A CRITICAL STUDY ON TAKRARISHTA
Krishnamurthy M.S.,1,2, Dwivedi Laxmikanth2, Rao Ravi S3, Prashanth B K1, Kulkarni N H4
1PG Dept of Bhaishajya Kalpana, AAMC, Moodbidri, India
2PG Dept of Rasasstra & Bhaishajya Kalpana, NIA, Jaipur, India
3PG Dept of Dravyaguna Vijnana, AAMC, Moodbidri, India
4PG Dept of Shalya Tantra, JGCHSA College, Ghataprabha, India

ABSTRACT
Takrarishta,a fermented medicament prepared by buttermilk is a classical Ayurvedic formulation mentioned in Charaka Samhita. There are abundant references of Takra(buttermilk) in various Ayurvedic classics. Their method of preparation, types, qualities and benefits were also discussed in various chapters of the Samhitas and Sangraha granthas. Whereas, only two references are found with regards to Takrarishta. Both the references are found in Charaka Samhita, Chikitsa Sthana of 14th (Arsha Chikitsa) and 15th (Grahani Chikitsa) chapters respectively. Even though in both the references Takra is used as a common medium, the difference lies in the herbal ingredients which are uncommon in these formulations. But, both are having common indications of Agnimandya, Shotha and Arshas.

In latter texts also the same reference of Takrarishta is found without much variation. But keen literature review discloses the rationality behind such a naming and its utility in respective contexts. Effort is carried here to clear the ancient Ayurvedic wisdom with available literatures and references.

KEY WORDS: Takra, Takrarishta, Yogananakarana, Shukta sandhana, Acidic fermentation, Asava, Arishta

INTRODUCTION
Among the basic principles of Bhaishajya kalpana, ‘Yoga namakarana Siddhanta’1 is also included. As per this substrate some rationality also exists in naming of a recipe. By name Takrarishta, it appears as a type of Arishta Kalpana (fermented product). As the media used is Takra (butter milk) 3, probably this name was given by our ancient Acharyas. Acharya Charaka,2,4 was the first person who mentioned Takrarishta. During this period, as there was no any discrimination between Asavas and Arishtas5,6, Charaka considered it under Arishta kalpana itself, though it is the fermentation where boiling was not carried unlike other Arishtas. Inspite of their good knowledge regarding Amla Sandhana7, consideration of a Shukta Sandhana (Amla Sandhana) in the name of Arishta (a type of Madhya Sandhana), still appears a surprising fact. Probably, wider acceptance or consideration of all fermented products with the Asava or Arishta name would have made them to consider this product also as a kind of Arishta. Secondly, possible knowledge of Takra itself as a sandhita dravya (Fermented product8) intended the scholars to call it as Takrarishta, as here refermentation of Takra was carried along with some other drugs. If ‘Na rishyate iti Arishtaha’9 derivation is considered, then it is possible to say that the drugs of the recipe, in the media of buttermilk are not degraded very easily or in short duration and hence the name ‘Takrarishta’ can be substantiated.

The consideration of such a fermented product in the name of Asava may be claimed more suitable by some of the scholars, it appears true, superficially, if one observes the quotation cited. As in the quotation it is told that “Takram tadasutam jatam”10 surely inclines one to call it as ‘Takrasava’.

Takra itself is an acidic fermented product and hence once again ‘Asutatwam’ of the same is double fermentation of a single product. This would have made them to consider it as a product of long lasting without deterioration (Arishta) unlike other acidic fermented products like Seedhu11, Souveera12, Shandaki13, etc.

MATERIALS AND METHODS
A thorough literature review reveals a hidden fact and rationality regarding the same. Acharya Charaka mentioned the formulations Takrarishta in two different contexts like Grahani adhikara2 and Arsha adhikara4. With out any...
discrimination both the preparations were termed as Takrarishta, in spite of much variability in preparation as well as number of ingredients.

Acharya Shodhala further refers this formulation in his text Gada Nigraha- Prayoga Kandha in Asavadhikara, Here in place of Kunchika, Sushavi is mentioned and other than this all the ingredients are same as per the reference of Charaka Chikitsa.

The ingredients and the proportion of ingredients of Takrarishta are given in Table No. 01.

Even though quantity of buttermilk is not specified, it is taken 1 Adhaka (3.072 lt.) in practice (As like in Cha.Chi.15).

Here, some specification is given regarding Takra as Manda amla (mild acidic) and Katu Rasatmakatwa (Pungent taste). Here ‘Katu rasatwa’ of buttermilk appears vogue. Probably by the line “Tacchoornam Takra Samyutam” or “Mandamla katukam sthapayet”, taste of whole buttermilk wort may be considered, as most of the drugs told in this recipe are of Katu rasatmaka. Here much emphasize has been given regarding the container, as Ghrita bhajana suggestive of rasatmaka. Here much emphasize has been given with regards the container anointed with ghee.

The time duration of fermentation is not told in this original text; where as in practice 14-21 days duration is followed.

Sandhana siddhi

Regarding the Sandhana siddhi Lakshanas, one clue has been given to test the final product as ‘Vyaktamla katukam’. Here, much emphasize is given with regards to clear manifestation of dominant Katu (pungent) and Amla (sour taste) Rasa.

Dose – Even though dose is not specified, general dosage of Amla Sandhana i.e., 1 pala (48ml) is considered. Now-a-days as this is impracticable in therapeutics, it is given in the dose of 15-20ml.

Oushadha kala –

The verse “Kaleshu Annasya Trishitam”, here suggestive of the Oushadha sevana kala. According to this verse, in Annakala (morning and night), after food it can be administered. But in specific cases, finding the necessity, three times a day (morning-noon-and night) it can be advised for intake.

Anupana –

Even though Anupana is not specified, it is better to administer along with equal amount of water.

Indications –

While in Phalashruti, it is told that Takrarishta is having Deepana, Ruchya, Varnya and Kaphavatanulomana properties. Acharya Charaka has advised this product in Guda Roga (Arsha), Shotha (Oedema) and in Kanta Roga (Throat disorders).

The ingredients and the proportion of ingredients of Takrarishta are given in Table No. 02.

Quantity of Buttermilk – In the verse, quality (type) and quantity of buttermilk is not specified. However, the commentator cleared that the media should be taken in one Adhaka = 4 Prastha quantity.

For the same, in Patantara, instead of “Takram tadasutam jatam”, “Takram sasutam jatam” is also mentioned. Hence, if that patantara is modified and “Takraksasutam jatam” is considered (as like in later text Asavarishta vijana samgraha), the quantity of buttermilk can be derived as 1 Kamsa = 1 Adhaka 3.072 lt.

Paka Siddhi lakshana –

Here for the word ‘jatam’ Chakrapani has given the commentary that “Jatamiti Amla rasasya jatam”. Therefore, the finished product should have dominant sour taste as per the verse.

Action and uses –

In the phalaprapti, it is said that this formulation is Deepana and hence useful in Shotha, Gulma, Arsha, Krimi, Meha, Udara, etc. As it is told under Grahani Adhikara, surely it is a formulation of priority in this disease. Similarly, in Atisara, Pravahika, Ajeerna, Agnimandya and other Udara vikaras also it is useful.

The text does not explain the time duration for the preparation of Takrarishta. Also, this reference does not refer the dose, vehicle and time of administration of Takrarishta.

DISCUSSION

Ashtanga Hridaya, Chikitsa sthana (As.Hri.Chi. 8/44-47) also refers the same version told by Cha.Chi.14/72-75 without any difference. Chakradatta quoted the same reference of Charaka – Grahani Adhikara, without any discrepancy; where as he has not mentioned the Takrarishta of Arsha Adhikara of Charaka. Astanga Sangraha Chikitsa sthana (As.Sa.Chi. 7/44-45) refers Arsha Adhikarokta Takrarishta.

In Gadanigraha, under Prayoga Kanda- Asavadhikara, Takrarishta is explained. Here, Acharya Shodhala has followed the same verse of Cha.Chi.14/72-75. The difference lies only in the mentioning of Sushavi instead of Kunchika.

In the phalashruti, in the place of Varnya, Balya is told by Shodhala. Similarly, in the last line, in the place of “Kandvarti nashanam” (subsides itching and pain in anal region), “Kantarti nashanam” (subsides pain or irritation of throat) is mentioned.
However, Gada nigraha text does not refer Takrarishta in Grahanhi Adhikara.

In Bhaishajya Ratnavali also the same recipe of Takrarishta, told in Grahanhi Adhikara is explained. Asavariṣṭa vijnana, text of Pakshadhar jha refers Takrastra formulation of Grahanhi Adhikara. Here, with the consideration of Patanthara of Charaka Samhita “Takrakamasutam jatam” is clearly mentioned and hence guided the manufacturer to take buttermilk in 1 Kamsa = 1 Adhaka pramana. The author guides the manufacturer to keep the wort on closing the lid and prescribed the time duration for the fermentation of Takrarishta as 7 – 15 days.

Vaidya Pandit Krishna Subbanna Bhatta in his text Asavariṣṭa vijnana Sangraha (1954) also refers the same method followed by Asavariṣṭa vijnana samgraha. But, he emphasized to take fresh and sweet buttermilk for the preparation.

The pharmaceutico -analytical Study carried by Krishnamurthy M S et al revealed following findings with regards to Takrarishta: Sp.Gravity: 0.9913– 0.9914,RI:1.347 - 1.352,pH :1.66- 1.84,Alcohol content: 4.88%v/v- 4.92%v/v,Total Sugar content:1001 µg/ml - 1121 µg/ml,Ascorbic acid content: 3.131 mg/ml - 3.213 mg/ml,

Free fatty acid content: 0.0125mg/ml – 0.0126mg/ml, and Total protein content: 113.43mg/ml - 132.07 mg/ml.

The above bio-chemical values do substantiate that Takrarishta is an acidic fermented product which may contain small percentage of alcohol.Thus the name Takrarishta is substantive in Ayurvedic classical view as well as modern perspective.

**CONCLUSION**

Takrarishta, being with the suffix of Arishta, is a kalpana of Shukta sandhanya and ‘Vyaktamlakshana’ is the dominant feature of this formulation.Buttermilk is a fermented product and reformation of the same with some more salts and herbal drugs yields more stable product containing little amount of alchohol and dominant characters of Acidic fermentation.The classical mentioning is substantive through the available bio-chemical values.

**REFERENCES**

12. Idib,Pg No 114
13. Idib,Pg No 115
20. Zha Pakshadhar , Asavarishta Vijnana,Published by Chaukhamba Orientalia,Varanasi,1999.Pg No 68
### Table 1 Takrarishta – Arsha adhikara – Cha.Chi 14/72-75

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Ingredients</th>
<th>Botanical Name / Chemical Name</th>
<th>Quantity</th>
<th>Eq.wt.</th>
<th>% of drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hapusha</td>
<td><em>Juniperus communis</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>2.</td>
<td>Kunchika</td>
<td><em>Nigella sativa</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>3.</td>
<td>Dhanyaka</td>
<td><em>Coriander sativum</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>4.</td>
<td>Ajaji</td>
<td><em>Cuminum cyminum</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>5.</td>
<td>Karavi</td>
<td><em>Carum carvi</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>6.</td>
<td>Shati</td>
<td><em>Hedychium spicatum</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>7.</td>
<td>Pippali</td>
<td><em>Piper longum</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>8.</td>
<td>Pippalimula</td>
<td><em>Piper longum</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>9.</td>
<td>Chitraka</td>
<td><em>Plumbago zeylanica</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>10.</td>
<td>Gajappapi</td>
<td><em>Pothos scandens</em> Linn</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>11.</td>
<td>Yavani</td>
<td><em>Tachyspermum ammi</em> Linn.Sprague</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>12.</td>
<td>Ajamoda</td>
<td><em>Carum roxburghianum</em> Benth.</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.32</td>
</tr>
<tr>
<td>13.</td>
<td>Takra</td>
<td>Buttermilk</td>
<td>1 Adhaka</td>
<td>3.072 lt.</td>
<td>84.21</td>
</tr>
</tbody>
</table>

Source of support: Nil, Conflict of interest: None Declared

### Table 2 Takrarishta – Grahani Adhikara - 15/120-121

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Ingredients</th>
<th>Botanical Name / Chemical Name</th>
<th>Qty.</th>
<th>Eq.wt.</th>
<th>% of drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yavani</td>
<td><em>Tachyspermum ammi</em> Linn.Sprague</td>
<td>3 Pala</td>
<td>144 gm</td>
<td>3.70</td>
</tr>
<tr>
<td>2.</td>
<td>Amlaki</td>
<td><em>Embelica officinalis</em> Linn</td>
<td>3 Pala</td>
<td>144 gm</td>
<td>3.70</td>
</tr>
<tr>
<td>3.</td>
<td>Harectaki</td>
<td><em>Terminalia chebula</em> Linn</td>
<td>3 Pala</td>
<td>144 gm</td>
<td>3.70</td>
</tr>
<tr>
<td>4.</td>
<td>Maricha</td>
<td><em>Piper nigrum</em> Linn</td>
<td>3 Pala</td>
<td>144 gm</td>
<td>3.70</td>
</tr>
<tr>
<td>5.</td>
<td>Saindhava</td>
<td>Rock Salt</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.23</td>
</tr>
<tr>
<td>6.</td>
<td>Samudra</td>
<td>Sea Salt</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.23</td>
</tr>
<tr>
<td>7.</td>
<td>Bida</td>
<td>Black Salt</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.23</td>
</tr>
<tr>
<td>8.</td>
<td>Souvarchala</td>
<td>Sonchhal Salt</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.23</td>
</tr>
<tr>
<td>9.</td>
<td>Romaka</td>
<td>Sambhar Salt</td>
<td>1 Pala</td>
<td>48 gm</td>
<td>1.23</td>
</tr>
<tr>
<td>10.</td>
<td>Takra</td>
<td>Buttermilk</td>
<td>1 Kamsa</td>
<td>3.072 lt.</td>
<td>79.0</td>
</tr>
</tbody>
</table>

Source of support: Nil, Conflict of interest: None Declared