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Original Research Article

An Evaluation of the Warm Seitz Bath Vs a Conventional Room Temperature Seitz Bath in Perineal Wound Healing: Retrospective Observational Study

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Abstract

Aim: The aim and objective of this retrospective study is to compare the effect of warm versus regular room temperature seitz bath.

Methods: This was a clinical retrospectively study conducted in the Department of General Surgery, Government Medical College, and Hospital, Bettiah, Bihar, India for 15 months. Total 85 patients comprising cases of haemorrhoids, fissure, perianal fistula, pilonidal sinus, perianal abscess and episiotomy wounds in the age group of 18 years to 55 years were include in this study. A set protocol of medical line of management was made for all the patients in the form of 5 days course oral antibiotics, metronidazole, H2 blocker along with 3 to 5 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.

Results: out of 85 patients, 50 patients (58.82%) in the study group opted for warm water seitz bath as compared to 35 patients (41.18%) of regular water seitz bath from the 3rd day of surgery onwards. All the 35 patients operated for pilonidal sinus, perineal abscess and perianal fistulectomy were found to have significant discomfort in the initial 15days to 21 days 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 15 days to 21. Adequate wound healing was achieved over a period of 8 to 10 weeks in all the patients of fistulectomy, perineal abscess and pilonidal sinus excision depending upon the size of the tissue defect and severity of infection.

Conclusion: The frequency of seitz bath and subsequent improvement in the local hygiene definitely give comfort to the patient and speeds up wound healing.

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

Introduction

Anorectal disorders include a diverse group of pathological disorders that generate significant patient discomfort and disability[1] Despite the fact that the exact nature and cause of the conditions is

known, the standard conservative treatment options are still a matter of debate. Anal Fissure is a linear ulcer in the squamous epithelium of the anal canal located just distal to the dentate line occurring usually in the posterior midline. It causes severe pain with spasm of the anal canal due to hypertonia of the internal anal sphincter.[2] Pain that is related to anorectal disorders could be relieved with the use of a Sitz bath, a relatively easy procedure that involves filling a bath tub with warm water[3] An additive, such as salt, may be used occasionally [4]The clinician usually orders a Sitz bath to be carried out one-to-four times per day, plus after defecation. Generally, the patients are instructed to immerse their perineum and lower pelvis in a tub of warm water with or without additives for 20–30 min. Although the preparation of a Sitz bath is easy, some patients might feel that Sitz baths are troublesome, rather than a necessity, to their treatment. This might be due to the underlying medical condition that is aggravated by pain and exhaustion. The Sitz bath is a relatively safe procedure. However, potential complications have been reported, such as infection and perineal burn[5,6] The spread of infection was due to the sharing of bath tubs between patients[6] Another study reported an incident where a patient developed a perineal scald burn due to impaired sensation post spinal surgery[5] Besides anorectal disorders, the Sitz bath is used widely to relieve perineal pain for post-partum women. Studies have reported that a cold Sitz bath was more effective in reducing post episiotomy edema and perineal pain, in comparison with a warm Sitz bath[7,8] It also has been reported that a cold Sitz bath can lead to vasoconstriction, local anesthesia, and a decrease in muscle irritability and spasm[6] However, a warm Sitz bath is more commonly used for the treatment for anorectal disorders[9,10] Although the effect of using a Sitz bath for anorectal disorders has not been established yet, clinicians still prescribe Sitz baths for patients with anorectal disorders. From clinical observation, the clinical impact of the Sitz bath has been unclear. Patients with anorectal disorders often have improved and their wounds were healed, regardless of their adherence to a strict Sitz bath regimen. No analysis has been conducted to examine the evidence with a systematic approach. The aim and objective of this retrospective study is to compare the effect of warm versus regular room temperature seitz bath.

Material and methods

This was a clinical retrospectively study conducted in the Department of General Surgery, Government Medical College, and Hospital, Bettiah, Bihar, India for 15 months. after taking the approval of the protocol review committee and institutional ethics committee. The technique, risks, benefits, results and associated complications of the procedure were discussed with all patients. Total 85 patients comprising cases of haemorrhoids, fissure, perianal fistula, pilonidal sinus, perianal abscess and episiotomy wounds in the age group of 18 years to 55 years were include in this study. Patients with comorbid conditions and immunocompromised medical disorders like diabetes, tuberculosis, HIV are excluded for study.A set protocol of medical line of management was made for all the patients in the form of 5 days course oral antibiotics, metronidazole, H2 blocker along with 3 to 5 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 85 patients 50 patients (58.82%) opted for warm water seitz bath (Group A) and others 35(41.18%) (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 10 days. In addition, 15days 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 50 patients (58.82%) in the study group opted for warm water seitz bath as compared to 35 patients (41.18%) of regular water seitz bath from the 3rd 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 15 cases of episiotomy (17.65%) wounds repaired by gynaecologist opted warm water seitz only. After excluding the 15 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

Table 1: Distribution of cases (Group A)

Type of perineal surgeries	Number of cases=50
Hemorrhoids	7
Fissures in ano	7
Fistula in ano	7
Perineal abscess	7
Pilonidal sinus	7
Episiotomy	15

Table 2: Distribution of cases (Group B)

Type of perineal surgeries	Number of cases=35
Hemorrhoids	7
Fissure in ano	7
Fistula in ano	7
Perineal abscess	7
Pilonidal sinus	7

The patients were assessed for the amount of pain relief 72 hours after the surgery. All the patients were prescribed non-steroidal analgesic for 3 to 5 days. The fissure in ano cases were operated by fissurectomy and lateral sphincterotomy to minimize the pain around the operative site. Out of 15 operated cases 5 had severe postoperative pain and 10 had moderate pain in the initial 3 to 5 days of postoperative period. All the 85 cases of perineal operated cases had total pain relief, comfortable and without any analgesic within a 10 days 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 85 cases who were maintaining adequate hygiene of the local wound by seitz bath of any type. The patients were able to get seitz bath 3 to 5 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 15 days on absolute reduction in the symptoms of pain and the amount of discharge.

All the 35 patients operated for pilonidal sinus, perineal abscess and perianal fistulectomy were found to have significant discomfort in the initial 15days to 21 days 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 15 days to 21. Adequate wound healing was achieved over a period of 8 to 10 weeks in all the patients of fistulectomy, perineal abscess and pilonidal sinus excision depending upon the size of the tissue defect and severity of infection.

Discussion

Some case study published 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.[6]There is no conclusive evidence to support that a particular type of hydrotherapy accelerates wound healing, healing of stretched skeletal muscle and reduces pain at operative site[11] 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[12,13] 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[14]The warm water exercise on the contrary appears to stimulate and accumulate more immune cells compared to cold water[15] Some study shows that clean tap water is a cost-effective alternative modality of wound irrigation or cleansing agent as compared to normal saline[16]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.[17] Shower by plain water is an effective mode of improving personal hygiene and population health.[18]

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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