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RESEARCH ARTICLE

PHARMACEUTICO-ANALYTICAL STUDY AND CLINICAL EVALUATION OF MODIFIED CREAM FORM OF SAHACHARA GHRITA ON MUKHDUSHIKA WITH SPECIAL REFERENCE TO ACNE VULGARIS: A RANDOMIZED CONTROLLED TRIAL

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Abstract

Introduction: Mukhadushika (acne vulgaris) is a common skin disorder that affects appearance, confidence and quality of life in young adults. Conventional therapies often have limitations such as prolonged treatment, side effects and recurrence. Ayurveda describes Sahachara Ghrita as a classical remedy for Mukhadushika. To improve cosmetic acceptability and patient compliance, this study reformulated Sahachara Ghrita into a cream and evaluated its efficacy against Shalmali Kantaka Lepa.

Methods: An RCT on 60 patients (18–30 yrs) with Mukhadushika compared Sahachara Ghrita cream (Group A, n=30) and Shalmali Kantaka Lepa (Group B, n=30) for 30 days, followed by 15 days of observation. Pharmaceutical preparation and analytical standardization of Sahachara Ghrita and its cream were performed. Clinical outcomes were assessed using subjective and objective parameters including Saruja Pidaka, Shotha, No. of Pidaka, comedones, papules, pustules, nodules and Investigator's Global Assessment (IGA).

Results: Both groups showed significant improvement. Group A demonstrated superior relief in Saruja Pidaka, Shotha, Ghana Pidaka, No. of Pidaka, closed comedones and open comedones. Patients preferred the cream for its smooth, non-greasy texture and cosmetic appeal. No adverse effects were reported.

Conclusion: The modified cream form of Sahachara Ghrita cream proved to be a standardized, stable and clinically effective topical dosage form for Mukhadushika. It offered superior therapeutic outcomes and patient acceptability compared to Shalmali Kantaka Lepa, making it a promising Ayurvedic intervention for acne vulgaris.

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Introduction:-

Rasashastra and Bhaishajya Kalpana represent a specialised branch of Ayurveda concerned with the preparation of medicines from herbal, mineral and herbo-mineral sources. This discipline emphasises purification, incineration and pharmaceutical processing, while integrating modern analytical techniques to ensure safety, reproducibility and therapeutic effectiveness. The skin, being the largest organ of the body, is described in Charaka Samhita as a vital sense organ (Sparshanendriya). ⁽¹⁾ Among its many disorders, Mukhadushika is one of the most common, particularly during adolescence and is classified under Kshudraroga. ⁽²⁾⁽³⁾ Classical texts such as Sushruta Samhita ⁽⁴⁾, Ashtanga Samgraha, Ashtanga Hridaya ⁽⁵⁾, Yogratnakar ⁽²⁾ and Bhavaprakasha described painful eruptions resembling the thorn of the Shalmali tree, filled with Meda, which diminish facial beauty. This condition is also termed Yauvanpitika or Tarunyapitika and in modern dermatology it corresponds to Acne vulgaris.

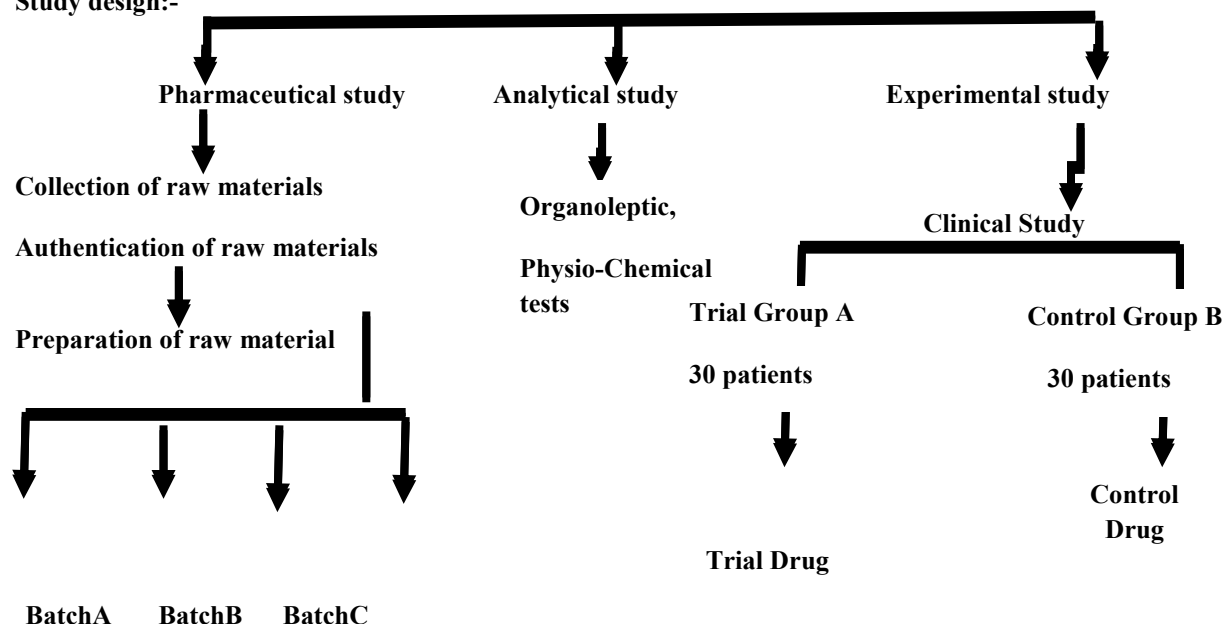
Ayurveda attributes its origin to disturbances in Vata, Kapha and Rakta, ^{(4,5)(6)} Modern science identifies multiple etiological factors including excessive sebum production, microbial activity (*Propionibacterium acnes*), ductal blockage, inflammation and genetic predisposition. ⁽⁷⁾ Therapeutic approaches in Ayurveda include Nidanparivarjan (elimination of causative factors), Shodhana Chikitsa (purification therapies) and Shamana Chikitsa (palliative measures). Both internal (Antahparimarjan) and external (Bahirparimarjan) treatments are employed. External therapies such as Abhyanga (massage with medicated oils or Ghrita) and Lepa (herbal pastes) act directly on the skin through Bhrajak Pitta. Bhaishajyaratnavali specifically mentions Sahachara Ghrita for Mukhadushika. ⁽⁸⁾ Its ingredients—including Sahachara, Dashmoola, Shirisha, Panchkola, Vidanga, Panchlavana, Kshartraya, Vrishchikali, Girisindura, and Gairika—are described as Kapha-Vata Shamaka, Rakta Prasadana, Shothahara, Lekhana, Krimighna, Kushtaghna and Vranaropana. Modern pharmacological studies further support their anti-inflammatory, antimicrobial, antioxidant, wound-healing and sebum-regulating properties. The pharmaceutical basis lies in Sneha Kalpana, which involves preparing medicated oils or Ghrita using herbal pastes (Kalka) and decoctions (Kwatha) under controlled heating. However, direct application of Ghrita poses practical challenges. Cream formulations, being cosmetically acceptable and easy to apply, offer a modern patient-friendly alternative. In this study, Shalmali Kantaka Lepa is considered a controlled drug. ⁽⁹⁾

Need of Study:-

- Acne vulgaris affects nearly 80% of adolescents and young adults, often causing psychological distress. ⁽¹⁰⁾
- Untreated acne may result in permanent scarring; early intervention improves quality of life.
- Ayurveda offers effective alternatives; validating Sahachara Ghrita strengthens traditional medicine integration.
- Developing a cream formulation ensures easier application, better compliance and modern relevance.
- The study aims to prepare, standardize and clinically evaluate Sahachara Ghrita cream for Mukhadushika, generating evidence for its pharmaceutical quality, therapeutic efficacy and translational potential.

Materials and Methods:-

Study design:-



Pharmaceutical Study:-**1) Collection of raw materials**

All raw materials were procured from authentic reliable sources.

2) The raw material was authenticated.**3) Pharmaceutical****1. Sahachara Ghrita: It contains following Ingredients****Table No. 1 Ingredient of Sahachara Ghrita**

Sr. No.	Ingredient	Part Used	Quantity
Sneha Dravya			
1	Murchhita Go-Ghrita		965 g
Kwatha Dravya			
1	Sahachara ⁽¹²⁾⁽¹³⁾⁽¹⁴⁾	Panchanga	3 kg
2	Shirisha ⁽¹⁵⁾⁽¹⁶⁾⁽¹⁷⁾	Stem bark	3 kg
	Dashmool⁽¹⁸⁾		
3	Bilva ⁽¹⁹⁾⁽²⁰⁾	Root	300 g
4	Agnimantha ⁽²¹⁾	Root	300 g
5	Shyonaka ⁽²²⁾	Root	300 g
6	Gambhari (Kashmari) ⁽²³⁾	Root	300 g
7	Patala ⁽²⁴⁾	Root	300 g
8	Brihati ⁽²⁵⁾	Root	300 g
9	Kantakari ⁽²⁶⁾	Root	300 g
10	Gokshura ⁽²⁷⁾	Root	300 g
11	Shalaparni ⁽²⁸⁾	Root	300 g
12	Prishniparni ⁽²⁹⁾	Root	300 g
KALKA DRAVYA			
1	Pippali ⁽³⁰⁾	Fruit	15 g
2	Pippalimoola	Root	15 g
3	Chavya ⁽³¹⁾	Root	15 g
4	Chitraka ⁽³²⁾	Root	15 g
5	Shunthi ⁽³³⁾	Rhizome	15 g
6	Vidanga ⁽³⁴⁾⁽³⁵⁾	Fruit	15 g
7	Saindhava Lavana ⁽³⁶⁾⁽³⁷⁾	Salt	15 g
8	Sauvarchala Lavana ⁽³⁸⁾	Salt	15 g
9	Samudra Lavana ⁽³⁹⁾	Salt	30 g
10	Bida Lavana ⁽⁴⁰⁾	Salt	15 g
11	Tankana ⁽⁴¹⁾	Kshara	15 g
12	Svarjika Kshara ⁽⁴²⁾	Kshara	15 g
13	Yava Kshara ⁽⁴³⁾	Kshara	15 g
14	Vrishchikali ⁽⁴⁴⁾	Whole plant	15 g
15	Sindura ⁽⁴⁵⁾	Mineral	15 g
16	Gairika ⁽⁴⁶⁾	Mineral	15 g

Abhava Pratinidhi Dravya:-

In present reference for Sahachara Ghrita, Audhabhida Lavan is an ingredient but it is not available when any Lavan is not available Saindhava Lavan is used.

Preparation of Sahachara Ghrita:-

- Collection of raw material.
- Ghrita Murchhana carried out according to Bhaishajyaratnavali.
- **Preparation of Kwatha**

For the preparation of the individual Kwath, 3 kg of coarse powder of each ingredient, namely SahacharaPanchanga, Dashamoola and Shirisha Twak, was processed separately. Each powdered drug was immersed individually in 24 L of water and kept overnight. The soaked material was subsequently heated on Manda Agni until the liquid volume was reduced to approximately 6 L. The resulting decoction was filtered separately through a cotton cloth to obtain a clear filtrate. The same procedure was followed independently for all three Kwath.

Preparation of Kalka:-

The prescribed ingredients were cleaned, powdered separately and then blended uniformly. All powders were triturated gradually with potable water until a smooth, homogeneous paste was formed, which was kept ready for the Sneha Paka process.

Preparation of SahacharaGhrita:-

1. **Base:** 965 g of Murchhita Go-Ghrita liquefied over Manda Agni in a stainless-steel vessel.
2. **Kalka addition:** Prepared Kalka balls added gradually with continuous stirring.
3. **Kwatha addition:** SahacharaPanchanga Kwatha, DashamoolaKwatha and Shirisha TwakKwatha added subsequently while stirring.
4. **Heating:** Mixture heated gently over Manda Agni with constant stirring.
5. **Observation:** Colour, aroma, frothing and consistency monitored until Sneha Siddhi Lakshanas appeared.
6. **Filtration:** Hot Ghrita filtered through double-layered cotton cloth.
7. **Storage:** After cooling, transferred into clean, dry stainless-steel containers, labelled and stored for analysis and cream formulation

Table No.2 Yield and Percentage Loss of SahacharaGhrita during Process

Initial Quantity of MurchhitaGhrita	Final Quantity of SahacharaGhrita	Processing Loss	Percentage Loss
965g	936 g	28 g	3 %





Pharmaceutical Preparation of Modified Cream Form of Sahachara Ghrita

Table No.3 Excipients Used in the Preparation of Modified Sahachara Ghrita Cream

Sr.No	Ingredient	Pharmaceutical Category	Quantity
1	Beeswax	Base and consistency enhancer	160 g
2	Liquid Paraffin	Emollient	500 ml
3	SahacharaGhrita	Medicated Ghrita (main ingredient)	300 ml
4	Borax	Emulsifying agent	8 g
5	Distilled water	Solvent	100 ml
6	Methyl Paraben	Preservative	1 g

Preparation of SahacharaGhrita Cream:-

- **Oil phase:** Beeswax was gently melted using a double-boiler method, liquid paraffin added gradually and SahacharaGhrita incorporated to form a uniform yellow mixture.
- **Aqueous phase:** Borax dissolved in distilled water, producing a slightly turbid solution.
- **Emulsification:** The aqueous phase was added slowly to the oil phase with continuous stirring, leading to thickening and formation of a smooth yellow cream.
- **Filling:** The warm semi-fluid cream was poured into sterile containers.
- **Cooling:** On cooling, the cream attained semi-solid consistency.
- **Final product:** A homogeneous yellow cream with smooth texture was obtained.

Table no. 4 : Final results of each batch

Batch	Initial Quantity	Final Cream Obtained	Processing Loss	% Loss	Observation
Batch I	1069 g	Approx 1055 g	Approx 14 g	Approx. 1.31%	Smooth, homogeneous yellow cream obtained.
Batch II	1069 g	Approx 1054 g	Approx 15 g	Approx 1.40%	Smooth, homogeneous yellow cream obtained.
Batch III	1069 g	Approx 1056 g	Approx 13 g	Approx 1.22%	Smooth, homogeneous yellow cream obtained.

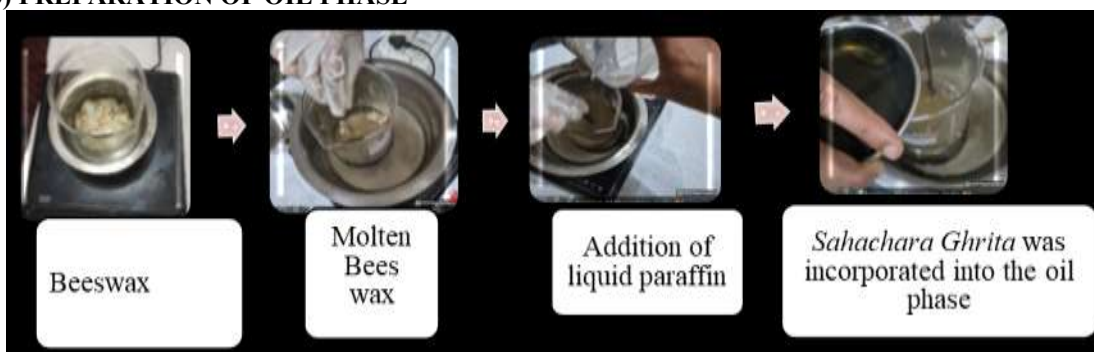
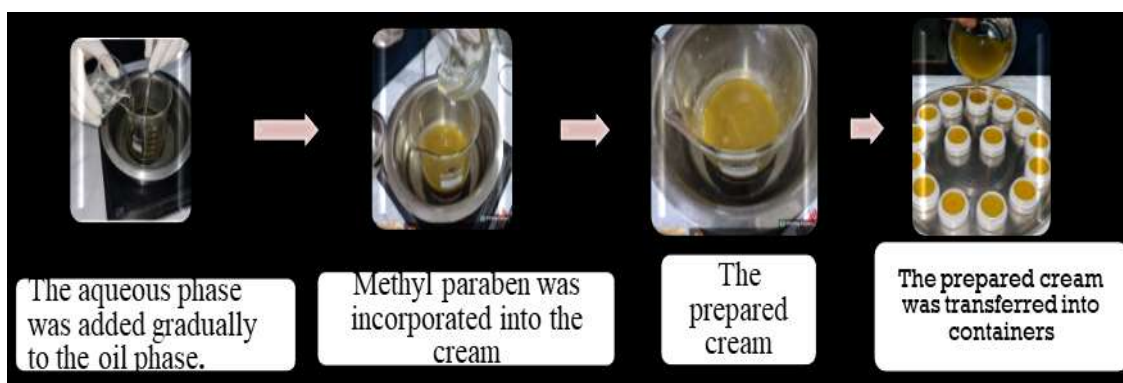
Preparation of Cream:-**Preparation of Water Phase:-****b) PREPARATION OF OIL PHASE****c) EMULSIFICATION**

Table No5 : Organoleptic Evaluation of Cream

Sr. No.	Parameter	Observation
1	Colour	Greenish yellow colour
2	Odour	Ghrita and Turmeric Like odour
3	Appearance	Homogeneous
4	Consistency	Smooth, semi-solid
5	Texture	Soft and slight
6	Spreadability	Easily spread on skin.
7	Phase Separation	Absent
8	Grittiness	Absent

Table No. 6 Analytical Reports of SahacharaGhrita

Sr no.	Test	Results
1	REFRACTIVE INDEX AT 40°C	1.4545
2	SPECIFIC GRAVITY AT 40°C	0.9012
4	SAPONIFICATION VALUE	216.2
5	ACID VALUE	0.86
6	IODINE VALUE	39.03
7	PEROXIDE VALUE	3.7
8	pH OF 1% AQUEOUS SOLUTION	5.5
9	RANCIDITY	Absent
10	ORGANOLEPTIC CHARACTER -	
	a) COLOUR	Greenish color
	b) ODOUR	Ghee & Turmeric like odor

TableNo 7Analytical Reports of Modified cream form of Sahachara Ghrita

Sr. No.	Test	Result
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1	Specific gravity at 40°C	0.8593
2	Acid value	0.91 mgKOH/g
3	Rancidity	Absent
4	Spreadability	Easily spread on skin
5	ORGANOLEPTIC CHARACTER	
	Colour	Greenish yellow colour
	Odour	Ghee and turmeric like odour
6	Viscosity at 40°C	41.2 cps
7	pH of 1 % aqueous solution	5.12

7	PEROXIDE VALUE	3.7
8	pH OF 1% AQUEOUS SOLUTION	5.5
9	RANCIDITY	Absent
10	ORGANOLEPTIC CHARACTER -	
	a) COLOUR	Greenish color
	b) ODOUR	Ghee & Turmeric like odor

Clinical Study:-**Study Design:** Randomized controlled trial.**Sample Size:** 60 patients diagnosed with Mukhadushika (Acne Vulgaris).
30 patients in each group**Groups:**

- **Group A (Trial):** Modified cream form of SahacharaGhrita
- **Group B (Control):** Shalmali Katak Lepa
- **Duration:** 45 days. (30 Days Intervention And 15 Days Observation)

Selection Criteria:-**Inclusion Criteria:-**

- 1) Age group 18-30 years irrespective of gender.
- 2) Patient having symptom of Mukhadushika
 - Shalmali Katak like eruptions.
 - Saruja Pidaka (painful acne)
 - Ghana Pidakas(hard and thick acne)
 - MedogarbhaPidakas(acne filled with oil/sebum/pus)
 - Shotha (Inflammation)
- 3) Patient having symptom of acne vulgaris
 - Open comedones (White head)
 - Close comedones (black heads)
 - Papule
 - Pustule

Exclusion Criteria:-

- 1) Patient suffering from any other skin disease and any allergic condition.
- 2) Patients of severe acne having inflammatory cyst.
- 3) Patients having hormonal imbalance like PCOD etc.
- 4) Genetic disorders

Withdrawal Criteria:-

1. Patient willing to discontinue trial.
2. If patient develop any allergy due to study drug.
3. Inter current illness.

Assessment Parameters:-

Table No 8:No. of Pidakas		
Sr no.	No. of Pidakas	Grade
1	NO Pidakas	0
2	1-5 Pidakas	1
3	5-10 Pidakas	2
4	10-15 Pidaka	3
5	More than 15 Pidaka	4

Table No 9: Medogarbha (containing fat in Pidaka):

Sr no.	Medogarbha	Grade
1	No Pidaka containing fat inside	0
2	1- 5 Pidaka containing fat inside	1

3	5- 10 Pidaka containing fat inside	2
4	10- 15 Pidaka containing fat inside	3
5	More than 15 Pidaka containing fat inside	4

Table No10: Open comedones (black heads):

Sr no.	Open comedones (black heads):	Grade
1	No open comedones in area	0
2	1- 5 open comedones in area	1
3	5- 10 open comedones in area	2
4	10- 15 open comedones in area	3
5	More than 15 open comedones in area	4

Table No.11: Papules

Sr no.	Papules	Grade
1	No papules in area	0
2	1- 5 papules in area	1
3	5- 10 papules in area	2
4	10- 15 papules in area	3
5	More than 15 papules in area	4

Table No.12: Pustules

Sr no.	Pustules	Grade
1	No Pustules in area	0
3	5- 10 Pustules in area	2
4	10- 15 Pustules in area	3
5	More than Pustules in area	4

Table No 13: Nodules

Sr no.	Nodules	Grade
1	No Nodules in area	0
3	5- 10 Nodules in area	2
4	10- 15 Nodules in area	3
5	More than Nodules in area	4

Table No14 :Investigator's Global Assessment (IGA) of acne severity

0	Clear	Erythema may be present
1	Almost clear	A few scattered comedones and a few small papules
2	Mild	Easily recognizable; less than half the face is involved. Some comedones and some papules and pustules
3	Moderate	More than half the face is involved. Many comedones, papules and pustules. One nodule may be present
4	Severe	Entire face is involved, covered with comedones, numerous papules and pustules and few nodules and cysts

Table No15: Criteria for assessment:

Unchanged	0-25% improvement
Mild	26-50% improvement
Moderate	51 to 75% improvement
Marked	76-100% improvement

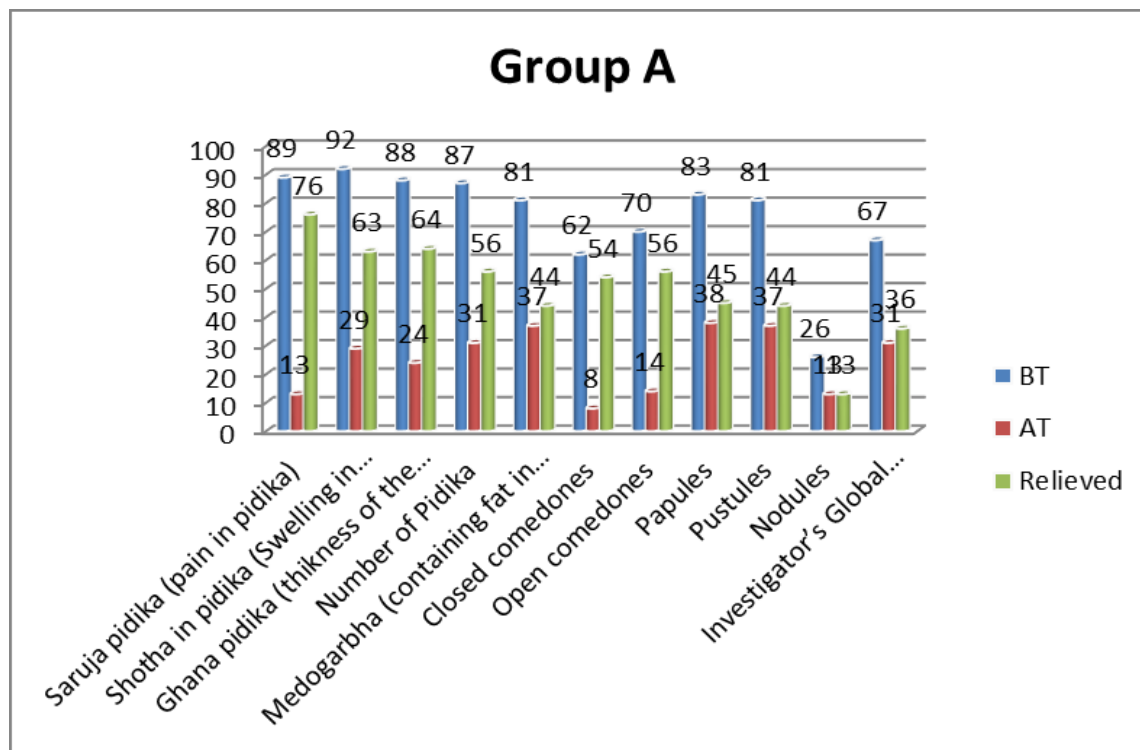
Table no. 16: Symptoms wise percentage relief in Group A and Group B (BT And AT)

Symptoms	Percentage Relief							
	Group A				Group B			
	BT	AT	Relieved	%	BT	AT	Relieved	%
Saruja Pidaka	89	13	76	85.39	91	26	65	71.43
Shotha in Pidaka (Swelling in Pidaka)	92	29	63	68.48	74	36	38	51.35
GhanaPidaka (thikness of the Pidaka)	88	24	64	72.73	79	33	46	58.23
Number of Pidaka	87	31	56	64.37	84	45	39	46.23
Medogarbha (containing fat in Pidaka)	81	37	44	54.32	86	45	41	47.67
Closed comedones	62	8	54	87.10	65	27	38	58.46
Open comedones	70	14	56	80.00	64	19	45	70.31
Papules	83	38	45	54.22	74	30	44	59.46
Pustules	81	37	44	54.32	86	45	41	47.67
Nodules	26	13	13	50.00	31	17	14	45.16
Investigator's Global Assessment (IGA)	67	31	36	53.73	67	31	36	53.73
Mean	65.88				55.45			

Table no. 17 : Inter-group p-values for all parameters

Parameter	Group A Mean Difference	Group B Mean Difference	p-value	Interpretation
Saruja Pidika (Pain)	2.533	2.167	0.034	Significant
Shotha in Pidika (Swelling)	2.100	1.267	0.006	Significant
GhanaPidika (Thickness)	2.133	1.533	0.006	Significant
Number of Pidika	1.867	1.300	0.027	Significant
Medogarbha	1.467	1.367	0.455	Not significant
Closed Comedones	1.800	1.267	0.002	Significant
Open Comedones	1.867	1.500	0.030	Significant
Papules	1.500	1.467	0.460	Not significant
Pustules	1.467	1.367	0.450	Not significant
Nodules	0.433	0.467	0.750	Not significant
IGA of Acne Severity	1.200	1.200	0.990	Not significant

Graph no. 1



Graph no.2

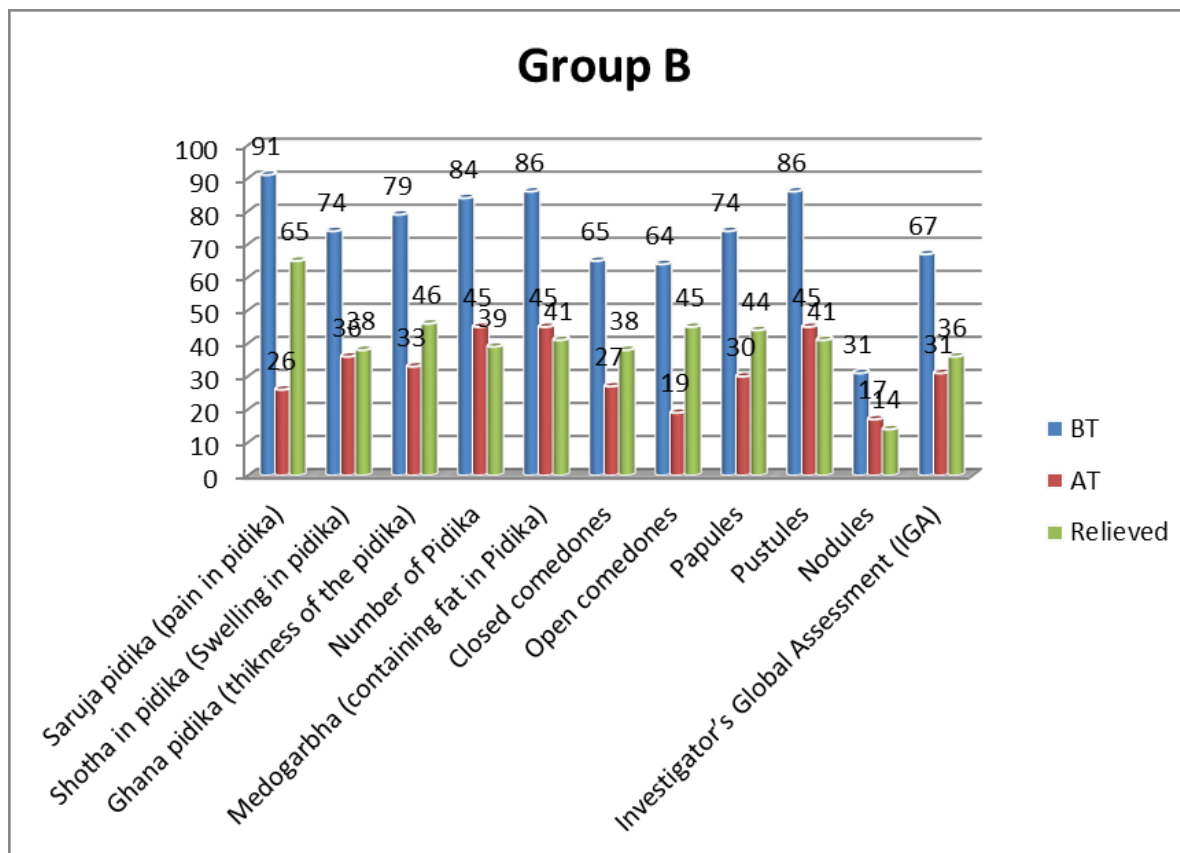


Table no.18 : Patient-wise Assessment of all clinical parameters Before and After Treatment in Group A and Group B

Group A					Group B				
Sr. No.	BT	AT	Relieved	% Relief	Sr. No.	BT	AT	Relieved	% Relief
1	23	6	17	73.91	1	24	11	13	54.17
2	26	9	17	65.38	2	27	11	16	59.26
3	25	9	16	64.00	3	14	9	5	35.71
4	28	6	22	78.57	4	28	11	17	60.71
5	21	6	15	71.43	5	23	10	13	56.52
6	31	12	19	61.29	6	27	13	14	51.85
7	23	5	18	78.26	7	25	11	14	56.00
8	27	9	18	66.67	8	27	12	15	55.56
9	23	8	15	65.22	9	21	9	12	57.14
10	31	11	20	64.52	10	30	12	18	60.00
11	27	6	21	77.78	11	26	11	15	57.69
12	26	8	18	69.23	12	24	12	12	50.00
13	26	9	17	65.38	13	27	10	17	62.96
14	29	7	22	75.86	14	31	14	17	54.84
15	29	10	19	65.52	15	23	13	10	43.48
16	26	6	20	76.92	16	28	11	17	60.71
17	28	9	19	67.86	17	27	11	16	59.26
18	28	9	19	67.86	18	21	12	9	42.86
19	24	5	19	79.17	19	30	11	19	63.33
20	21	7	14	66.67	20	26	12	14	53.85
21	29	11	18	62.07	21	21	10	11	52.38
22	24	7	17	70.83	22	30	12	18	60.00
23	24	7	17	70.83	23	25	8	17	68.00
24	27	11	16	59.26	24	25	12	13	52.00
25	26	7	19	73.08	25	26	8	18	69.23
26	28	9	19	67.86	26	29	10	19	65.52
27	28	11	17	60.71	27	26	13	13	50.00
28	27	6	21	77.78	28	23	13	10	43.48
29	29	10	19	65.52	29	29	9	20	68.97
30	25	10	15	60.00	30	20	10	10	50.00
Average % relief				68.98	Average % relief				55.85

Table no. 19 – Overall effect of therapy according to subjective criteria on 60 patients of Mukhdushika with special reference to Acne vulgaris

Result	Group A		Group B	
	Number of patients	%	Number of patients	%
Marked improvement (76 to 100 %)	26	86.67%	0	0.00%
Moderate improvement (51 – 75 %)	4	13.33%	25	83.33%
Mild improvement (26 – 50 %)	0	0.00%	5	16.67%
Unchanged (0 to 25 %)	0	0.00%	0	0.00%

In **Group A of Modified cream form of SahacharaGhrita** out of 30 patients, marked improvement (76 to 100 % relief) was noted in 26 patients i.e. 66.67 %, Moderate Improvement (51 to 75 % relief) was reported in 4 patients i.e. 13.33 %.

In **Group B of Shalmali Kantaka Lepa** out of 30 patients, Moderate Improvement (51 to 75 % relief) was observed in 25 patients i.e. 83.33 % and Mild Improvement (26 to 50 % relief) was noted in 5 patients i.e. 16.67 %.

Result:-

Effect of the Modified cream form of SahacharaGhrita (Group A) and Shalmali Kantaka Lepa (Group B) on symptoms observed in Mukhdushika with special reference to Acne vulgaris is statistically proved to be significant on subjective criteria separately.

The effect of Modified cream form of SahacharaGhrita (Group A) is significant than Shalmali Kantaka Lepa (Group B) for subjective criteria – Saruja Pidaka (pain in Pidaka), Shotha in Pidaka (Swelling in Pidaka), Ghana Pidaka (thickness of the Pidaka), Number of Pidaka, Closed comedones (white heads) and Open comedones (black heads) of Mukhdushika with special reference to Acne vulgaris, where level of significance is 95 %.

The effect of Modified cream form of SahacharaGhrita (Group A) is not significant than Shalmali Kantaka Lepa (Group B) for subjective criteria such as Medogarbha (containing fat in Pidaka), Papules, Pustules, Nodules, Investigator's Global Assessment (IGA) of Mukhdushika with special reference to Acne vulgaris, where level of significance is 95 %.

Discussion:-

Mukhadushika (acne vulgaris) is a condition that, while not life-threatening, deeply affects the confidence and social wellbeing of young individuals. Its rising prevalence and the limitations of conventional therapies—such as long treatment duration, side effects and frequent recurrence—make it an important area for exploring safer, patient-friendly alternatives. Ayurveda describes Mukhadushika as a KshudraRoga caused by vitiation of Kapha and Vata dosha with involvement of Raktadhatu. Topical therapy, acting directly on the affected site, is emphasized in classical texts, which guided the rationale for this study.

The trial compared Modified SahacharaGhrita Cream with Shalmali Kantaka Lepa. Sahachara Ghrita, a classical formulation from Bhaishajya Ratnavali, was reformulated into a cream to overcome the greasy texture and cosmetic limitations of traditional Ghrita. This modification retained therapeutic properties while improving spreadability, non-greasy feel and patient acceptability. Shalmali Kantaka Lepa, a well-established topical preparation, served as the control.

Pharmaceutical and analytical evaluation confirmed the stability and quality of both formulations. SahacharaGhrita showed consistent physicochemical parameters (RI 1.4545, SG 0.9012, SV 216.2, Acid 0.86, Iodine 39.03, Peroxide 3.7, pH 5.5, no rancidity), while the cream demonstrated favourable characteristics (SG 0.8593, Acid 0.91, pH 5.12, good spreadability, viscosity, and cosmetic appeal). These findings validated that the modification enhanced usability without compromising therapeutic integrity.

Clinically, both groups showed significant improvement in acne symptoms. However, Group A (Modified SahacharaGhrita Cream) achieved superior outcomes in Saruja Pidaka, Shotha, Ghana Pidaka, Number of Pidaka and comedones. Group B (Shalmali Kantaka Lepa) showed comparable improvement in papules, pustules, nodules and Investigator's Global Assessment (IGA) score, but overall efficacy was lower. Mean percentage relief was higher in Group A (65.88% subjective, 68.98% overall) compared to Group B (55.45% and 55.85%). Importantly, patients preferred the cream for its non-greasy texture, smooth consistency and cosmetic appeal, which likely contributed to better compliance and outcomes. From an Ayurvedic perspective, the therapeutic effect of SahacharaGhrita can be properties. Modern pharmacological insights further support its anti-inflammatory, antimicrobial, antioxidant and wound-healing activities. The cream dosage form enhanced contact time and uniform application, strengthening its clinical efficacy.

Overall, the study demonstrates that pharmaceutical modification of classical Ghrita into a cream form can provide improved patient convenience and cosmetic acceptability without compromising therapeutic potential. The modified SahacharaGhrita cream proved to be a standardized, stable and clinically effective topical dosage form for

Mukhadushika, offering superior outcomes compared to Shalmali Kantaka Lepa. The study was limited by its small, single-center sample and short treatment and follow-up period, which restricted assessment of long-term efficacy and recurrence. Both formulations were safe and well tolerated, with no ADRs reported in either group.

Conclusion:-

This study showed that converting SahacharaGhrita into a cream form made it more patient-friendly without losing its therapeutic strength. Both the cream and Shalmali Kantaka Lepa improved acne symptoms, but the cream gave better relief in Saruja Pidaka, Shotha, Ghana Pidaka, Number of Pidaka. Analytical tests confirmed its stability and patients preferred it for its smooth, non-greasy feel and cosmetic appeal. In essence, the modified SahacharaGhrita cream blends classical Ayurvedic wisdom with modern pharmaceutical convenience, making it a promising and effective option for managing Mukhadushika (acne vulgaris).

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