

A Reflection: Missed “Buttonhole” Tear after Non-rotational Forceps Delivery with Episiotomy

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Objective

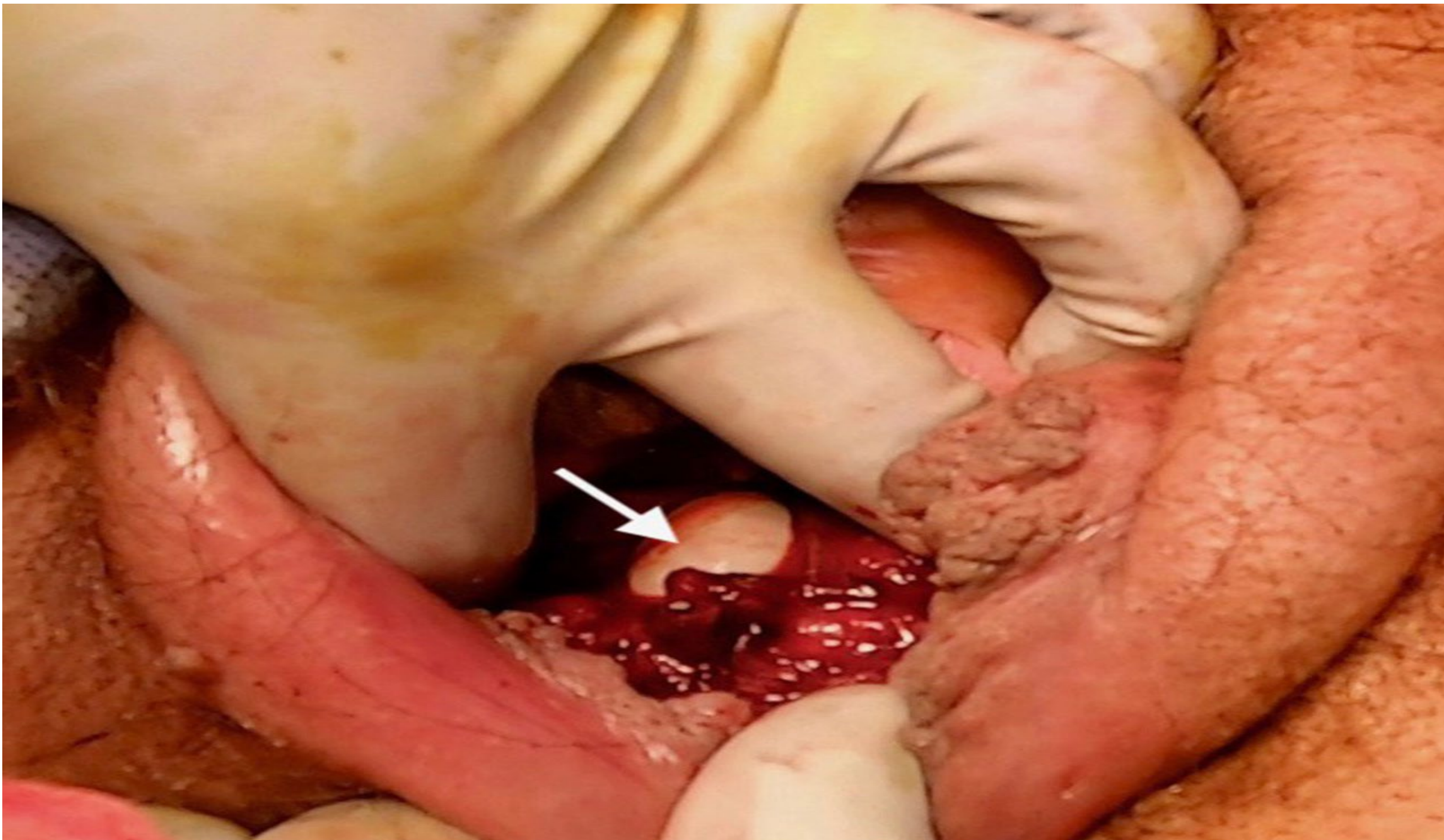
We aimed to critically appraise clinical practice in non-rotational forceps delivery with mediolateral episiotomy.

Design

This is retrospective critical analysis designed to share reflective practice after a missed “buttonhole” tear that occurred subsequent to successful trial of non- rotational forceps delivery with right mediolateral episiotomy in the operation theatre under regional anesthesia.

What is a buttonhole Tear

A rectal buttonhole tear is an isolated tear of the anal mucosa or rectal mucosa & vagina but without involving the anal sphincter. Buttonhole is a rare tear & its true incidence is not known. It is not part of widely accepted classification of perineal tears.



Method

A Retrospective description was used anonymously to reflect upon details of the index case under the following headings: What happened, Learning points, Reflection & Action plan.

Results

Missed “buttonhole” tear after non-rotational forceps vaginal delivery is a rare entity in operative obstetrics. Missed “buttonhole” tear resulted in pain & vaginal discharge creating profound mental & physical discomfort to the index case during postpartum period.

A systematic approach was adopted demonstrating positive learning from this incidence. Principles of adult learning methodology were demonstrated reflecting insight of clinical governance and duty of candor. An appropriate pastoral support to second victim (Trainee) was provided in a professional manner. This constructive behavior encouraged to reflect non hierarchal culture at our set up.

Although there have been missed opportunities to diagnose “buttonhole” tear despite examination by two senior obstetricians however it was ultimately diagnosed & repaired without long term residual effect.

General principles for repair of Isolated buttonhole rectal Tears

Step	Principle
Surgeon	Repair by an appropriately trained clinician or by a trainee under supervision. As these injuries are so rare, a consultant should always be present.
Colorectal opinion	If the obstetric consultant is not confident it should be performed jointly with a colorectal surgeon.
Setting	Should always be sought for high rectal buttonhole tears (> 7 cm from the anal verge or if there is faecal soiling). A covering colostomy is rarely performed but may be considered in these scenarios. The risks and benefits of colostomy should be discussed with the patient.
Examination	Repair should take place in an operating theatre, under regional or general anaesthesia, with good lighting and appropriate instruments.
Prior to repair	A systematic digital vaginal and rectal examination must be performed to exclude any additional injuries and in particular an OASI should be excluded (Fig. 2).
General principle	The proximal and distal end of the rectal laceration must be clearly identifiable before suturing. The three layers for repair (rectal mucosa, rectovaginal fascia and vaginal skin) must be identified (Fig. 3).
Repair of rectal mucosa	Figure-of-eight sutures should be avoided because they are haemostatic in nature and may cause tissue ischaemia. Using a transvaginal approach, a non-locking continuous 3–0 polyglactin suture, with knots on the vaginal side of the rectal tear.
Repair of rectovaginal fascia	Perform a rectal examination to confirm that good apposition of the mucosa is obtained.
Repair of vaginal skin	Using an interrupted mattress technique using a 2–0 or 3–0 PDS sutures.
Following repair	Continuous non-locking 2–0 Vicryl sutures.
Complex tears	A digital vaginal and rectal examinations should be performed to ensure complete closure of the tear.
Antibiotics	If the distal end of the anorectal mucosal tear is not clearly identifiable, it will be the only indication to create a 4th-degree tear by cutting through the intact anal sphincters and anorectal mucosa to meet up with the distal end of the rectal buttonhole tear. Repair is then performed as described for a 4th-degree tear [4].
Laxatives	Intra-operative broad-spectrum intravenous antibiotics should be given and continued as per local protocol. Our practice is to continue oral antibiotics for at least 3 days.
Follow-up	A stool softener, such as Lactulose, should be prescribed for at least 10 days.
	Arranged in 6 weeks or earlier if indicated.

Conclusion

1- Timely examination of perineum before & after repair of perineal trauma should be a standard practice after any instrumental intervention by the primary attending obstetrician.

2- The authors believe that use of index finger to perform rectal examination to rule out “buttonhole” tears of rectal mucosa should be routinely performed along with pill rolling technique: using thumb in the vagina & index finger in the rectum to palpate the anal sphincter complex before & after repair of perineal trauma.

3- Self-reflection in difficult clinical situations is an effective way of adult learning methodology especially when outcome is unexpected.

Recommendation

The authors would like to recommend to give buttonhole tears a separate classification probably like 5th degree tear .

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