinetics of each and every drug. One should think before administration of a drug because the drug may possess several qualities whether it acts on the basis of dravya, guna, veerya vipaka and prabhava.

REFERENCES

1. The charak Samhita by Agnivesha - Chakrapanidatta (1941) edited by Vaidya Yadavji Trikamji Acharya .Published by Nirnaya Sagar Press, Mumbai..
2. The charak Samhita by Agnivesha - Chakrapanidatta (1941) edited by Vaidya Yadavji Trikamji Acharya .Published by Nirnaya Sagar Press, Mumbai..kalpa sthana 1/4
3. The charak Samhita by Agnivesha - Chakrapanidatta (1941) edited by Vaidya Yadavji Trikamji Acharya .Published by Nirnaya Sagar Press, Mumbai.15/ 11
4. The charak Samhita by Agnivesha - Chakrapanidatta (1941) edited by Vaidya Yadavji Trikamji Acharya .Published by Nirnaya Sagar Press, Mumbai 15/11 chakrapni commentary
5. Astanga Hridayam of Vagbata , vol.II , English translation , Prof. K.R.Srikantha Murthy, Krishnadas Academy, Oriental publishers and distributors, Varanasi , 3rd edition 1998 Sutra sthan 1/2
6. The charak Samhita by Agnivesha - Chakrapanidatta (1941) edited by Vaidya Yadavji Trikamji Acharya .Published by Nirnaya Sagar Press , Mumbai. 26/13
7. Yadaiah.P. Clinical panchakarma,2nd ed , Akola, Jaya Publications, 2008 ; 4th chapter, 54-65.



Dr. P. Yadaiah, R.T. Ayurved College, Akola (M.S.)

Schematic diagram of Pharmacokinetics of vamana