Genital trauma in girls

Main Author: Brigid Hayden
On behalf of British Society for Paediatric & Adolescent Gynaecology

Modified by the Guidelines Group and members of the BritSPAG Committee

1. INTRODUCTION

Obstetricians & Gynaecologists are familiar with examination findings in adult women, which may include evidence of genital tract trauma. The assessment of young girls is less familiar territory.

Concerns exist in relation to the aetiology of the findings, as well as regarding appropriate management strategies.

It is always advisable for the girl to be seen and assessed by a senior Paediatrician, who will oversee her ongoing care. Input from a Gynaecologist should be sought, and possibly also from a Paediatric Surgeon.

All injured children should be initially assessed and managed according to local paediatric resuscitation/ APLS principles.

This guideline seeks to provide a succinct, pragmatic approach to the clinically stable female child with a genital injury.

2. GENITAL EXAMINATION OF LITTLE GIRLS

The environment in which the examination takes place is very important.
It should be in a private area, for example a cubicle in A&E, in the presence of the child's carer and a trained children's nurse.

Verbal consent should be obtained from the carer, and from the child if old enough to understand.

The supine 'frog leg' position is generally used, with the child on the examination couch, or on the carer's lap.

The prone 'knee chest' position may sometimes be used, and can help in visualising the posterior aspect of the hymen.

Gentle labial separation is needed to display the introitus and hymenal opening.

Internal examination (digital or instrumental) is rarely carried out in prepubertal girls.

Examination under anaesthetic should be considered if crucial to making a diagnosis or to providing definitive treatment.

3. PRESENTATION OF GENITAL INJURY IN GIRLS

3.1 Straddle injury: Bruising +/- laceration of the vulva and perineum

There is usually a clear history, and the injury may well have been witnessed.

Most straddle injuries lead to asymmetry in the pattern of trauma, unless the object fallen on is wide (such as the side of a bath). If the object fallen upon is narrow (e.g. gate or cross bar of a bicycle), symmetrical trauma may raise suspicion of abuse. Consider whether the pattern of injury corresponds with the stated mechanism of that injury.

If there is a bruise and/or a closed haematoma which is not enlarging, it may be managed conservatively.

Consider overnight observation, and possibly Haemoglobin estimation, if it is a large haematoma in a small child. The child should receive regular oral analgesia.

If a laceration is present, it may need suturing. Small labial tears and vulval lacerations without active bleeding may be managed conservatively. Where there is active bleeding and/or a large or deep laceration, suturing will be required. Pressure should be applied to the area while awaiting surgical intervention.

Suturing under LA is seldom tolerated in children, and the application of Steristrips is fruitless, as they come adrift on micturition.

GA is usually required, or alternatively intravenous sedation may be considered. The situation should be discussed with a Consultant Anaesthetist.

3.2 **Labial tear**

Where a labium minorum is partially avulsed, suturing is required to ensure appropriate healing.

3.3 **Penetrating injury**

Vulval/perineal injury with associated pelvic trauma may have occurred from a road traffic accident (RTA) or a serious fall. Abuse should always be considered.
Senior Paediatric and A&E input is required.
The child may need to be stabilised and transferred to another hospital, depending on the facilities available locally.

Urethral trauma is rare in girls due to the anatomy of the urethra, and is most often associated with high impact injuries.
Clues to a urethral injury include vaginal bleeding, blood from the external urinary meatus (if it can be seen), haematuria, or an inability to void despite good analgesia. Examination under anaesthesia (EUA) is recommended with input from a paediatric surgeon or paediatric urologist; a urethral catheter may be placed under direct vision, or a suprapubic catheter +/- on-table cystogram / urography may be required.
Have a high index of suspicion for associated vaginal and bladder injuries.

Rectal injuries are more commonly seen with a penetrating injury, particularly those which take a more posterior course. However, a rectal injury can also occur with high impact mechanisms of injury.
Clues to a rectal injury include blood at the anal verge, or perianal haematoma.

If the injury is high, and the peritoneum has been breached, there will be abdominal pain that is not explained by any other injury or intercurrent illness.
When a rectal injury is suspected, do not perform a PR or attempt proctoscopy on an awake child. Proceed to EUA with a paediatric surgeon. A temporary colostomy may be required.

Antibiotics should be considered in the presence of a large haematoma, a suspected urethral or rectal injury or a potentially contaminated wound.

3.4 **Fourchette tear**

It is important to consider penetration or attempted penetration (with fingers, penis or an instrument) in the differential diagnosis.

3.5 **Foreign bodies**

Foreign bodies may be introduced into the vagina by the child herself, or by an adult as a form of sexual abuse.

The presentation is usually a foul-smelling, and/or blood-stained discharge.

Occasionally, the foreign body may have damaged the genital tissues, giving the appearance of genital trauma.

4. SAFEGUARDING ISSUES

Child protection is an integral part of medical care, and sexual abuse should always be considered in a child with genital trauma.

There are very few pathognomonic signs on which to make a diagnosis of abuse.

An assessment must be made in any injured child as to the aetiology of the injury, building up a picture of the whole situation.

Factors which contribute to this assessment are:

- Who is attending with the child, and how concerned do they seem? Abusers frequently groom and/or threaten children, obscuring the true aetiology of the injury.

- How plausible is the history?
  Does the mode of described injury fit with the clinical findings?

- How does the child seem?
  She may be frightened and in pain, of course, but may also be withdrawn, wary or apathetic, which would raise concern. Likewise, the child may appear inappropriately confident and chatty.

- How well cared-for does the child appear?
  Sexual abuse is often associated with other types of abuse (physical abuse, emotional abuse or neglect).

An injured child should be seen by a senior paediatrician, who will be best placed to consider all aspects of care, including child protection procedures.

If sexual abuse is suspected, the paediatrician will initiate interagency working, seeking input from a professional experienced in this field.
That person will carry out examination and take samples in line with the forensic principle of 'chain of evidence', to ensure that they are admissible as evidence in court.

A Sexual Abuse Referral Centre, if accessible locally, is an invaluable resource in such situations.

5. DOCUMENTATION

It is very important to document clearly the history and clinical findings, including a diagram of the affected area.

A checklist format may be useful. (See Appendix)

References

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Appendix: Genital Trauma in girls' Checklist

Type of injury	
Mechanism of injury	
General appearance and attitude of child	
Diagram of injury/injuries	
Name of person/people giving history of events leading to injury	
Witnesses to the injury	
In your opinion do the histories obtained correspond with one another?	
In your opinion, do the injury/injuries correspond with the proposed mechanism of injury?	
Has the patient been seen by a senior paediatrician?	
Are samples required to be obtained as part of a "chain of evidence"?	
Is a safeguarding referral required	
Is referral to SARC required?	
Treatment plan:-	