Case Report

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Management of Post Burn Gluteal Pouching

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Abstract

Injuries to the buttocks and the perineal region is a comparatively rare presentation with thermal burns. The patients present with chronic constipation, difficulty in hip abduction and restriction of sexual functions. Complications such as gluteal pouching with hooding of the rectum have also been described. Release and reconstruction of the defect is a challenge with an extra dimension to the contracture, which on release creates a raw area much bigger than expected. Reconstruction of the gluteal fold and cleft is another challenge and requires careful planning as contracture of the gluteal fold may result in anal verge being pulled up. We discuss management of a post burn contracture of the gluteal fold in this article.

Keywords: Post Burn Contracture; Perineal Contracture; Buttock Contracture; Gluteal Pouching.

Introduction

Deep partial and full-thickness burns of the joints and flexural surfaces often lead to contractures. Perineal burns are relatively rare as the perineum is generally protected from exposure to burn agents [1]. Injuries to the buttocks and perineum account for approximately 13% of all thermal burn injuries [2]. More often than not, perineal burns occur in the context of major burns. They may however occur from falling onto a flame or burn agent and landing on the buttock as in the reported case discussed hereafter. Burns to the buttocks in particular can cause the fusion of gluteal folds creating a pouch around to the rectum [2].

A band contracture of the gluteal cleft when released has an extra dimension and thus the raw area created after release is more than expected, thus planning a reconstruction following release is a challenge and needs proper planning. This article discusses the management of a post burn contracture of the gluteal cleft with pouching.

Case Details

A 3 year old male child was brought to JIPMER Tertiary Burn Centre (JTBC) with a history of a band of scar tissue holding his buttocks togetherand unable to pass stools freely of nine months duration. He had history of accidental thermal burn injury to his buttocks when accidently sat on a burning coal nine months back, following which he was treated on out patient basis with regular dressings at a local hospital. The burn woundshealed by secondary intention over three months with the scarring and contracture. On examination, the thigh abduction was limited to 40 degrees. He had a band of hypertrophic post scar tissue of size 7 x 4 cm bridging the buttocks together, located around 2 cm away from the anal verge and covering it (Figure 1). The patient was operated by Radiofrequency (RF) assisted incision release under general anesthesia. Post release the defect was rhomboid in shape and a local Limberg flap was done (Figure 2). Post-operative period (Figure 3) was uneventful with no complications. On follow up at 1 month, the wound healed satisfactorily with healthy flap covers no residual or recontracture with normal passage of stool.

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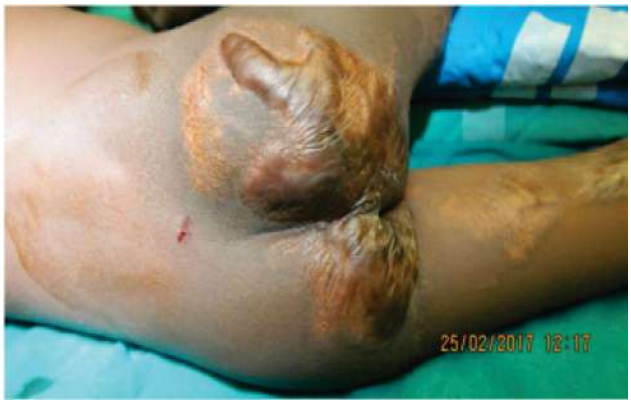

Fig. 1: Preoperative photograph showing contracture band with pouching

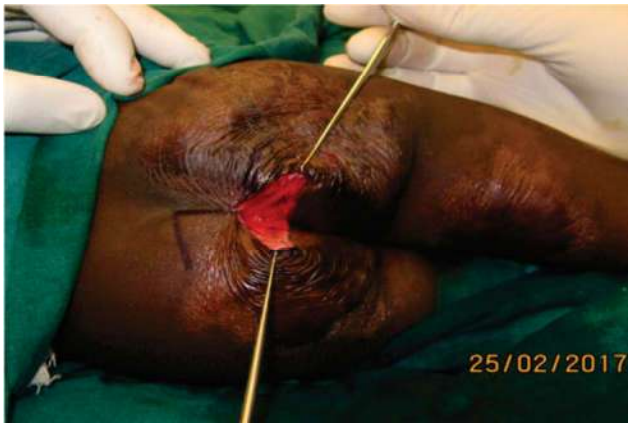

Fig. 2: Intraoperative photographs showing rhomboid defect with Limberg Flap marking

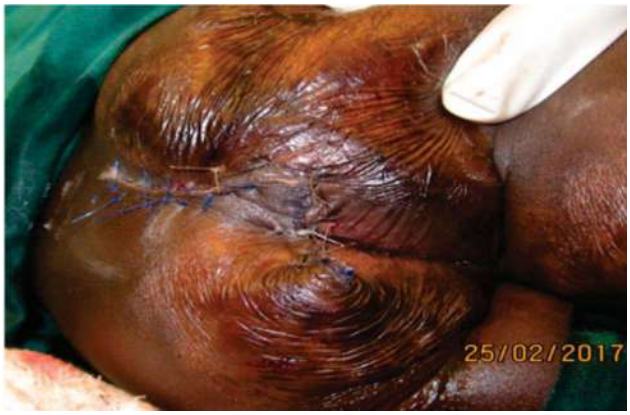

Fig. 3: Post operative photo with Limberg Flap

Discussion

Genital and perineal burns are rare but can be debilitating. The patients normally ignore Perineal burn contractures, which can be unsightly, as they are well hidden by clothes [3]. However, these perineal burn contractures can cause a functional disability. The thick scar bands across the symphysis pubis behind the genitals can bind the thighs together, leading to impairment of the movement of the hip joints, especially abduction. Due to this limitation in movement, walking, sitting, urination, defecation, and sexual intercourse become difficult. Squatting, a common posture adopted in India for urination and defecation, becomes extremely difficult [4,5].

Extensive raw areas are produced on release of the contractures. While resurfacing, it is desirable to provide a full thickness skin cover over the symphysis pubis as it breaks the continuity of the skin grafted area. However, this may not be possible when the abdominal skin is deeply scarred. Moreover, skin grafts contract and graft contraction can lead to disastrous functional disabilities in the perineum.

Thus the reconstruction following the release of this contracture is challenging and needs to be planned carefully. It cannot be emphasized more that the residual raw area of true defect is always more than apparent and this must be kept in mind. A careful examination and distance from the anal verge is also necessary to decide the management strategy. A stenotic anus with chronic constipation is a frequently associated problem in these cases [6]. Local flap cover to cover the defect brings healthy tissue from surrounding areas in the gluteal cleft. It avoids a scar contracture associated by a skin graft and also breaks a straight-line scar.

It is suggested that gluteal cleft contractures need to be managed by release and covering the defects using healthy local tissues keeping the distance from anal verge in mind. Prevention of a contracture in the perineal & genital region are of utmost importance [7]. A simple regular dressing with a barrier and avoiding contact of two raw surfaces can prevent it.

References

1. Sawhey C.P. Management of burn contractures of the perineum. PlastReconstrSurg 1983;72:837-42.
2. Alghanem AA, McCauley RL, Robson MC. Gluteal pouching: A complication of perineal burn scar contracture. A case report. J Burn Care Rehabil 1990;11:137–9.
3. Angel C, Shu T, French D, Orihuela E, Lukefahr J, Herndon D N. Genital and perineal burns in children: 10 years of experience at a major burn center. J Pediatr Surg 2002;37:99–103.
4. Thakur JS, Chauhan CGS, Diwana VK, Thakur A. Extrinsic post-burn perianal contracture leading to sub-acute intestinal obstruction: A case report. Cases Journal. 2008;1:117.
5. Michielsen D, Van Hee R, Neetens C, LaFaire C, Peeters R. Burns to the genitalia and the perineum. J. Urol. 1998;159:418–9.
6. Alghanem AA, McCauley RL, Robson MC, Rutan RL, Herndon DN. Management of pediatric perineal and genital burns: Twenty-year review. J Burn Care Rehabil 1990;11:308–11.
7. Pisarski G P, Greenhalgh D G, Warden G D. The management of perineal contractures in children with burns. J Burn Care Rehabil 1994;15:256–9.