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Original Research Article

Retrospective observational study to evaluate the concept of the warm versus regular room temperature seitz bath in perineal wound healing

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ABSTRACT

Background: Seitz bath in post-perineal surgery minimizes pain by reducing anal sphincter tone and also maintains hygiene. The aim and objective of this retrospective study is to compare the effect of warm versus regular room temperature seitz bath. The article clears the concept of seitz bath. The seitz bath gives psychological satisfaction of dressing to patient and helps in boosting the concept of hygiene in their mind.
Method: Study design for this study was comparative study of warm and room temperature seitz bath on 60 patients by convenience sampling operated for perineal diseases from 01 November 2019 to 30 March 2020 with written informed consent of patient and fulfilling ethical requirements at Rajiv Gandhi Medical College, Thane, Mumbai. Patients with immunocompromised status and comorbidities like diabetes, tuberculosis, HIV were excluded from study this was the criteria for the study.
Results: Out of 60 postoperative cases having perineal wounds, 35 (58.33%) patients opted for warm water seitz bath, while the rest 25 (41.66%) preferred regular room temperature seitz bath. In spite of a greater number of patients opting for warm seitz bath, wound recovery in terms of healing and wound discharge was almost similar in both the study groups. All the patients involved in the study were comfortable to resume their daily activities with significant reduction in pain by the end of first week irrespective of the choice of seitz bath they opted for.
Conclusion: The study concludes that symptomatic relief and wound recovery in the operated cases of perineal surgeries completely independent of the choice of seitz bath practiced.

Keywords: Seitz bath, Perineal wound healing, Duration of recovery, Hygiene

INTRODUCTION

There are very few study reports which emphasize on the actual role of seitz bath in perineal wound healing.[1] The literature search does not report any definitive guidelines about suitable temperature for hydrotherapy which will give maximum postoperative comfort and speed up the mechanism of wound healing. The main aim and objective of the study is to expose the psychology behind concept of seitz bath and real facts in the healing of perineal wounds and relief from the postoperative symptoms. The study fulfills the objectives that the postoperative reduction in pain, comfort of patient and duration of perineal wound healing is not based on the duration and type of seitz bath and the antiseptic solution used, but it is based on the tissue handling skills of the surgeon and the local hygiene maintained postoperatively.

METHODS

Study design

Study design was comparative study with written informed consent of patient.

Study place

Study place was Rajiv Gandhi Medical College, Mumbai, Maharashtra, India.

Study period

Study period was from 01 November 2019 to 30 March 2020.

Selection criteria of patients

Patients with comorbid conditions and immunocompromised medical disorders like diabetes, tuberculosis, HIV are excluded for study.

Convenience sampling method was used for comparative study on 60 patients comprising cases of haemorrhoids, fissure, perianal fistula, pilonidal sinus, perianal abscess and episiotomy wounds in the age group of 20 years to 50 years. The data were entered in Excel spreadsheet, percentage was calculated for categorical data. Data were presented as statistical diagrams, where relevant. As the patients were recruited in study, choice of seitz bath was given to them.

A set protocol of medical line of management was made for all the subjects in the form of 5 days course oral antibiotics, metronidazole, H2 blocker along with 2 to 3 days course of analgesic and ointment for local application.

All the patients were asked to practice seitz bath of their choice by warm water or regular room temperature seitz bath with added povidone iodine solution 3 to 4 times in a day till the wound heals completely and the patient gets the desired pain relief.

The patients were from middle to lower socioeconomic class. Out of 60 patients 35 patients (58.33%) opted for warm water seitz bath (Group A) and others (41.66%) (Group B) opted for regular room temperature seitz bath. The patients who opted geyser for warm seitz bath were from middle socioeconomic group who had easy accessibility to warm water. The patients from poor socioeconomic class mainly selected for regular room temperature seitz bath.

The patients were evaluated in view of reduction in postoperative pain till 7 days. In addition, 2 weeks follow up assessment about perineal itching, patient comfort in lifestyle in view of discharge from wound and significant reduction in size of the wound or healing status of wound was done.

RESULTS

It is patient's psychological behavioral pattern to opt or choose for fomentation by warm object to reduce pain. Moreover, there is a general tendency to believe that warm water has better cleansing property as compared to regular water. The 35 patients (58.33%) in the study group opted for warm water seitz bath as compared to 25 patients (41.66%) of regular water seitz bath from the second day of surgery onwards. The cases who opted for regular water seitz, were in poor socioeconomic background, due to easy and frequent availability of regular water as compared to warm water. All the 10 cases of episiotomy (figure 1) (16.66%) wounds repaired by gynaecologist opted warm water seitz only. After excluding the 10 cases of episiotomy, there was equal selection choice among warm and regular seitz bath cases. The choice of selection of seitz bath basically depends upon patient's discussion with past treated cases of similar disease, educational background, socioeconomic status in the society and treating surgeon's advice.

Figure 1: Progress of Episiotomy wound healing by warm water seitz bath (A And B).

Table 1: Distribution of cases (Group A).

Type of perineal surgeries	Number of cases
Hemorrhoids	5
Fissures in ano	5
Fistula in ano	5
Perineal abscess	5
Pilonidal sinus	5
Episiotomy	10

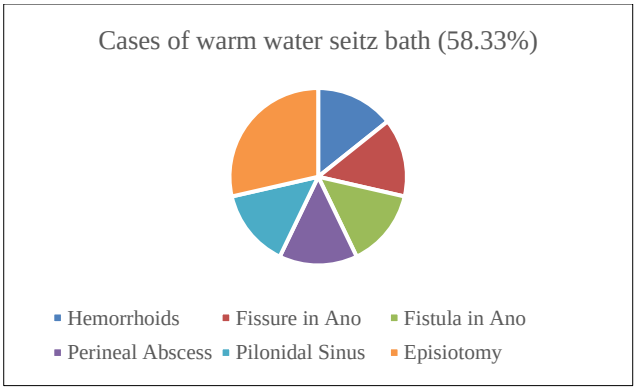

Figure 2: Cases of warm water seitz bath.

Table 2: Distribution of cases (Group B).

Type of perineal surgeries	Number of cases
Hemorrhoids	5
Fissure in ano	5
Fistula in ano	5
Perineal abscess	5
Pilonidal sinus	5

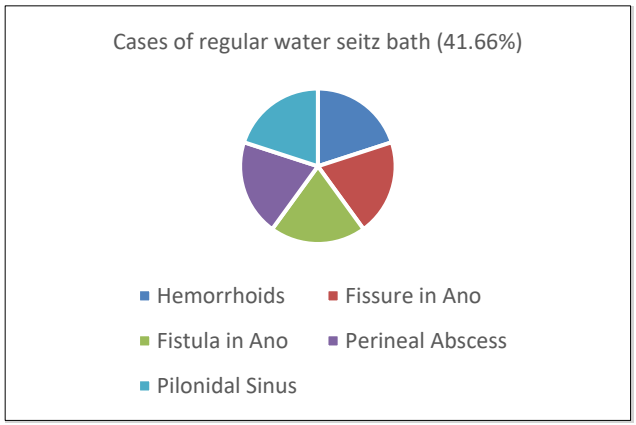

Figure 3: Cases of regular water seitz bath.

The patients were assessed for the amount of pain relief 48 hours after the surgery. All the patients were prescribed non-steroidal analgesic for 2 to 3 days. The fissure in ano cases were operated by fissurectomy and lateral sphincterotomy to minimize the pain around the operative site. Out of 10 operated cases 4 had severe postoperative pain and 6 had moderate pain in the initial 3 to 4 days of postoperative period.

All the 60 cases of perineal operated cases had total pain relief, comfortable and without any analgesic within a week period. The severity and duration of postoperative pain also depend upon the stage in which the patient presented with that particular disease and the extent of tissue dissection during the surgery.

There was no deterioration in the progress of wound healing in any of the 60 cases who were maintaining adequate hygiene of the local wound by seitz bath of any type. (Figure 4 and 5) The patients were able to get seitz bath 3 to 4 times a day depending upon the availability of water at home and presence of family members at home. It was also noticed that the patients used to reduce the number of seitz bath in a day usually after a period of 2 weeks on absolute reduction in the symptoms of pain and the amount of discharge.

All the 30 patients operated for pilonidal sinus, perineal abscess and perianal fistulectomy were found to have significant discomfort in the initial 2 to 3 weeks due to discharge from the wounds. But all the patients got satisfactory results with respect to the reduction in the amount of smell and discharge from wound after a period of 2 to 3 weeks. Adequate wound healing was achieved over a period of 8 to 10 weeks (Figure 6) in all the 30 patients of fistulectomy, perineal abscess and pilonidal sinus excision depending upon the size of the tissue defect and severity of infection.

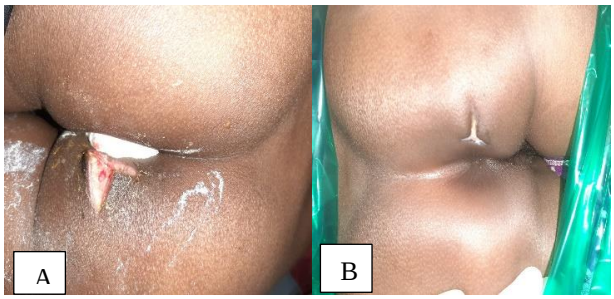

Figure 4: Progress of wound healing in an operated case of perineal abscess with practice of regular water seitz bath (A And B).

Figure 5: Progress of wound healing in an operated case of haemorrhoidectomy with practice of regular water seitz bath (A And B).

Figure 6: Progress of wound healing in an operated case of perineal fistula with practice of regular water seitz bath (A And B).

DISCUSSION

There are very few case study published[1] in the current literature about the efficacy of seitz bath in view of reduction of actual pain and speed of wound healing and overall comfort of the patient. There is no conclusive evidence[2] to support that a particular type of hydrotherapy accelerates wound healing, healing of stretched skeletal muscle and reduces pain at operative

site. It is reported that there is no difference in efficacy of result of seitz bath by cold or hot seitz bath.

There is no definitive protocol or guidelines reported with evidence about the type of hydrotherapy with required temperature, its duration and frequency of body part immersion.[3,4] There are no publication suggesting the usage of any specific antiseptic solution speeds up the process of wound healing. There is no documentary evidence stating the practice of any particular type of seitz bath accelerates the wound healing and its effectiveness in the pain relief.

It is reported that the cold-water immersion blunts the sensory stimulus, thus significantly reducing the pain and delays increment in circulating testosterone and cytokines post resistance exercise.[5] The warm water exercise on the contrary appears to stimulate and accumulate more immune cells compared to cold water.[6]

The literature study shows that clean tap water is a cost-effective alternative modality of wound irrigation or cleansing agent as compared to normal saline[7]. The tap water is easily available in adequate amount, cost effective and there is no deterioration in the status of the wound healing on its use for wound irrigation. There is no difference in the rate of infection of episiotomy wounds or open wound wash by water with variable temperature or any antiseptic solution.[8] Shower by plain water is an effective mode of improving personal hygiene and population health.[9]

The limitation of the study was of the analysis being restricted to one Institution, which further needs a detailed multicentric study. The study is of very short duration due to spread of corona pandemic in the country. The convenience sampling was done in view of small sample size.

CONCLUSION

The progress of wound healing and postoperative comfort in operated perineal surgical wound does not based on type of seitz bath and the antiseptic solution used for seitz bath. But it is found that the frequency of seitz bath and subsequent improvement in the local hygiene definitely give comfort to the patient and speeds up wound healing. The choice of seitz bath which patient prefer is basically based on psychological impression created in the mind of patient, previous experience, socioeconomic status and consultant advice.

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