

PHARMACEUTICAL AND ANALYTICAL STUDY OF TRIPHALA GUGGULU W.S.R. TO TRADITIONAL MEDICINE PREPARATION METHOD

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ABSTRACT

Traditionally prepared medicine has best results. To check the quality we prepared *Triphala Guggulu (T.G.)* by traditional preparation method and compared it with three market samples of *Triphala Guggulu* i.e. B, I and V. We found all samples have different colors. Traditionally prepared *T.G.* has slightly astringent taste. Traditionally prepared *T.G.* is more acidic (3.65) than samples B (4.31), I (5.56), V (5.00). Traditionally prepared *T.G.* has more Alcohol extractive value (37.98) than B (15.74), I (11.26) and V (16.38). Water soluble extractive value of I (59.62) is more than traditionally prepared *T.G.* (51.24), B (39.50) and V (41.47). It clears that, while preparing *Triphala Guggulu*, we have used good quality raw material including *Guggulu*, followed correct procedures, formulated good end product. This shows traditionally prepared *Triphala Guggulu* is more potent and good quality end product compared to samples B, I & V.

Keywords: traditional medicine preparation; *triphalo guggulu*; *Guggulu kalpana*; quality medicine

INTRODUCTION

Without weapon we can't fight the battle. At the time of war there is need of large number of warriors, horses, elephants, tactics and the most important Weapons. The same condition happens in our clinic. Even though we think by different ways and in multiple angles, we select medicines, follow right *samprapti* (Pathology), the only medicine works on patient's body. That's why medicine is a weapon of *vaidya*. But we should think that, is this medicine of good quality? Is this weapon has sharp edges? Our medicine works by its qualities (*Guna*), tastes (*Rasa*), *Virya* etc.

In college days we learnt separate subject '*Rasashastra And Bhaishajya Kalpana*'. This subject gives us knowledge about how to prepare medicines. By following those steps we can prepare medicines for our own OPD. But now a days medicine preparation for OPD are disappearing because of availability of medicines by many manufacturers, lack of proper space and setup to prepare medicine in home or clinic, etc. Then what is the use of the knowledge which we have learnt in college or from different Ayurveda traditions. One says self-prepared medicines has not good analytical study, hygiene is not followed properly etc. But if it is cor-

rect, why we don't take into consideration the work done by our ancestors? They had given best results in all diseases by giving them self-prepared medicines. Even today also there followers also following same tradition. Now it's our duty to save these traditions.

Every tradition has its own uniqueness and importance. Everyone knows uniqueness and importance of *Panchabhautik Chikitsa's* medicine preparation methods. It has most useful and appreciated features like different traditional techniques of *churna* preparation, *guggulu* preparation, low dose of medicines, etc. I am preparing medicines for my patients for last eight years. All followers of *Panchabhautik chikitsa* are using medicines in low dose and getting great results. *Triphala Guggulu* is used widely by all Ayurveda practitioners. That's why I decided to compare analytical study of self-prepared *Triphala Guggulu* with three market samples. These three samples were prepared by manufacturers by regular *guggulu* preparation method in large scale.

MATERIALS AND METHODS:

a) Preparation of *Triphala Guggulu* :

Required raw drugs for *Triphala Guggulu (T.G.)* was identified and purchased from local market. Then impurities were removed and sundried for five days. After that, seeds from *Haritaki*, *Bibhitaki* and *Aamalaki* were removed manually and *yavakut churna* was prepared with the help of *khalva yantra*. Required *yavakut churna* for *Guggulu* purification was weighted and kept aside. Then again this usable

part i.e. pericarp was sun dried for two days. After two days required fine *churna* of *Triphala* and *Pippali* was prepared with the help of traditional stone grinder manually. In the evening, for *guggulu* purification *yavakut churna* of *triphala* was taken in a pot and water was added up to four *angul* above the surface of *yavakut churna* and kept it overnight. It helps to soak water by *dravya* and it separates each particle of *Pruthvi mahabhuta (Mahabhut Vilinikaran Siddhant)*. Next morning, whole water was filtered from mixture in another pot and required amount of water for decoction (i.e. eight times of the weight of *guggulu*) was added in it. Then half of that water was added in soaked *triphala yavakut churna*. Water level was marked on the pot by pen. Then remaining water was added. Pot was placed on the burner and allowed it for heating. After completion of decoction, it was filtered in another pot and weighted impure *guggulu* was mixed in it. This mixture was kept till next day to allow *guggulu* to dissolve properly in the decoction. On the next day, mixture was heated and filtered in another pot and again allowed it to heat till the mixture become semisolid. After that homogeneous mixture of *Triphala churna* and *Pippali churna* was added slowly in it. Whole mixture was mixed properly till it become homogeneous. After that small '*chakrika*' of mixture was prepared and then allowed it to sun dry for one month. After one month, required quantity for analytical study was taken and its *churna* was prepared with help of traditional stone grinder and remaining *chakrika* was stored in airtight container.

Table 1: Ingredients of *Triphala Guggulu*.

| SN | Ingredient | Quantity Of Fine Churna | Quantity Of Yavakut Churna For Guggulu Purification |
|----|---|-------------------------|---|
| 1 | <i>Haritaki</i> (Terminalia chebula) | 500 grams | 833 grams |
| 2 | <i>Bibhitaki</i> (Terminalia bellerica) | 500 grams | 833 grams |
| 3 | <i>Amalaki</i> (Emblica officinale) | 500 grams | 833 grams |
| 4 | <i>Pippali</i> (Piper longum) | 500 grams | - |
| 5 | <i>Guggulu</i> (Commiphora | 2.5 kg | - |

Readymade three market samples of *triphala guggulu* i.e. *Triphala Guggulu* (B) [T.G.(B)], *Triphala Guggulu* (I) [T.G.(I)] and *Triphala Guggulu*(V) [T.G.(V)] were purchased from market and all three samples were given to the lab for analytical study.

b) Analytical Study : To check the quality of these four samples of *Triphala Guggulu* [T.G.; T.G.(B), T.G.(I) and T.G.(V)], the organoleptic parameters like color, odor, taste, pH and Physicochemical parameters Alcohol and Water soluble extractive values were done.

OBSERVATION AND RESULTS:

Table 2: Yield of Traditionally Prepared *Triphala Guggulu*.

| SN | Medicine | Total Yield |
|----|-------------------------|-------------|
| 1 | <i>Triphala Guggulu</i> | 4.5 kg |

Table 3: Organoleptic parameters of *Triphala Guggulu*

| SN | Parameters | T.G. | T.G (B) | T.G. (I) | T.G. (V) |
|----|------------|-----------------------------|-----------------|-----------------|-----------------|
| 1 | Colour | Coffee | Black | Dark Brown | Gray |
| 2 | Odour | Pungent | Pungent | Pungent | Pungent |
| 3 | Taste | Slightly Astringent, Bitter | Slightly Bitter | Slightly Bitter | Slightly Bitter |
| 4 | pH | 3.65 | 4.31 | 5.56 | 5.00 |

Table 4: Physicochemical Parameters of *Triphala Guggulu*

| SN | Parameters | T.G. | T.G (B) | T.G. (I) | T.G. (V) |
|----|----------------------------------|-------|---------|----------|----------|
| 1 | Alcohol Soluble Extractive Value | 37.98 | 15.74 | 11.26 | 16.38 |
| 2 | Water Soluble Extractive Value | 51.24 | 39.50 | 59.62 | 41.47 |

DISCUSSION

We compared traditionally prepared *Triphala Guggulu* (T.G.) with three market samples B, I, and V. We found traditionally prepared T.G. has different and strong taste than others and also it has different color i.e. coffee color. All samples are acidic in nature but traditionally prepared T.G. is more acidic (3.65) than three samples B (4.31), I (5.56), V (5.00). That's why concentration of traditionally prepared T.G. is more than other three samples.

Low extractive value indicates addition of exhausted material, adulteration or incorrect processing during drying or storage or formulating. Most kinds of alkaloids are insoluble or poorly soluble in water and soluble in organic solvents like ethanol. Alkaloids are the class of nitrogenous organic compounds of plant origin which have pronounced physiological

actions on humans. Traditionally prepared T.G. has more Alcohol extractive value 37.98 than B (15.74), I (11.26) and V (16.38). This shows that traditionally prepared T.G. has more active ingredients like alkaloids than other samples.

Water soluble extractive (w.s.e.) value of I (59.62) is more than traditionally prepared T.G. (51.24), B (39.50) and V (41.47). Alcohol soluble extractive value is lesser in samples B (15.74), I (11.26) and V (16.38). As sample I has more w.s.e. value, we can say that, in sample I single medicine powders could have been used. And in sample B, even though its w.s.e. value (39.50) is less than sample I (59.62), V (41.47) and traditionally prepared (51.24), it shows that low quality raw material could have been used.

CONCLUSION

This study reveals that good quality control parameters were followed during preparation of *Triphala Guggulu*. Organoleptic, physicochemical parameters were carried out for quality assurance of the formulation. On the basis of this study it is cleared that, while preparing *Triphala guggulu* we have used good quality raw material including *Guggulu*, followed correct procedures from start to end and formulated good end product which results into more potent and good quality end product compared to other three samples. And by considering the history of our tradition we can say that, traditional methods of medicine preparation don't allow every particle of medicine to lose its own qualities by any manner. So that we can assume that, if these market samples give us results in 250 mg dose, traditionally prepared medicines would give results in low dose.

REFERENCES

1. Sharangdhar samhita, Brahmanand Tripathi, Chaukhamba Surabharati Prakashan 2007 – Madhyam Khand 7/82 - 83, Page 206
2. Abhinav Bhaishajya Kalpana Vidnyan, Acharya Siddhanandan Mishra, Chaukhamba Surabharati Prakashan 2003
3. Vanaspatinche Swabhav Arthat Gunadharmashastra – Vaidyaraj Atmaram Vaman Datar – Third edition 2007 - Vaidyaraj Datar Panchabhautik Chikitsa Va Sashodhan Kendra, Sangli.
4. Panchabhautik Chikitsetil Veas Pramukh Aushadhi Kalp, Dr. Sudhakar Haladavanekar & Dr. Sou. Gayatri Bhosekar, Second edition, Vaidyaraj Datar Panchabhautik Chikitsa Va Sashodhan Kendra, Sangli. - Page 26

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