



## Surgery

## HOT SITZ BATH OR SLOW COLD JET? A COMPARATIVE PROSPECTIVE STUDY OF POST OPERATIVE ANORECTAL SURGICAL CASES

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**ABSTRACT** **INTRODUCTION-** Application of heat in the form of hot water or steam or hot bricks wrapped in a wet towel is an age old practice since time immemorial. Application of cold water or ice is another alternative in tropical climates. Modern methods are warm water or ice cold tub bath of perineal area underwent operation. A comparative prospective analysis of perineal surgery cases done on 60 patients 30 in each group.

**MATERIAL AND METHODS-** total number of 60 cases ,30 in each group were selected matching procedure to procedure. Group A comprised of 30 cases who were asked to wash perineal wound with slow cold jet water, and group B were asked to wash the surgical wound while sitting in a warm water tub. Cases of fistulectomy, fissurectomy and haemorrhoidectomy were selected in equal number in each group and case to case comparison was done on parameters like- pain, bowel movements and time period taken for recovery. No change in the rest of standard protocol like –antibiotics, dressings etc, were done.

**RESULTS-** apart from a substantial number of patients(n-15) complained about the warm water tub procedure as cumbersome, no significant difference observed with other parameters like –pain, wound healing, bowel movement and duration of treatment found.

**CONCLUSION-** a slow jet cleansing of post-operative perineal surgery wound is equally effective in assisting wound healing, bowel movement and relief of pain. Hot water tub which is routine till today ; found cumbersome by many patients. Moreover , patient feels a breach of his privacy as he always needs the help of an assistant for it.

**KEYWORDS :** hot sitz, slow jet, post-operative, temperature, perineal wound.

**Introduction**

Practice of applying heat or cold fomentations to inflamed or injured areas is an age old practice since time immemorial<sup>1</sup>. A caressing hand along with physical temperature alterations was considered a wonderful healing remedy. With time only temperature change factor left out due to societal change for materialism and selfishness. Hot sitz bath originated in cold western world along with surgery and medication. An alternative i.e. Cold washing with a jet as is the practice in third world can be of immense value for cleansing and soothing, as temperatures are usually around normal body temperature<sup>2</sup>.

Nowadays most middle class and lower middle class people have ablation jet fixed to their toilet commodes , so no extra cost of any kind is needed. Moreover , patient after passing motion doesn't need to move to tub for washing his/her perineal area. He can wash his wound with cold jet while sitting on the commode only. This way his privacy is completely preserved. This study is specially designed to remove the cumbersome practice of sitting in hot water tub. Many patients do not understand the procedure properly and end up doing it wrong way and sometimes not doing at all. It's very easy and simple to describe cold jet procedure.

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**Exclusion criteria**

Age group- below 18 yrs and above 60 yrs.  
Patients with severe comorbidities like- uncontrolled diabetes, hypertension, renal or hepatic disease, coagulopathies, mental disorders and with no access to modern bathroom gadgets were excluded from the study.

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**Aims of study**

To compare the cumbersome age old practice of hot sitz bath with the readily available modern facility for perineal care. A proven fact will go a long way in simplifying the self perineal care after surgery.

**Material and method**

Total number of patients included were sixty. 30 in group A and 30 in group B. equal number of cases of particular surgery were matched with same number of same surgery in another group to avoid procedural discrepancy.

Group A patients were advised to wash their perineal wounds with

slow cold water jet as is available in their washrooms, after passing motion. A five minutes washing was recommended. Thereafter they would wipe the perineum dry and apply petroleum jelly-antibiotic ointment over the wound. Group B patients were asked to sit in a warm water tub without any antiseptic added to it for 15 minutes as is the standard procedure. On follow up of regular weekly basis in OPD all patients were asked about – pain; during or post ablation, convenience of procedure, frequency of bowel movements, social interaction or any other complaint. Antibiotics, anti-inflammatories and PPI were prescribed in same way in both groups. No laxatives were added in any form. Patients came for follow up regularly for 3 weeks and then asked to come only if there was some specific problem(s). subjective and objective observations were noted in specific proforma. Visual Analogue Scale(VAS) was applied for grading of pain.

**RESULTS**

Observations regarding intensity of pain during or immediately after ablation in both the groups noted and found out to be without any significant difference<sup>3,4</sup>. No extra pain killers needed in both the groups. No patient complained about constipation or increased frequency of stools despite the fact that they were not given any

**laxatives in both the groups.**

*Table-1 showing various observations in both the groups*

Parameters	Group A	Group B
<i>pain</i>	02/30	01/30
<i>Inconvenience of procedure</i>	00/30	15/30
<i>Delayed healing</i>	00/30	00/30
<i>Bowel activity</i>	Normal(2)	Normal(2)
<i>Return to normal activity</i>	>2 weeks	>2weeks

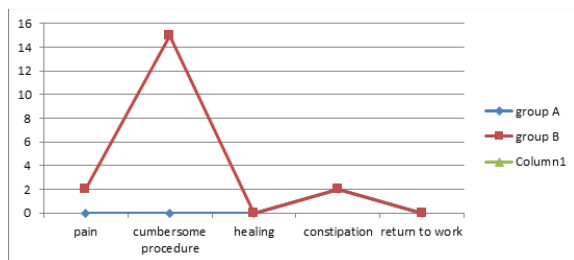
A highly significant difference found regarding execution of procedures. 50% cases (n-15) in group B complained spontaneously that, procuring and sitting in tub is cumbersome. They need an assistant for this and this way their privacy is invaded<sup>5</sup>. Moreover, the procedure was not effective as they used plastic tub which is used for washing clothes with less accommodative capacity. Moment patient sat into it ,the whole water came out making it a totally ineffective procedure<sup>6</sup>. One patient did not get the procedural details properly and kept passing motion in tub full of water. We came to know only when her attendant asked during their last visit that whether she still needs to pass motion in tub. This reveals the hidden truth about hot sitz bath.

Slow jet washing is easy to understand and application too is not difficult as patients are already used to it.

Apart from this major difference, no other significant difference found. Surprisingly, contrary to expectations no patient complained about the pain related to temperature difference<sup>8</sup>.

## DISCUSSION

A simple prospective study of post-operative perineal wound care in the form of cleansing after passing motion is done. Hot sitz bath v/s slow cold jet. Slow, because a high frequency jet wash will be painful and may cause injury irrespective of temperature of the water<sup>9,10</sup>. Moreover, temperature in south asian countries hardly goes below 200 except in higher altitudes<sup>11</sup>. Though the study was meticulously matched procedure to procedure to avoid surgical trauma discrepancy and age was matched decade wise, a big difference (n=15) noted in patient response regarding convenience of the procedure.



Graph-1 depicting relation of various results in both the groups

Most patients favoured cold jet over cumbersome hot water sitz bath. Insignificant(n=2) number noted some extra pain during jet wash. Might be due to excessive speed of jet as everyone is not perfect even for his/her daily routines<sup>12,13</sup>. There was no difference in speed of healing<sup>14,15,16</sup>. All wounds healed in both the groups in normal way. No patient complained of constipation or excessive bowel movements<sup>17</sup>.

Return to work was also within a normal period of 2 weeks<sup>18</sup>.

## CONCLUSION

Above study tells more about the psychological aspect of the patient than the physical one. Patients try to preserve their privacy at little extra cost and effort. And of course some extra inconvenience is never complained about as long he/she managed to preserve his/her integrity. A hot sitz bath needs an assistant to procure and physically help the patient for procedure. During this time patient is inappropriately dressed up and embarrassed by his state. If he can avoid all this by just switching on a jet in private; a little pain will never be complained about. As there is no difference in healing period and return to work hot or cold loses any significance. Anyone will do as far as convenience and privacy is concerned. Though looks a very simple work; a proved insignificance of temperature difference can make post-operative self care very simple and as effective as the age old traditional practice was.

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