Therapeutic profile of Yashada bhasma-
A review of research works carried out at IPGT& RA, GAU, Jamnagar

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Metallic preparations - Integral part of Ayurvedic therapeutics

Yashada (Incinerated Zinc)

Zinc in human - Ubiquitous biological role and appears in all enzymes.
Continued...

- **Bhasmas** - safety issues in the recent past.

- Necessity - To assess and develop the safety profile and also to revalidate the classical guidelines and therapeutic efficacy, to generate evidence.

- Research works
Totally 5 works were carried-out in IPGT&RA at PG levels during 1987-2001 and one study at PhD level is ongoing and they were reviewed for the present work.
## OBSERVATION AND ANALYSIS

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<th>Sl. No</th>
<th>Study Title</th>
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<td>1.</td>
<td>Role of media in the preparation of yashad bhasma w.s.r. to swethapradara</td>
<td>Dr. Saly. V.M</td>
<td>1987</td>
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<td>2.</td>
<td>Use of yoni varti in swetapradara – A pharmaceutical study of vit khadira alone and along with Yashada pushpa</td>
<td>Dr. Purohit Chetna . P</td>
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<td>3.</td>
<td>A comparative pharmaco clinical study of shilajith compound and yashada compound on Madumeha</td>
<td>Dr. kailash Chandra sahu</td>
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<td>5.</td>
<td>Pharmaceutical standardization of Yashada bhasma</td>
<td>Dr. Renuka Diwakar Joshi</td>
<td>2001</td>
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<td>6.</td>
<td>Pharmaceutical standardisation of Yashada bhasma prepared by 2 different methods and their comparative efficacy on Madumeha</td>
<td>Dr. Seetha Chandran</td>
<td>Ongoing PhD work</td>
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Study Protocol

Conceptual

Analytical

Pharmacological

Pharmaceutical

Clinical
Study conducted in 1987 - Role of media in the preparation of Yashada bhasma w.s.r to *swetha pradara*

- In this work Yashada marana was carried out by 3 methods:
  - Parada - Light grey
  - Mulika - Brick red
  - Gandhaka - Dark grey

Colour of Yashada bhasma prepared using different media
Clinical study - 500 mg sized capsule was given twice daily with milk.

Maximum result - moolika media

Indiscriminative of the media, it gave 70.69% symptomatic relief in swetha pradara.

In 1993, the Pharmaco clinical study of vitkhadira alone and along with Yashada pushpa as yonivarti (local applicant) in swethapradara, better result was observed in Yashada pushpa containing varthi.
Comparative pharmaco-clinical study of shilajatu compound and Yashada compound on **Madhumeha (DM)** in 1998 – Vijayasaradi gana

- Both the test drugs - evaluated in albino rats at a dose of 2 ml/kg.

- **Clinical study** - 2gm sized capsule bd daily with plain water for 30 days
In both group - Significant decrease in symptomatic as well as biochemical parameters.

In experimental study, only Yashada compound showed significant decrease in blood sugar level. And in clinical study only Shilajatu compound showed significant result.
In 1999, the safety profile of Rasamanikya and Yashadamrtha malahara were evaluated experimentally, and its clinical efficacy was analysed in vicharchika.
Clinical study - carried out in three groups
Rasamanikya – G1
Yashadamrtha malahara - G2
Both the drugs together – G3

Significant improvement - kandu, pidaka and daha in all the 3 groups.

Yashadamrtha malahara - shotha

Combined drug group – rookshatha, vedana and vaivarnya.
Standardization of Yashada bhasma – 2001

- Evaluated the safety of Yashada bhasma prepared using 3 different methods and its antidiabetic activity on pharmacological grounds.

- Three types of Yashada bhasma were assessed:
  1. Vanaspathi (Apamarga) jaritha (YJ),
  2. Vanaspathi jaritha maritha (YJM)
  3. Parada maritha (YPM).
Parada marita bhasma - bright yellow
vanaspati marita bhasma - light yellow

Phase identification by XRD - presence of ZnO in all samples except in minor phase of YJ sample

Variety of major and trace elements detected in Spectroscopy
Toxocology study –

- Done with *YJM* and *YPM* samples
- *YJM* seems to possess higher toxic potential in comparison to *YPM* group.
- There was an elevation in serum urea level in all the 3 treated groups.

- At the same time the drug showed reversal of elevated serum urea in diabetic albino rats.

- Since the changes are of moderate intensity they are likely to be reversible.
Ponderal and bio-chemical parameters –

- YPM - moderate cyto protective activity
- YJM - weak cyto protective activity
- YJ - anti-diabetic, anti-hyperglycemic and weak cyto protective activity.
DISCUSSION
Clinical findings

- Therapeutic efficacy proved in cases such as swetha pradara, Vicharchika and prameha.

- Administered - mixing with suitable herbal powders and adjuvants.

- The therapeutic dose was ranging in between 300 mg – 1 gm.
- *Yashada bhasma* - remarkable symptomatic relief in *Swetha pradara*.

- Antibacterial, antifungal, and immunomodulatory action of *yashada* may prevent the recurrence of such immunosuppressive disease.

- Similar properties of *Yashadamrita malahara* - contributed in reducing the symptoms of *Vicharchika*.
In the clinical study on *Madhumeha Yashada compound*, symptomatic and blood sugar level improvement.

In diabetes oxidative stress contribute to insulin resistance and many complications.

Immunomodulatory and free radial scavenging activity of *Yashada bhasma*-reduce the systemic level damage, by reducing the oxidative stress.
CONCLUSION

- From the above studies - *Yashada bhasma* appears safe and effective.

- *Bhasmas* prepared in different medias – different compositions which shows different chemical reactions and biological actions - specific clinical efficacy of a particular *bhasma* incinerated in specific media.
||शुभमस्तु परं ततो जगतः||