

**ROLE OF MAHA-MANJISHTADI GHRUT AS A ANTI-ADHESIOLYTIC &
LUBRICANT AGENT FOR INTESTINES - A CLINICAL REVIEW STUDY**

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ABSTRACT

Now a days, abdominal surgeries become more easier, simple, recovery rate is good & less mortality rate in post operative complications by new techniques adopted in modern surgery. Eventhough method of lubrication are rarely considered in gastro- intestinal surgeries. Here we evaluated a technique illustrated, advocated by Acharya Sushruta that the application of ghrut (Cow's Ghee) externally to the intestines during the intestinal surgeries to avoid the adhesiolysis & fibrous band formation & also for early regain of peristaltic movement & avoid the dryness of intestine, so that less abdominal pain was there. Till date, there is no practice of application of Ghrut to the intestines during surgery. But Acharya Sushruta has clearly quoted this thing in his scripture. To study this, we compare Maha-Manjishtadi ghrut (a medicated ghrut) with liquid Paraffin which usually used in all over the world. So we took 30-30 patient for study. Group-A – Trial group - Maha-Manjishtadi ghrut & Group-B - Control group – Liquid Paraffin. We got significant result for avoiding adhesiolysis & fibrous band formation, less pain & early regain of peristaltic movements in post operative period. Ghrut has naturally soothing, anti-inflammatory & bacteriostatic properties. Post operative pain, peristalsis & adhesiolysis with fibrous band formation were evaluated in two groups. Fast regaining of peristaltic movements & post operatively less pain was noted in Group-A – (i.e. Trial Group- Maha-Manjishtadi Ghrut) than Group – B (i.e. Control Group – liq. Paraffin). This study is being carried out since last 18 years. We also observed, no adverse effects or damage to patients for both groups. This is simple, safe & inexpensive techniques for abdominal surgery illucidated by Acharya Sushruta.

KEYWORDS: Abdominal surgery, Ayurveda, Intestinal lubrication, adhesiolysis & fibrous band formation.

INTRODUCTION

“उदरं पाटयित्वा चतुरंगुल प्रमाणमन्त्राणि निष्कृत्य निरीक्ष्यबद्धगुदस्यान्त्रप्रतिरोधकरमश्मानं वालं वाSपोह्य मलजातं वा ततो मधुसर्पिर्भ्यामभ्यज्यान्त्राणि यथास्थानं स्थापयित्वा बाह्यं व्रणमुदरस्य सीव्येत् I”

सु. चि. 14/17

Means – Laparotomy should be perform for intestinal obstruction, intestines take out from abdomen, keen observation should be done, find out the cause of obstruction what may be, resolve it, then finally honey or ghee (Ghrut) should applied externally on intestines & again place it at it's original place & abdominal incision should be sutured.

Here Acharya Sushruta has clearly mentioned in above version, the surgical treatment of intestinal obstruction in his Chikitsa Sthan 14/17.

Acharya Sushruta advocated the Ghrut (Ghee) or honey application to the intestines.

In the first stage of peritonitis, it is known as the stage of peritonism. In this stage, peritoneal acidic fluid becomes irritant, due to perforation & intra-luminal secretions. This fluid causes for laceration or erosions & inflamed serosal layer of intestines, which may cause for adhesiolysis, pain & late peristaltic movements in post operative period. Maha-Manjishtadi Ghrut have soothing, anti-inflammatory, bacteriostatic & healing properties naturally.

Methods of lubrication of intestines considered rarely in laparotomy cases in modern surgical era. But Ayurveda science doesn't fail. Acharya Sushruta thought deeply observe minutely & advocated the application of Ghrut or honey to intestines. Here we followed Ghrut application technique with Maha- Manjishtadi instead of plain ghrut. Since last 18 years of my surgical practice.

Cow's Ghrot is more compatible for human beings. Ghrot is not only natural lubricant but also soothing, bacteriostatic properties. Lubrication by ghrot persists for long period because it is not water soluble. So stayed for long time. This is definitely help in early regain of peristalsis, less pain in post operative period, no adhesiolysis in all kind of abdominal surgeries.

This is a extraluminal but intra abdominal snehan (Oleation.) Provides longtime oleation to organs.

There is high chances of trauma to intestines during abdominal surgery. Most of time, it would be iatrogenic. Some time, if patient have keloid tendency, then there is a high chances of intestinal adhesions or fibrous band formation in post operative period.

To avoid this, application of ghrot or honey is the solution for this. According to Ayurveda, formation of adhesions & fibrous bands are due to the dryness of the organ. Now a days, surgeons keep wrapped continuous wet to intestines during surgery is a good practice, but this is not enough. If we oleate the intestines after surgery, it is definitely more beneficial to the patient. Any raw surface, cut nerve ends, lacerated serosa may initiate for adhesions & fibrous band formation. So patient have sufferings from continuous mild pain in abdomen in post operative period after 1-2 years.

So, I made search to overcome this problem & I found above version in Sushruta Samhita. Since that day, I used Maha- Manjishtadi Ghrot (a medicated ghrot by Manjishtha, Haridra, Rakta- Chandan, etc.) as lubricant to avoid adhesions & fibrous band formation.

So I decided to do a comparative study between Maha-Manjishtadi Ghrot (Group-A i.e. Trial Group) & liquid Paraffin (Group-B i.e. Trial Group) since last 18 years.

As the study, go ahead & come to this day. I observed that early regain of peristalsis, less pain in immediately post operative period & no adhesions & fibrous band formation in Group- A i.e. Maha-Manjishtadi ghrot fast recovery, no any damage to patients alongwith proper antibiotics coverage.

In Group-B i.e. use of liquid Paraffin, there is late starting of peristaltic movements & more abdominal pain. Liquid Paraffin also known as Paraffinum liquidum or Russian mineral oil, is a very highly refined mineral

oil used in cosmetics and medicine. Liquid Paraffin is primarily used as pediatric laxative in medicine and is a popular treatment for constipation and encopresis. Because of its ease of titration, the drug is convenient to synthesize liquid Paraffin relieves dryness and leaves the skin soft and hydrated.

Liquid Paraffin oil is a mineral oil and is a transferent, colorless, odorless and tasteless oil, which is mainly composed of high boiling alkane derivatives.

AIMS AND OBJECTS

To compare the Maha-Manjishtadi ghrot (Trial Group - A) & liquid Paraffin (Control Group- B) as a anti-adhesiolytic agent in abdominal surgeries.

To observe time for regain of peristaltic movements.

METHODOLOGY

Material – Maha-Manjishtadi ghrot (Trial Group -A) & Liquid Paraffin (Control Group- B)

Methods

Total 30 - 30 patients has taken for this study.

- First 30 patients – Maha-Manjishtadi ghrot as a lubricant (Trial Group -A)
- Another 30 patients – Use of liquid Paraffin as a lubricant (Control Group- B)
- Male & Female patients were selected.
- Age group between 19 to 60 years of age.
- Sterilised mild warm liquid Paraffin & Maha-Manjishtadi ghrot directly applied over intestine externally to lubricate the intestines.

Inclusive criteria

Age – between 19 – 60 years.
Sex - Both male & female.
All types of intestinal surgeries – Intestinal Obstruction,

- Perforation (Peptic or intestinal)
- R.A.
- Appendicectomy
- Patient who undergo first time for laparotomy

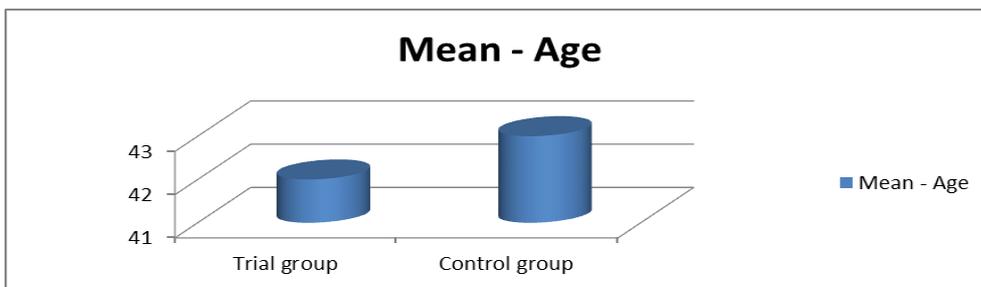
Exclusive criteria

- Patient with DM
- Abdominal surgeries for Oncho cases,
- Previously operated for abdominal surgeries,
- Keloid Tendency
- Koch's Abdomen

Data Analysis

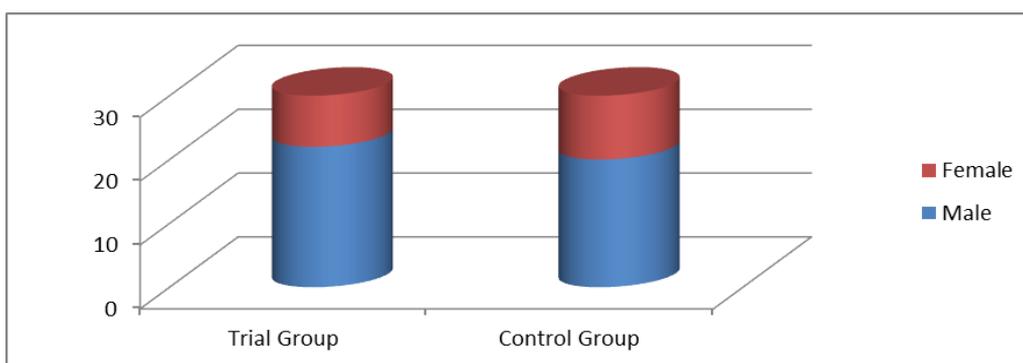
1) Age

	Mean Value
Maha- Manjishtadi Ghrot (Trial Group – A)	42 years
Liquid Paraffin (Control Group – B)	43 years



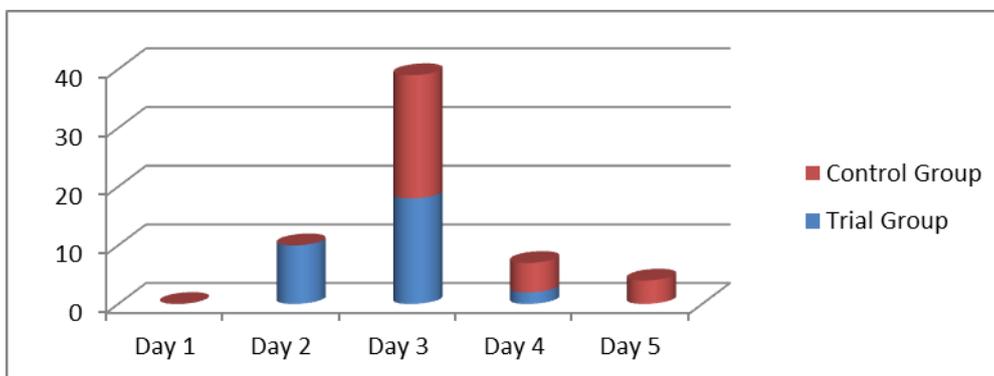
2) Sex

	Male	Female
Maha- Manjishtadi Ghrut (Trial Group – A)	22	8
Liquid Paraffin (Control Group – B)	20	10



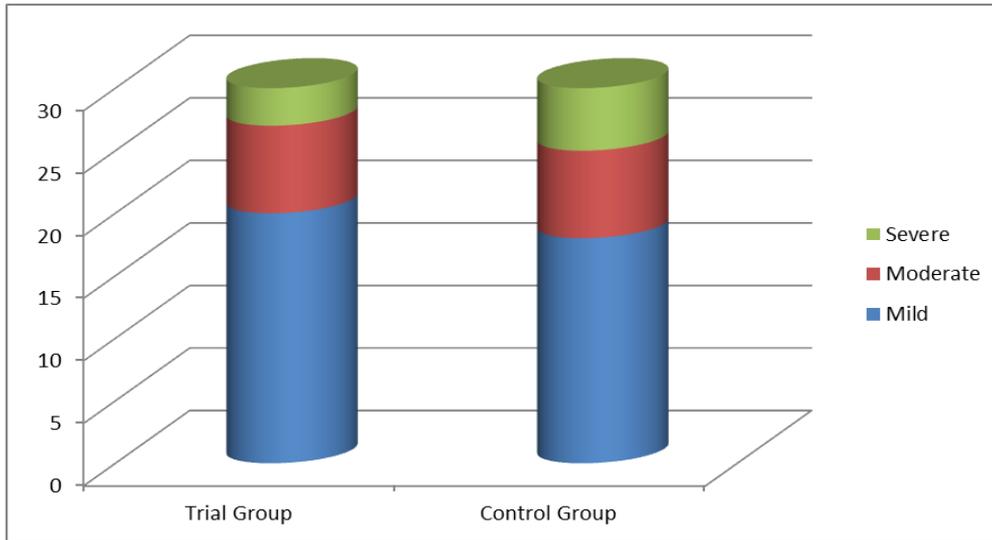
3) Post operative regain of Peristalsis in days

Days	Maha- Manjishtadi Ghrut (Trial Group – A)	Liquid Paraffin (Control Group – B)
1	-	-
2	10	-
3	18	21
4	2	5
5	-	4
Total	30	30



4) Post operative pain

	Maha- Manjishtadi Ghrut (Trial Group – A)	Liquid Paraffin (Control Group – B)
Mild	20	18
Moderate	7	7
Severe	3	5



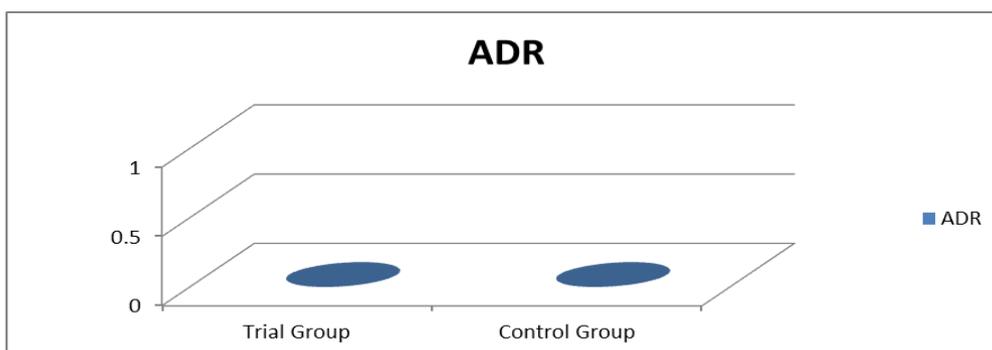
5) Review after post operative 2 years for adhesions & fibrous band

Maha- Manjishtadi Ghrut (Trial Group – A)	Liquid Paraffin (Control Group – B)
-	2



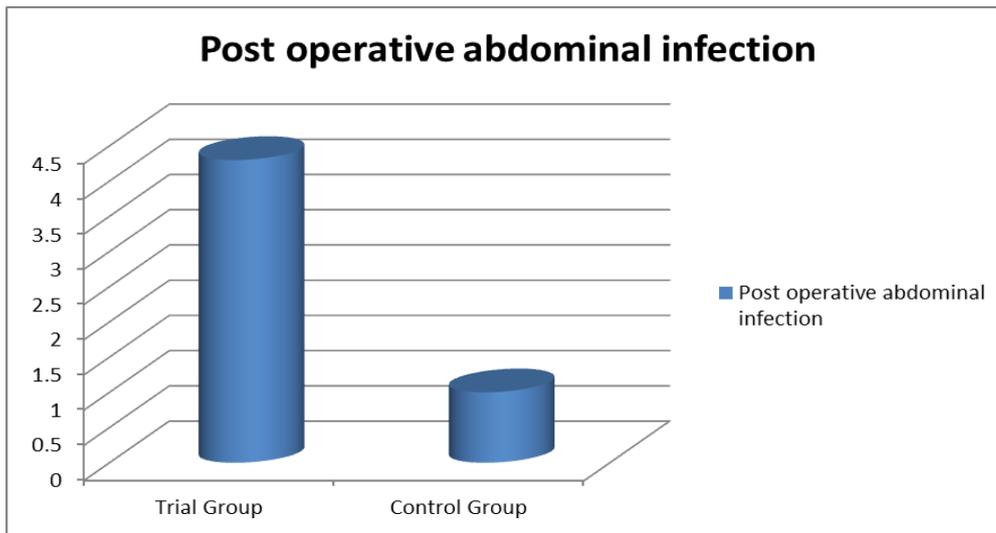
6) Any Adverse drug reaction

Maha- Manjishtadi Ghrut (Trial Group – A)	Liquid Paraffin (Control Group – B)
-	-



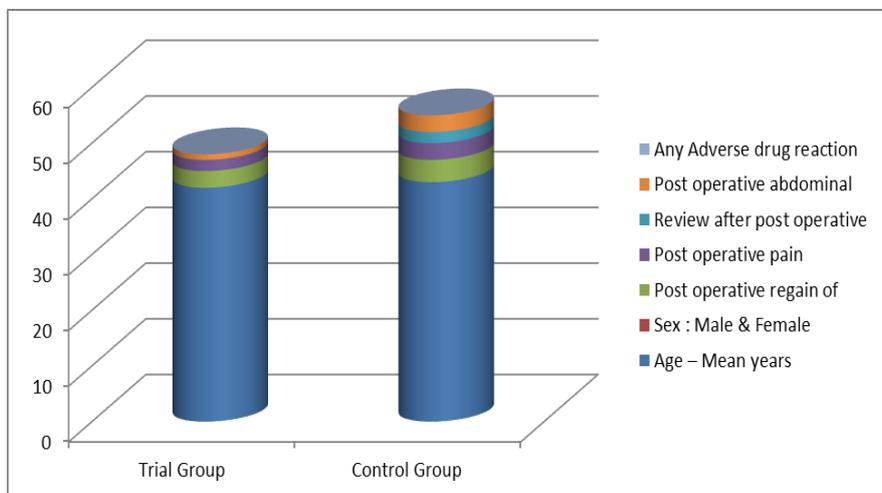
7) Post operative abdominal infection

Maha- Manjishtadi Ghrut (Trial Group – A)	Liquid Paraffin (Control Group – B)
1	3



8) Mater Table

	Maha- Manjishtadi Ghrut (Trial Group – A)	Liquid Paraffin (Control Group – B)
1) Age – Mean years	42	43
2) Sex : Male & Female	22 & 8	20 & 10
3) Post operative regain of Peristalsis in days	3	4
4) Post operative pain subsided in days	2	3
5) Review after post operative 2 years for adhesions & fibrous band	-	2
6) Post operative abdominal infection	1	3
7) Any Adverse drug reaction	-	-



OBSERVATION

Certainly patients are less suffered symptomatically from Group-A (i.e. Trial group) of Maha-Manjishtadi ghnut.

Lubrication & oleation of ghnut is persists for long time, which is definitely helpful in relieving pain & early regaining of peristalsis. As it has naturally property of

soothing & healing it avoids further complications like adhesiolysis & fibrous band formation. It is observed that patient are suffered less in pain, as ghrut has bacteriostatic property, there is less chances of post operative abdominal infections.

Age is approximately same in both group. Sex wise also near about same.

Post operative review for adhesiolysis & fibrous band formation are taken after 2 years of each patients. It clears that there is no evidence of adhesiolysis & fibrous band formation in Group –A patients that is our Trial Group of Maha-Manjishtadi ghrut where 2 patients are suffered from mild abdominal pain in post operative period in Group-B i.e. Control Group of liquid Paraffin. This Parameter evaluated clinically & confirmed by radiologically.

There is no any kind of ADR noted in post operative period.

Generally we can say, that there is more benefit to use Maha-Manjishtadi ghrut for lubrication & oleation of intestine during intestinal surgeries.

RESULT

Maha-Manjishtadi ghrut i.e. Group- A (Trial Group) is more beneficial in lubrication & oleation to avoid post operative adhesiolysis & fibrous band formation rather than Liquid Paraffin i.e. Group –B (Control Group).

CONCLUSION

The proposed technique is simple, safe & inexpensive method & early recovery in post operative intestinal surgery. Moreover, it helps early regain of peristalsis, less abdominal pain.

Further studies are needed to confirm this data.

Maha-Manjishtadi ghrut is more significant than liquid Paraffin for avoiding adhesiolysis & faster recovery in post operative period, also avoids less dryness of intestines in time consuming intestinal surgeries.

Data Availability

Data are available from the corresponding author.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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