Analysis of Virechana karma with Danti avaleha: A retrospective study

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ABSTRACT

Virechana (therapeutic purgation) is a common procedure that is widely practiced among the panchakarma treatments (pentad treatments). Various Virechaka dravyas (purgative drugs) have been described for Virechana. Even after critical analysis of Virechaka dravyas in the literature, still there is difficulty in the fixation of dose. Hence, the retrospective analysis of varied outcomes of Virechana with Danti (Baliospermum montanum) avaleha (linctus) is discussed in this paper. The study included twenty-seven case reports of patients who were administered Virechana with Danti avaleha. These case reports are of patients suffering from various ailments such as irregular menstrual cycles, polycystic ovarian syndrome, primary and secondary infertility, and psoriasis. Danti avaleha was administered at dose of 10 g and 5 g in the Krura (~strong) and Madhyama (~moderate/normal) Koshta (~GI tract) patients, respectively. Among seven Krura koshta patients, three of them resulted with Pravara (excellent) Shuddhi and other four resulted with Madhyama (medium) Shuddhi. In twenty Madhyama koshta patients, sixteen of them resulted with avara (minimum) Shuddhi and remaining four patients resulted with Madhyama shuddhi. Complications like Udara shoola (spasmodic pain of abdomen) and Vamana (emesis) were observed during Virechana. Majority of the patients suffered with Udara shoola were of Madhyama koshta. Vamana was seen in both Krura and Madhyama koshta patients. Irrespective of the type of Shuddhi and complications, all the patients resulted with Samyak Kaphhaantiki Virika lakshana (signs of perfect purgation with end expulsion of Kapha). The study concluded that the Krura koshta patients were tolerable for dose of 10 g and are expected to attain Pravara Shuddhi. Whereas Madhyama koshta patients were intolerable even to mild dose of 5 g, producing Avara shuddhi.

Key words: Danti, Koshta, Samyak kaphhaanta lakshana, Virechana

INTRODUCTION

Virechana is therapeutic purgation indicated for multiple conditions like Pittaja vyadhi (~disorders of pitta), Kushta (~skin diseases), Meha (~diabetes), Udana (~ascites), Pandu (~anemia), Hridroga (~cardiac diseases), Vyanga (~pigmentation diseases), Swasa (~asthmatic conditions), Kasa (~chronic cough), Kamala (~jaundice), Apasmara (~epilepsy), Unmade (~psychic disorders), Vatarakta (~gout), Yoni roga (~gynecological disorders). For example, KLE Ayurveda Hospital Database has recorded total 714 Virechana procedures in the year 2014. Virechana has also been studied extensively by various researches and proven as efficacious over Shamana (palliative) type of treatment in various conditions like Tamakashwasa[3] (~bronchial asthma), essential hypertension.[4] Studies have also reported that Virechana found to be effective in curing and preventing the recurrence of Vicharbikad[3] (~eczema). Virechana was also found to be beneficial in chronic conditions like obese patients with Prameha (~type-2diabetes).[4] Comparative studies have also been conducted with two different purgative medicines to assess its efficacy on psoriasis.[5]
Numerous drugs have been described for Virechana. Critical analysis of these drugs with reference to their pharmacological actions and disease-specific formulations has been narrated. Different classifications of Virechaka dravyas were also mentioned in the literature depending on their action\[^5\] (Virechaka and Virechakopaga), part\[^6\] and potency\[^7\] of the drug used. Dose of these drugs has been decided depending on the form administered (powder/linctus/decoction etc.) which further depends on the type of Kashta (~gastrointestinal tract).\[^8\] Even with all these critical inputs, there is difficulty in the fixation of dose within the patients of similar Kashta and varied output (Vegas) of Virechana is observed. Danti (Baliospermum montanum) is the least practiced purgative drug as a prime medicine. The data with evidence provide authentic information for clinical application and practice of Panchakarma. Hence, the analysis of varied outcomes of Virechana with Danti avaleha administered to the patients at Department of Panchakarma, KLE Ayurveda hospital, Belgaum, has been discussed in this paper.

**MATERIALS AND METHODS**

The present study is a retrospective study of case report formats of patients who have undergone Virechana with Danti Avaleha in Department of Panchakarma, KLE Ayurveda Hospital, Belgaum.

**Source of data**

Outpatient department and inpatient department case report formats available at Department of Panchakarma, KLE Ayurveda Hospital, Belgaum.

**Selection of case reports**

Completed case reports of patients, who had undergone Virechana by Danti avaleha, are selected for the study. Total number of patients undergone Virechana were 30, but only 27 case reports were complete with all details which were selected in this retrospective study.

Case reports presented that patients have undergone prior evaluation for fitness of Virechana in the Panchakarma department. Hence, the patients with pathological conditions of Annayaba Srotas like Shoola (~acid-peptic disorders, gastric ulcer, acute gastritis, cholelithiasis), Bhagandhara (~acute fissure and fistula) were ruled out before administration of Virechana procedure as Teekshana virechana has been advised.

**Exclusion of case reports**

Incomplete case report formats, where complete details of Virechana vegas and type of Shuddhi have not been mentioned and case reports of patients who discontinued Virechana procedure because of aversion to Snehatana, were excluded from the study.

**Duration of study**

All the case reports of the patients collected were in the span of 18 months (December 2012–April 2014).

**Procurement of Danti avaleha**

Danti avaleha administered for the patients during this period was procured from GMP certified KLE Ayurveda Pharmacy, Belgaum. The medicine used for all the patients was prepared in a single batch with shelf life of 24 months.

Statistical methods like simple average and percentage analysis were used in this study.

**Assessment of Shuddhi**

Shuddhi is defined as the effect resulted in the patient due to the expulsion of doshas (morbid factors) by administration of Panchakarma procedures. The following two parameters are primarily considered to assess the type of Shuddhi.

**Vegiki/grading of Shuddhi**

Shuddhi attained by Virechana is graded into three types depending on the number of purgative bouts after the omission of first two bouts passed initially. Passage of bouts ranging from 1 to 10, 11 to 20, and 21 to 30 is graded as avara (least), madhyama (medium), and Pravara (excellent) type of Shuddhi.

**Kapha Aantiki shuddhi**

Aantiki shuddhi means type of Dosha expelled during end of Virechana vegas (purgative bouts). Here, Kapha dosha is expected to be Aantiki shuddhi which is prime sign for deciding the Samyak yoga of Virechana (perfect purgation), apart from the number of bouts.

As per the case reports, all 27 patients were administered initially with Deepana (carminatives) and Pachana (digestives) with Chitrakadi vati till Nirama lakshanas were observed. Later, Snehatana (internal oleation) was administered with Moorbita gritha (processed ghee) till the attainment of Samyak snigdha lakshanas (proper signs of unctuousness). During the next 3 days of Vishrana kala, Sarvang aabhyanga (external oleation) with Moorchita tila taila (processed sesame oil) followed by Bashpa sweda (sudation) were administered. Finally, all the patients were administered Virechana with Danti avaleha in the dose of 5 g and 10 g for Madhyama and Krura koshtha, respectively. In the patients where Ayoga lakshanas (improper purgation) were observed, Danti avaleha was re-administered at the dose of 5 g after assessing their Jeerna anubadhi lakshanas (signs of digestion of previous dose of medicine).

**Observations**

Case reports presented that the patients were diagnosed with irregular menstrual cycles, polycystic ovarian syndrome (11), primary and secondary infertility (6), and psoriasis (10).
None of the case reports suggested past history of diabetes in the patients. Study revealed that patients who were fit for Teekshana (severe) Virechana were only administered Virechana with Danti avaleha. The age of the patients in the reports was found to be in the range of 20–40 years.

RESULTS OF THE STUDY

Among 27 patients, seven of them possess Krura koshta, and twenty possess Madhyama koshta. Krura koshta patients attained Snigdha (unctuousness) in 6 days with average dose of 215 ml, whereas Madhyama koshta group attained Snigdha in span of 4 days with average dose of 180 ml. Signs of unctuousness were observed in all patients [Table 1].

Among Krura koshta, three patients had Pravara shuddhi whereas four patients had Madhyama shuddhi with minimum of 15 and maximum of 24 bouts. Among Madhyama koshta patients, four had Madhyama shuddhi whereas 16 had Avara shuddhi with minimum of 6 and maximum of 14 bouts. Kaphantika lakshana was observed in all patients irrespective of Koshta [Table 2].

Udarashoola and Vamana were the complications observed in the patients on the day of Virechana. Udarashoola has been experienced by three Krura koshta and seventeen Madhyama koshta patients. Vamana was observed in four Krura koshta and sixteen Madhyama koshta patients.

Four Krura koshta patients who encountered vamana complication were of Kaphapitta prakriti and had Madhyama shuddhi. While other three did not have vamana and attained Pravara shuddhi.

In Madhyama koshta, sixteen patients had Vamana of which four attained Madhyama shuddhi and 12 attained Avara shuddhi. While other four attained Avara shuddhi only, without the complication of Vamana [Table 3].

Punah onshadi prayoga (re-administration of medicine) was observed in all Madhyama koshta patients [Table 3].

This study also observed that the patients had undergone Virechana in different months and presented with different types of Shuddhi which was not season-dependent. The above data depict that the three types of Shuddhi are present in all the seasons which does not vary much.

DISCUSSION

Danti is one among best six purgative drugs mentioned in our classics. Danti possesses the qualities like Teekshana (sharp), Usna (hot), Guiru (heavy), Aushukari (faster in action), Vikati (relieves obstruction). This is more beneficial in reducing pitta and Kapha doshas.\(^\text{[9]}\) Virechana with Danti is mainly indicated in Gulma (growth), Udara (ascites), Granthi (cysts), Aarrita vata (complex pathological conditions of Vata), Aartava dhushti (menstrual disorders), kushta (skin disorders)\(^\text{[10]}\) and in the conditions where Teekshana virechana\(^\text{[11]}\) (strong purgation) is advised. This drug can be administered as a purgative in all seasons.\(^\text{[12]}\) In spite of many indications, still this drug is used as only an ingredient in many formulations like Kaisbora guggulu, Chandraprabha vati etc., rather than as a purgative drug. This may be due to the above complications like Udata shoola and Vamana. Intolerance of the drug was experienced by the patients when administered for purgation and even there is difficulty in the fixation of dose also. Hence, this retrospective study was performed to understand the common dose of Danti avaleha administered and the presentation of bouts.

This study shows that the duration of Snehapana and quantity of Sneh consumed with respect to the Koshta are almost similar to earlier studies on Sanjayak nigdha lakshanas.\(^\text{[13]}\) The earlier studies also presented the duration

### Table 1: Signs of unctuousness in respect to koshta

| Type of sign of unctuousness                  | Krura koshta (n=7) | Madhyama koshta (n=20) |
|----------------------------------------------|--------------------|------------------------|
| Vatanulomana (normal movement of vata)       | 7                  | 20                     |
| Agni deeepti (increased digestive fire)      | 7                  | 20                     |
| Twak Snigdha and Gatra snigdha (unctuousness of skin and body) | 5                  | 18                     |
| Punisha snigdha (steatorrhea)                | 7                  | 20                     |
| Snehodvega (aversion to sneha)               | 6                  | 18                     |
| Klamai/Glani (un-exertional tiredness)       | 7                  | 20                     |
| Angalaghavata (lightness of body)            | 3                  | 4                      |

### Table 2: Shuddhi in respect to koshta

| Shuddhi          | Krura koshta (n=7) | Madhyama koshta (n=20) |
|------------------|--------------------|------------------------|
|                  | Number of bouts    | Number of patients     | Number of bouts    | Number of patients     |
| Pravara (>20)    | 22                 | 03                     | 00                 | 00                     |
| Madhyama (11-20) | 16                 | 04                     | 13                 | 04                     |
| Avara (1-10)     | 00                 | 00                     | 08                 | 16                     |

All the 27 patients had Kaphaanta.

### Table 3: Shuddhi versus Vamana complications

| Status/occurrence of complication | Outcome/bouts of Virechana (number of patients) |
|----------------------------------|-----------------------------------------------|
|                                  | Krura koshta (n=7) | Madhyama koshta (n=20) |
| Absence of Vamana upadrava       | 3 - Pravara shuddhi | 4 - Avara shuddhi     |
| Presence of Vamana upadrava      | 4 - Madhyama shuddhi | 4 - Madhyama shuddhi |

Vamana complication observed in general after first Vega of Virechana. In all Madhyama koshta patients, punah virechana aushada was administered at the dose of 5 g when ayeja was observed. Number of patients in parenthesis
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of Snehatana in the same range of 6–7 days for Krura koshta patients and 4–5 days in Madhyama koshta patients. In this study, the percentage of patients who attained Sanjayak snigdha lakshanas like Shakthagata (oleation of peripheral tissues/exterior tissues)/Twacha snigdha (unctuousness of skin), Koshtagata (oleation at Gastrointestinal tract [GIT])/Purisha snigdha (slimy stools with fat), and Snehadrdaya (aversion to Sneha) with respect to koshta were in parity with previous studies [Table 1].

The age of the patients in the case reports was in the range of 20–40 years where the dose of medicine remains standard. Hence, the dose of Danti avaleha administered in these patients was not age-dependent but based on type of Koshta.

Pravara shuddhi was observed only in Krura koshta patients, whereas Madhyama shuddhi was noticed in both Krura and Madhyama koshta patients. Avara shuddhi was seen only in patients of Madhyama koshta. The purgative bouts observed in Krura koshta were in the range of 15–24, whereas the bouts in the Madhyama koshta ranged between 6 and 14. Sanjayak virikta lakshanas of Kapthaanta was attained irrespective of the number of bouts, which might be due to Teekshana (penetrant) and bbhada (purgative) gunas of Danti.

Pravara type of shuddhi was observed in those Krura koshta patients where complete medicine was retained due to the absence of Vamana. That might have caused more number of Vegas resulting in Pravara shuddhi. The other set of Krura koshta patients who attained Madhyama shuddhi may be ranging from Madhyama to Krurata. Hence, they might have vomited due to intolerance of drug and thus produced less number of Vegas resulting in Madhyama type of Shuddhi.

Further analysis has shown that Udara shoola (spasmodic abdomen) was experienced by twenty patients among whom three patients belong to Krura koshta and remaining seventeen belongs to Madhyama koshta. Onset of Udara shoola was observed within 10 min of administration of drug in all twenty patients, and fifteen of them were relieved from pain soon after Vamana. In general, Udara shoola is expected with abnormal dosage, excessive higher dose, improper purification (Shodhana) of the medicine and in conditions like administration of Teekshana draya in Mrudula koshta (high potent medicine in mild Koshta). The conditions affecting GIT like acid-peptic disorders, ulcer, acute fissure and fistula etc., were also evaluated. Even in the absence of all the above factors, the occurrence of abdomen pain in patients may be attributed to Teekshana guna of Danti.

Even in the absence of causative factors of Vamana like administration of purgation during Kaptha kala (kapha predominance time), Kaptha associated conditions and low intensity of agni, the condition “Vamana” was still be observed. This again might be due to Teekshana guna of Dravya leading to spasmodic pain in abdominal muscles with contractions and expulsion of Dravya through oral route. Another important point to be noted is that the Vamana happened in all the patients after their first purgative bout, clearly indicating that emesis was not due to patient’s aversion for medicine.

Relation between Shuddhi and the complication Vamana in Krura Koshta: Here, the Koshta is predominant of Vata and Kapha doshha. The patients (3) who did not vomit the drug can be understood as possessing the inherent quality of Krura tama (excess krura/strong) in their Koshta where vata is predominant. Hence, they were able to tolerate Teekshana draya and had maximum average number of Vegas (22.4). The other four patients might be of Krura tara (moderate strong) with Kapha predominant Koshta and hence vomiting was observed. But still they were able to exert average bouts of sixteen without requiring re-administration of the second dose.

Re-administration of medicine in Madhyama koshta

Madhyama and Avara shuddhi were observed in all Madhyama koshta patients. Among Madhyama koshta, 80% of them presented with the complication of Vamana and remaining 20% did not have Vamana. Avara vegas were observed in all patients irrespective of Vamana complication. The second dose of 5 g medicine was administered only after ascertaining the digestion of previous dose. Even after re-administration of medicine, there was no much improvement in the number of bouts.

The dependence of season on the number of bouts or type of Vegiki shuddhi (end point) is evaluated. It is clearly evident from the data that the three types of Shuddhi were seen in all the seasons. This indicates that Vegiki shuddhi is not related to season and dependent only on the effect of drug.

Further the age of patients was not related to the type of Shuddhi attained. From the observation, it is found that all patients who had undergone Virechana were in the age range of 20–40 years where the dose of drug remains same as per classics. Hence, the type of Shuddhi is more dependent on the quantum of Doshas (morbid factors), rather than age of the patient and their dose.

Danti (Baliospermum montanum) is attributed for possessing the property of hydragogue cathartic. This means it produces a discharge of watery fluid belonging to the class of cathartics that retains fluids in the intestines and aid in the removal of only edematous fluids which can be correlated to bhedana/rechana type of Virechana. Hence, this might have induced the purgation even at mild doses. The difference in the number of bouts may be due to the individual response to the phytochemicals such as

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baliopermin and montanin,\textsuperscript{17,18} present in Danti moola, which might be responsible for purgation.

\textit{Danti} is a least practiced drug for purgation because of the complications like intolerance of the drug, spasmodic abdomen and emesis of the medicine. In spite of these complications, still \textit{Kaphaantaki} was observed in all the patients of either \textit{koshta} which is the \textit{Samyak virikta lakshana}.

CONCLUSION

This study presents the evidence that administration of \textit{Danti dravya} at dose of 10 g is well-tolerated by patients possessing \textit{Krura koshta}. \textit{Pravara shuddhi} may be attained at dose of 10 g in \textit{Krura koshta}. \textit{Madhyama koshta} patients were intolerable with dose of 5 g and even after repetition of dose, they resulted only with \textit{Madhyama} and \textit{Avara shuddhi}.

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Conflicts of interest

There are no conflicts of interest.

GLOSSARY

- \textit{Abhyanga} = External Oleation by application of oil in a specific direction (along with direction of hair root).
- \textit{Avara Shuddhi} = Least type of \textit{Shuddhi}.
- \textit{Ayoga Lakshanas} = Improper/Inadequate purgation.
- \textit{Bashpa Sweda} = Method of Sudation.
- \textit{Bhedana} = Type of \textit{virechana} which has lytic (breaks the morbid factors) action.
- \textit{Deepana} = Carminatives.
- \textit{Koshta} = Gastro intestinal tract (GIT).
- \textit{Krura koshta} = Strong type of nature of GIT which has ability to digest anything.
- \textit{Madhyama Koshta} = Moderate type of GIT.
- \textit{Madhyama Shuddhi} = Medium \textit{Shuddhi}.
- \textit{Pachana} = Digestives.
- \textit{Pravara Shuddhi} = Excellent \textit{Shuddhi}.
- \textit{Rechana} = Synonym of \textit{Virechana}.
- \textit{Samyak Virikta Lakshanas} = Signs of perfect purgation.
- \textit{Shuddhi} = Purification/detoxification.
- \textit{Snehapana} = Internal Oleation by oral route of administration of \textit{sneha}.
- \textit{Teekshana} = Severe/penetrant nature of drug.
- \textit{Udarashoola} = Spasmotic pain in the abdomen.
- \textit{Upadrava} = Complications.
- \textit{Vamana} = Emesis/vomiting.
- \textit{Vegas} = Purgative bouts.
- \textit{Virechaka Dravya} = Drug that imparts purgative action.
- \textit{Virechaka Dravyas} = Drugs used for Therapeutic purgation.
- \textit{Virechakopaga} = Drugs that only assist purgation.
- \textit{Virechana} = Therapeutic Purgation.

REFERENCES

1. Ghosh KA, Tripathi PC. Clinical effect of Virechana and Shamana Chikitsa in Tamaka Shwasa (Bronchial Asthma). Ayu 2012;33:238-42.
2. Shukla G, Bhatted SK, Dave AR, Shukla VD. Efficacy of Virechana and Basti Karma with Shamana therapy in the management of essential hypertension: A comparative study. Ayu 2013;34:70-6.
3. Kaur M, Chandola H. Role of Virechana Karma in cure and prevention of recurrence of Vicharchika (Eczema). Ayu 2012;33:505-10.
4. Pandey RK, Bhatt NN, Singhala TM, Shukla VD. A comparative study of Vamana and Virechana Karma in the management of Shula Pramehi w.s.r. to Type-2 diabetes. Ayu 2011;32:536-9.
5. Shah P. A comparative study of two virechana yogas in the management of Eka-Kushta (Psoriasis). The Internet Journal of Alternative Medicine 2008;7:2.
6. Sharma RK, Dash B, editors. Apamarga tanduleeya adhyaya. Charaka Samhita of Agnivesha, Charaka, Sutrasthana. 13th ed., Vol. 1, Ch. 2, Ver. 9, 10. Varanasi: Chaukambha Sanskrit Series Office; 1990. p. 65.
7. Sharma RK, Dash B, editors. Vatakalakaleeya adhyaya. Charaka Samhita of Agnivesha, Charaka, Kalpasthana. 13th ed., Vol. 6, Ch. 12, Ver. 51-58. Varanasi: Chaukambha Sanskrit Series Office; 1990. p. 118-20.
8. Tripathi H. Vangasena Samhita, Chikitsasthana. Ch. 89, Ver. 5-6. Varanasi: Chaukambha Sanskrit Series Office; 2009, p. 924.
9. Sharma RK, Dash B, editors. Danti Dravanti kalpa adhyaya. Charaka Samhita of Agnivesha, Charaka, Kalpasthana. 13th ed., Vol. 1, Ch. 12, Ver. 6. Varanasi: Chaukambha Sanskrit Series Office; 1990.
10. Sharma RK, Dash B, editors. Danti Dravanti kalpa adhyaya. Charaka Samhita of Agnivesha, Charaka, Kalpasthana. 13th ed., Vol. 1, Ch. 12, Ver. 10-14. Varanasi: Chaukambha Sanskrit Series Office; 1990.
11. Vidyasagar PS, editor. Sharangadara-Samhita, Uttarakanhand, VirechanaVidhi Adhyaya. Reprint: 2000. Ch. 4, Ver. 14. Varanasi: Krishnadas Academy; 2000. p. 398.
12. Vidyasagar PS, editor. Sharangadara-Samhita, Uttarakanhand, VirechanaVidhi Adhyaya. Reprint: 2000. Ch. 4, Ver. 26. Varanasi: Krishnadas Academy; 2000. p. 398.
13. Ramteke R, Vinodkumar G, Meharjan T. An open clinical trial to analyze Samyak Snigdha Lakshana of Shodhananga with Mahatikthakam Ghritam in Psoriasis. Ayu 2011;32:519-25.
14. Sharma RK, Dash B, editors. Tasyasheeteeeya adhyaya. Charaka Samhita of Agnivesha, Charaka, Siddhisthana. 13th ed., Ch. 6, Ver. 28-30. Varanasi: Chaukambha Sanskrit Series Office; 1990, p. 270.
15. Srikanth KR. Vamanavirechana saadhyopadrava chikitisitha adhyaya. Susruta Samhita of Susrutha, Sutrasthana. 13th ed., Vol. 1, Ch. 12, Ver. 51-58. Varanasi: Chaukambha Sanskrit Series Office; 1990. p. 270.
16. Srikanth KR. Vamanavirechana saadhyopadrava chikitisitha adhyaya. Susruta Samhita of Susrutha, Sutrasthana. 13th ed., Ch. 6, Ver. 28-30. Varanasi: Chaukambha Sanskrit Series Office; 1990. p. 270.
17. Varies PS. In: Medicinal Plants – A Compendium of 500 Species. Madras: Orient Longman Ltd.; 1994. p. 240-3.
18. Chatterjee A, Prakashi SC. In: Treatise on Indian Medicinal Plants. New Delhi: CSIR; 1994. p. 24-9.