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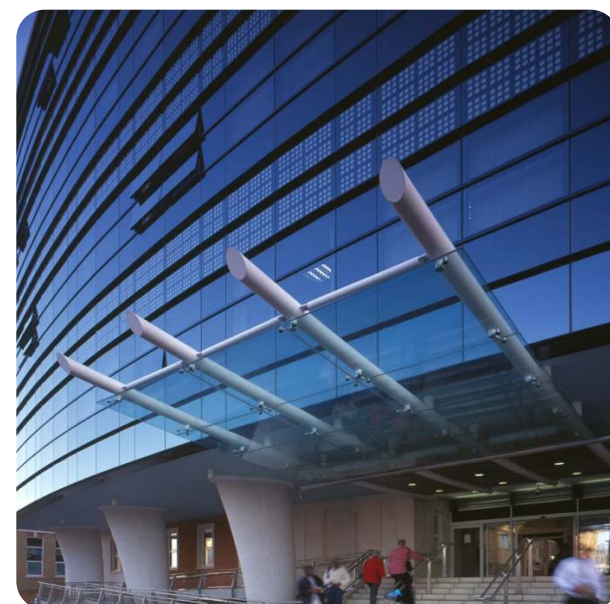
**Fourth Joint Conference** *of the British HIV Association with the British Association for Sexual Health and HIV*  
**Edinburgh International Conference Centre ♦ 17-20 April 2018**

Review of the presentation,  
management & outcome of 6  
cases of genital Gonorrhoea in 6  
pre-pubertal girls referred to a  
London SARC 2016-17

**Dr Rebecca Adlington**

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KING'S HEALTH PARTNERS

# Disclosures

None

- Genital Gonorrhoea (GC) infection is rare in pre-pubertal children
- A national surveillance study of the UK & Ireland identified only 6 cases over a 25 month period (Jan 2010 – Jan 2012)

Reading R, Rogstad K, Hughes G, et al. Gonorrhoea, chlamydia, syphilis and trichomonas in children under 13 years of age: national surveillance in the UK and Republic of Ireland. Arch Dis Child 2014;99: 712–16

- This case series: 6 cases of genital GC in girls <6 years referred to London SARC over 18/12 (2016–17) from a variety of sources

- All presented with symptoms to A&E or GP
- No disclosures of child sexual abuse
- Only one previously known to social care
- All diagnosed GC culture +ve on initial swabs
- Referred to SARC
  - As part of S47 Child Protection investigation
  - Child protection medical
  - Full STI screening with ‘chain of evidence’ (COE)

Case no.	Age (years)	Symptoms	Significant genital findings	Sensitivity/ resistance	Treatment
1	4	Vaginal discharge	None	Not available	Ceftriaxone IM
2	5	Green vaginal discharge	None	S=Az, Cef, Pen, Spec, Cip	Ceftriaxone 250 mg stat Azithromycin 200mg od 3/7
3	3	Itchy green vaginal discharge	None	S=Az, Cef, Pen, Spec, Cip	Ceftriaxone 125 mg IM Azithromycin 200mg od 3/7
4	5	Genital itch, green discharge	None	‘Broad, inc. Penicillin’	Benzyl Penicillin IM
5	4	Mother and child had vaginal discharge	None, disputed hymenal appearance on peer review	Not available	Ceftriaxone 50 mg/kg IV 7/7 Azithromycin 200mg od 3/7
6	4	‘Sore knickers’ Yellow discharge	None	Not available	Amoxicillin 250 mg tds 10/7 Ceftriaxone 250mg IM Azithromycin 200 mg

Case no.	Disclosure	Contact screening outcome	Initial Child Protection Responses	Social Care Outcome	Legal outcome
1	No	None identified	S47 Child and sibling taken into short term foster care	No CPP Case closed to SS	Case closed to police
2	No	Older teenage sister, 16+ years	S47 Supervision order	<b>CPP for 6 months</b> then closed to SS	Case closed to police
3	No	Older teenage sister, 16+ years	S47 Supervision order	<b>CPP for 6 months</b> then closed to SS	Case closed to police
4	Vague ++	Father	S47 Father removed, supervised contact	<b>Remains on CPP</b>	Case closed to police
5	No	Mother	S47 Stayed with grandmother during investigation	No CPP Case closed to SS co-sleeping mother	Case closed to police
6	No	Uncle	S47 Contact with uncle had ceased	<b>Remains on CPP</b> <b>Previous SS involvement, neglect</b>	<b>Police referred to CPS.</b> Awaiting decision

- 6 cases GC vulvovaginitis seen in 18/12 - no other STI referred
  - Might there be under-diagnosis of other STIs in the community?
- GC in a child is almost always sexually transmitted
  - In 5/6 children positive household contact was found
  - This does not confirm child sex abuse
  - Some evidence that non-sexual GC transmission may occur
- A rapid, sensitive & supportive multiagency approach must be taken to investigate & manage all STIs in children



# Pre-pubertal girl is susceptible to vulvovaginitis

## Effect of Oestrogen



- **Anatomy**
  - Absent pubic hair
  - Lack of labial fat pads
  - Proximity to anus
  - Thin atrophic mucosa, cuboidal not squamo cells
  - Alkaline pH
- **Behaviour**
  - Poor local hygiene (bottom wiping)
  - -Tendency to explore ....

Laura R. Marks Biofilm Formation Enhances Fomite Survival of *Streptococcus pneumoniae* and *Streptococcus pyogenes*. *Infection and Immunity* March 2014 Volume 82 Number 3 pp1141 - 1146



Gonorrhoea survives in pus in warm humid conditions (25-39 °C):

2- 3 hrs on contaminated cloth

Alausa K, Sogbetun A, Montfiore D. Effect of drying on *Neisseria gonorrhoeae* in relation to non-venereal infection in children. *Nigerian J Pediatric* 1977;4(1):14-8

Up to 3 days in a “wide variety of soft and hard materials”

Sriovastava AC. Survival of gonococci in urethral secretions with reference to nonsexual transmission of gonococcal transmission of gonococcal infection. *J Med Microbiol* 1980;13(4):593-6



## Outbreaks in babies on postnatal wards C19th attributed to contaminated rectal thermometers

*Goodyear-Smith F. What is the evidence for non-sexual transmission of gonorrhoea in children after the neonatal period? A systematic review. J Forensic Leg Med 2007;14:489–502*

## Epidemics of conjunctival GC in the Tropics: flies acting as vectors

*Mikru FS al. Community-wide outbreak of *Neisseria gonorrhoeae conjunctivitis* in Konso district, North Omo administrative region. Ethiop Med J 1991;29(1):27-35*

## 8yr old & the Aeroflot toilet seat

*Dayan L. Transmission of *Neisseria gonorrhoeae* from a toilet seat. Sex Transm Infect 2004;80: 327*

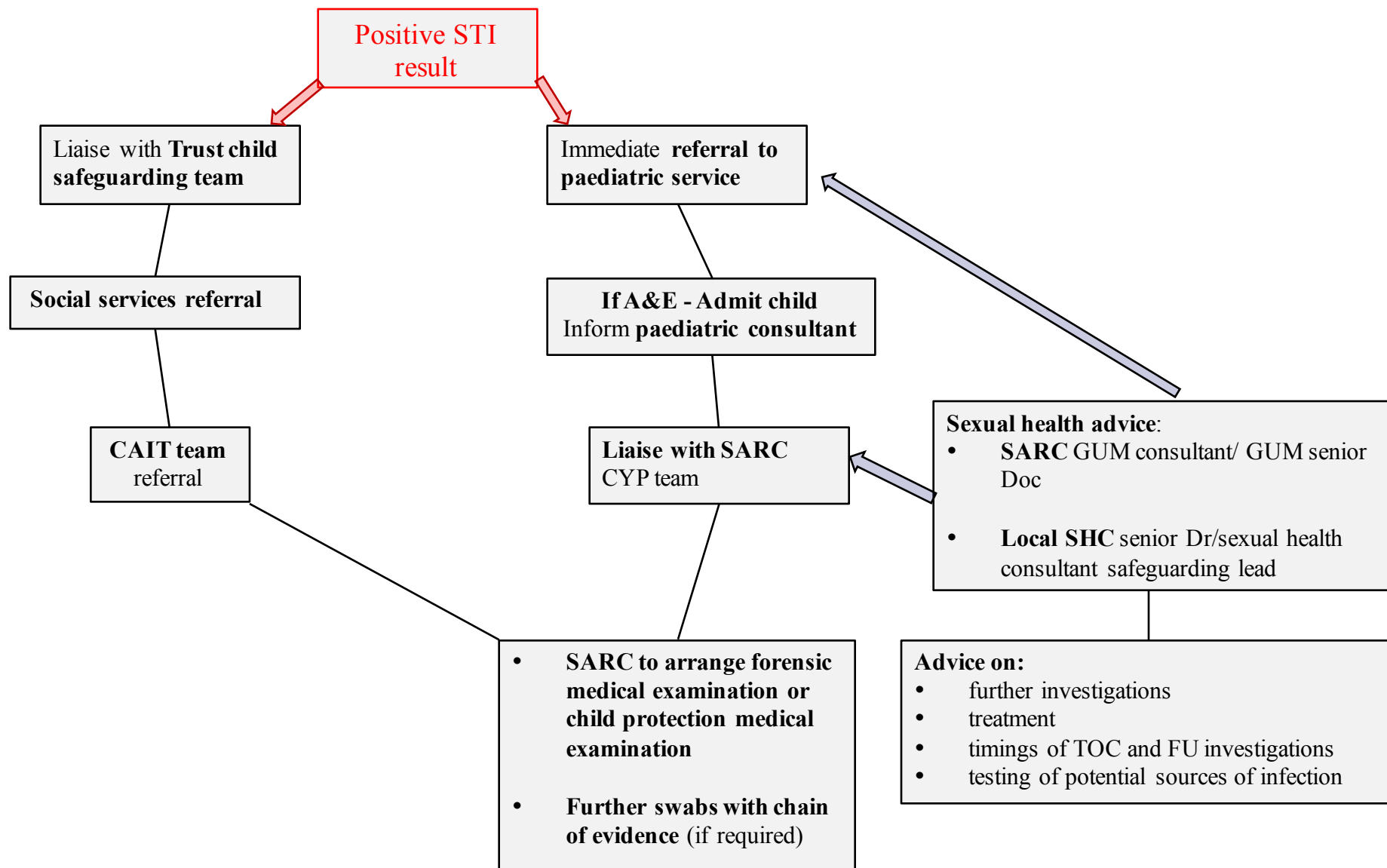


*“I’m with a mother & her 4yr old girl who has vaginal discharge; MC&S are culture positive for GC”*

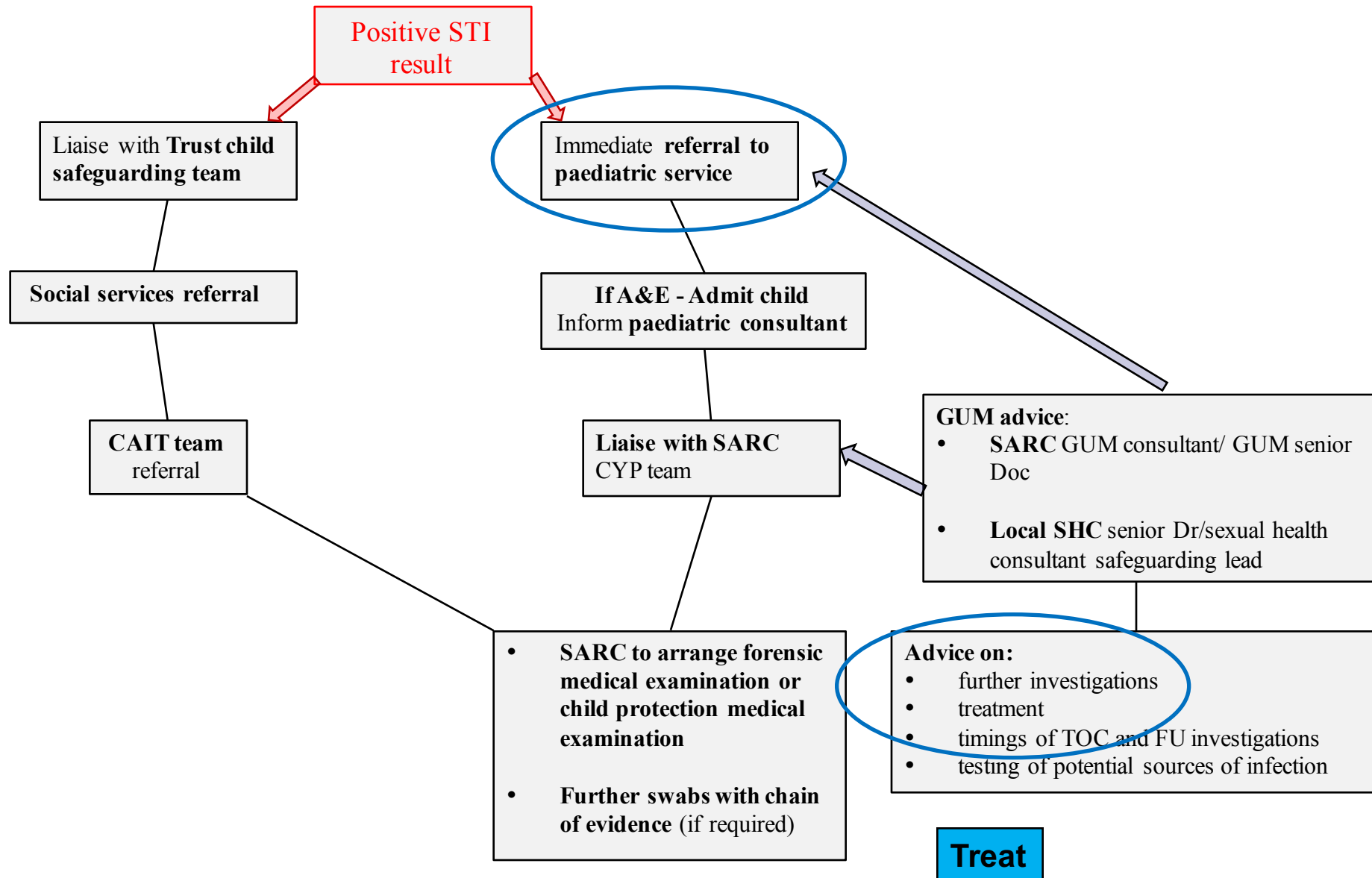
- What should I say?
- What must I do?
- What can I give?



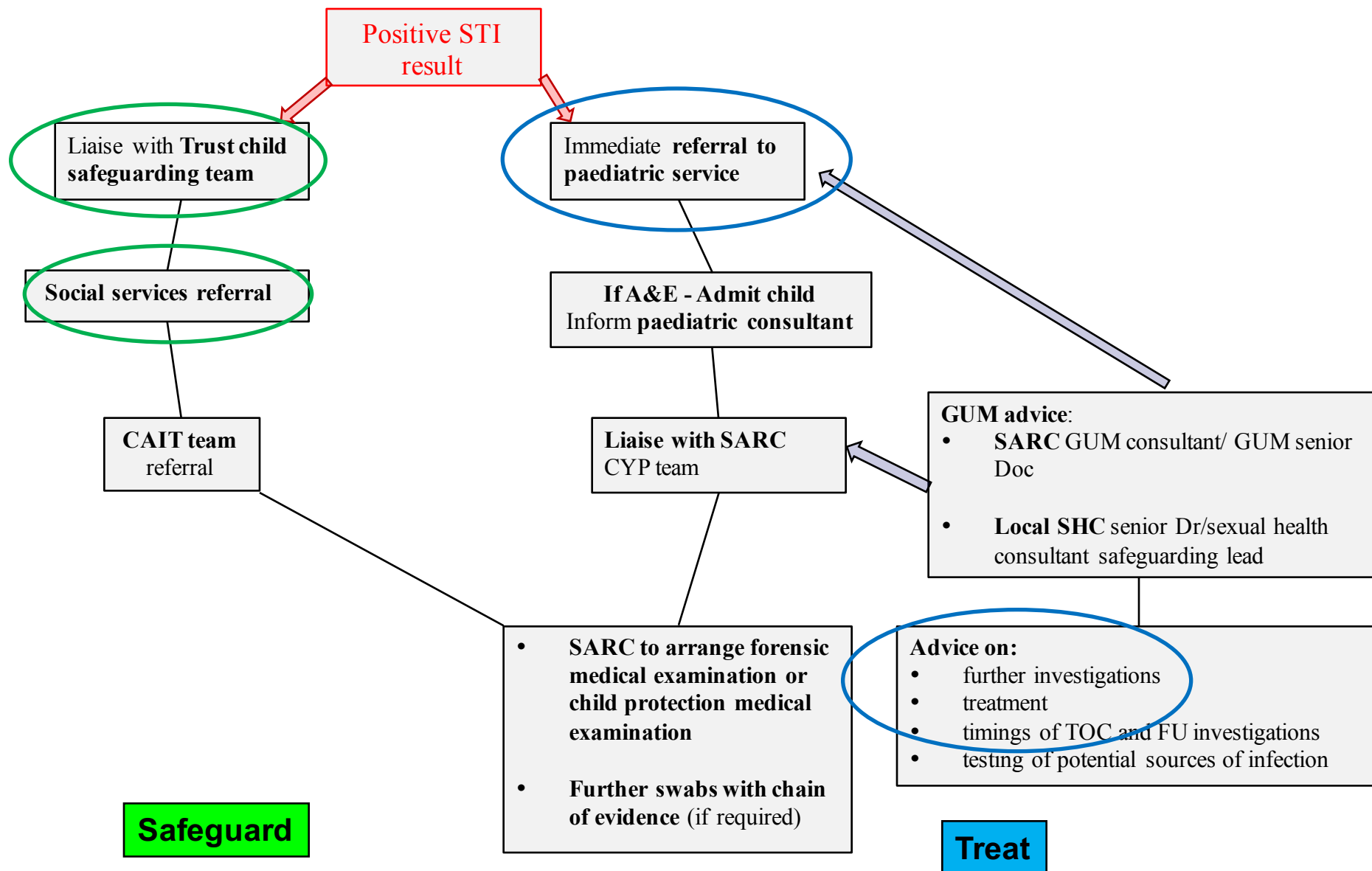
# Immediate healthcare response to diagnosis of a STI in a pre-pubertal child



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## What has been done so far?

Investigations: (for other STIs), COE?

Treatment: local paed team for management  
local GUM advice

Safeguard: Contact local safeguarding lead & Children's Social Care

**If disclosure/allegation: Call the Police 101 & CSC**

## What do you tell the parents/carers?

Genital GC, outside the neonatal period, is almost always sexually transmitted

.....**Don't elaborate!** Avoid 'coaching' potential witness/ suspect

You are "obliged to make a child protection referral"

You will contact social services immediately who will arrange a strategy meeting & advise next steps



- GC vulvovaginitis is rare
- Presents to a variety of settings
- A standardised approach to all cases is needed
- In order to reach a decision about further action, investigation must include:
  - Examination by skilled examiner
  - Peer review
  - Effective interagency communication
  - **“Reluctance to jump to conclusions” for or against CSA**

Kelly P. Does sexually transmitted infection always mean sexual abuse in young children?  
(editorial) Arch Dis Child 2014; 99:705–706

## CYP Havens

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