

## Limp - Child Presenting With A Limp

Subject:	Child Presenting With A Limp
Policy Number	N/A
Ratified By:	Clinical Guidelines Committee
Date Ratified:	July 2015
Version:	1.0
Policy Executive Owner:	Dr N Patel, Clinical Director, Children's Services ICSU
Designation of Author:	Dr G Armstrong (Consultant) Dr G McGeoch (GP Registrar)
Name of Assurance Committee:	As above
Date Issued:	July 2015
Review Date:	3 years hence
Target Audience:	Emergency Department, Paediatric, Orthopaedic, Radiology clinicians
Key Words:	Limp, child, presentation, gait disturbance, Perthes, SUFE, transient synovitis, hip, septic arthritis, osteomyelitis, toddler fracture

## Version Control Sheet

Version	Date	Author	Status	Comment
1.0	June 2015	Dr G Armstrong Dr G McGeoch	New	New guideline ratified at July 22 CGC

## ➤ **Criteria for use**

For children presenting with limp

## ➤ **Background/ introduction**

### **The child who presents to the Emergency Department with a limp**

- No national guideline exists for management of the child presenting with a limp.
- Level of evidence for practice is mostly grade C.
- This guideline was written in conjunction with Emergency Department, Paediatric, Orthopaedic and Radiology clinicians.
- The differential diagnosis is wide, often grouped by age. The aim is to detect those who need urgent investigation and prevent unnecessary radiation. Always arrange follow up. The flowcharts are a guide, not an absolute requirement.
- Discuss with seniors at an early stage to allow time for adequate assessment.

### **Do not discharge without follow up arranged.**

- Follow up for non-traumatic limp needs to be arranged in secondary care via paediatrics registrar or orthopaedics.
- There are flow charts for children aged under five, five to ten, and over ten years. The ages are guides and not to be taken as absolute requirements.
- Useful structures for examination include the modified paediatric Gait Arms Legs Spine (pGALS) tool and the orthopaedic “look feel move” approach. They are summarized in [a recent BMJ review](#).

### **Also examine thoroughly for sources of infection in a febrile or unwell child.**

- Use adult blood culture bottles if you can get at least 10mls blood (each bottle holds 5-10ml). Paediatric culture bottles hold 3-5mls but can be used with as little as 1ml blood, and only one bottle is required.

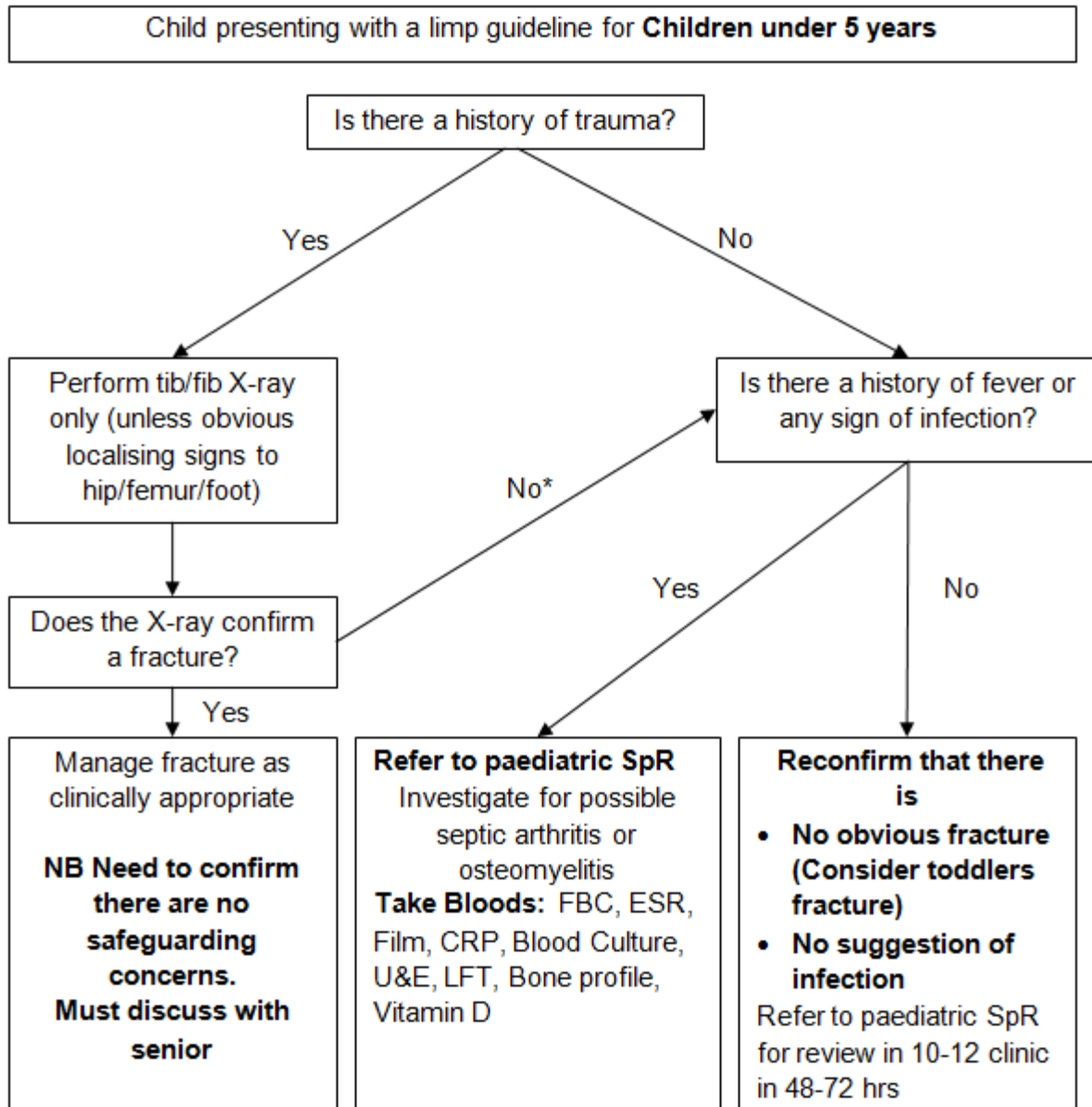
Below is an illustration of primary different diagnosis of an “atraumatic limp” by age.

0-5 years	5-10 years	10-15 years
Septic arthritis or osteomyelitis		
DDH*		
Fracture or soft tissue injury. <b>Always consider NAI.</b>		
Toddler fracture	Other/Avulsion fracture	
3-10: Transient synovitis or irritable hip		
	Perthes	SUFE**
Other: Haematological eg sickle cell, Infection eg pyomyositis, discitis		

\*Developmental dysplasia of the hip

\*\*Slipped Upper Femoral Epiphysis

## ➤ Clinical management

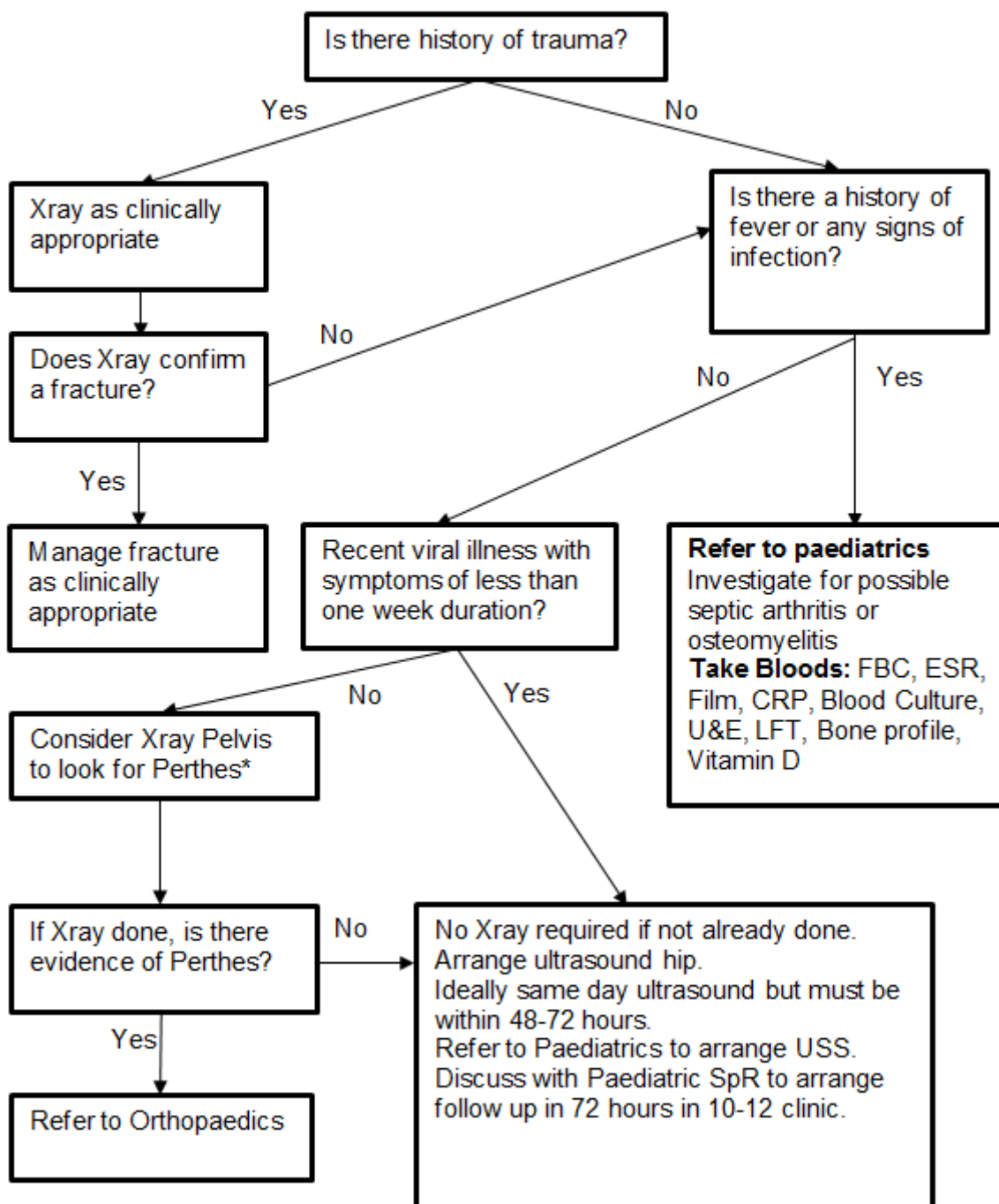


- In traumatic injury in children < 5 years the commonest accidental fracture in a limping child is the toddler's fracture (spiral fracture of distal tibia).
- \*Toddler's fractures are not always not always visible on initial X-ray, however in these children changes should be visible if the X-ray is repeated in 7 to 10 days.
- Toddler's fractures are very stable and even if not detected at first presentation, children will not come to any harm if they attempt to walk. In

practice children in this age group tend to avoid weight bearing if they have an occult fracture.

- Transient synovitis can occur in children from age three to ten. It is usually acute and self-limiting, attributed to a viral or autoimmune process. It is more common in boys. There is often a history of a recent viral upper respiratory tract infection. The pain should not be severe and the child usually appears well. Explain to parents that taking NSAIDs regularly is part of the treatment to reduce inflammation. Ensure follow up with paediatrics is arranged. The [NHS Choices leaflet on 'Irritable hip'](#) is a useful source of information for carers.

Child presenting with a limp guideline for **Children aged 5 to 10 years**

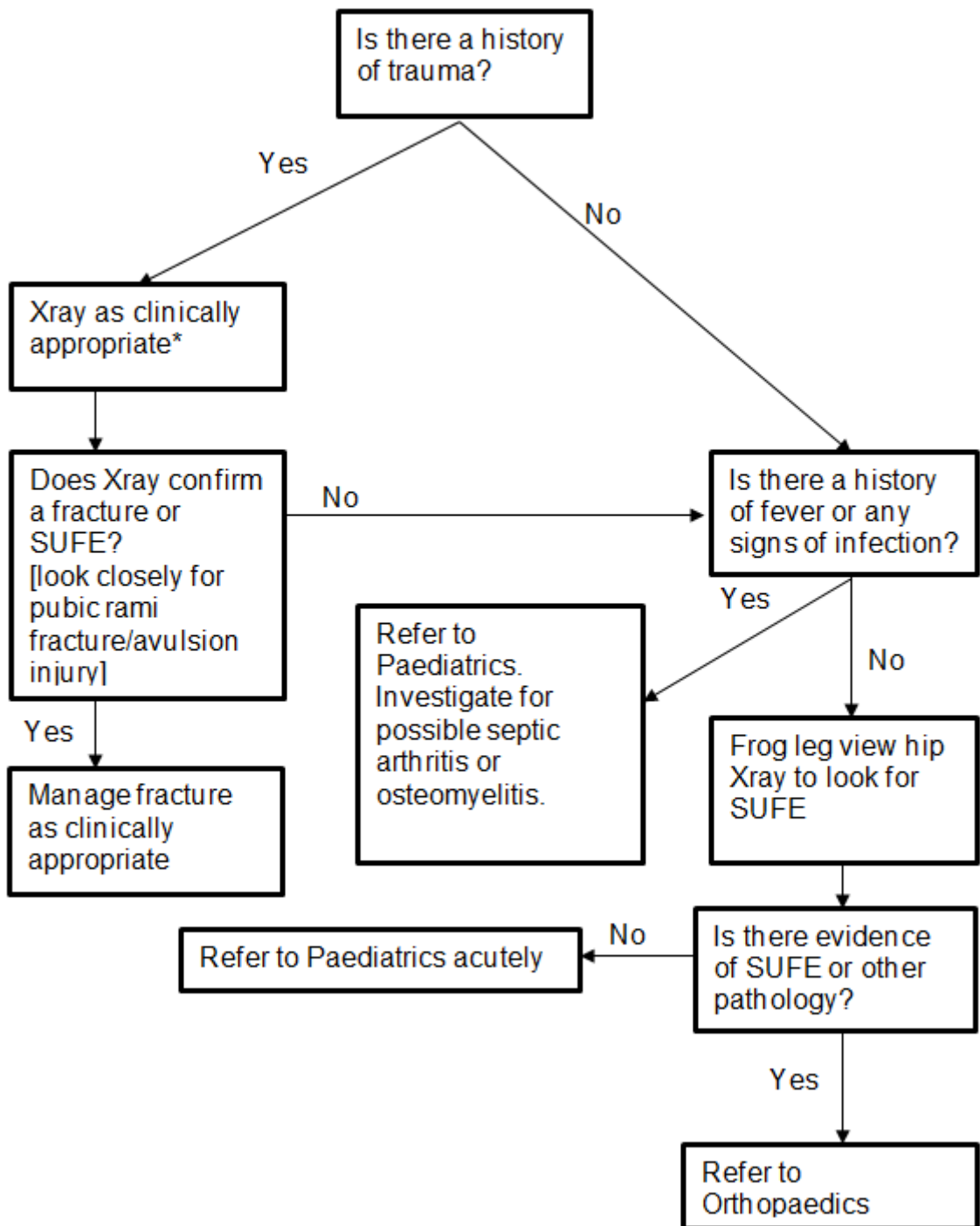


- \*Not all children at this point in the pathway require pelvic Xray. Perthes can remain in the differential and be picked up via Xray in 10-12 clinic if symptoms have not resolved
- While waiting for ultrasound, manage actively with regular NSAIDs and explanation to carers about transient synovitis. Provide written information which can be found on NHS Choices website under 'irritable hip'.

- If ultrasound confirms transient synovitis, further investigation may not be necessary. Otherwise, further investigation may be arranged at time of 72 hour Paediatric follow up.



Child presenting with a limp guideline for **Children aged 10 years or older**



- \*Ottawa ankle rules are validated for adolescents. Application of the rules will not miss clinically significant fracture. An insignificant fracture that makes no difference in long term outcome may be missed.

- If a pelvic Xray is clinically indicated (eg pain in knee or above), consider slipped upper femoral epiphysis (SUFE) and request frog leg view.
- Remember to request Xray Pelvis if avulsion fracture is in the differential.

➤ **Contacts (inside and outside the Trust including out-of-hours contacts)**

- Consultant Paediatrician on call (via switchboard)

➤ **References (evidence upon which the guideline is based)**

Perry, Daniel C. & Bruce, Colin (2010) Clinical Review: Evaluating the child who presents with an acute limp BMJ 2010;341:c4250 accessed 23 July 2015 (<http://www.bmj.com/content/341/bmj.c4250>) NB full text available with an NHS OpenAthens password

NHS Choices (2015) Irritable hip. Accessed 23 July 2015 (<http://www.nhs.uk/conditions/Irritable-hip/Pages/Introduction.aspx>)

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	<b>Does the procedural document affect one group less or more favourably than another on the basis of:</b>		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	<b>Is there any evidence that some groups are affected differently?</b>	No	
3.	<b>If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?</b>	No	
4.	<b>Is the impact of the procedural document likely to be negative?</b>	No	
5.	<b>If so can the impact be avoided?</b>	N/A	
6.	<b>What alternatives are there to achieving the procedural document without the impact?</b>	N/A	
7.	<b>Can we reduce the impact by taking different action?</b>	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.

## Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
<b>1.</b>	<b>Title</b>		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
<b>2.</b>	<b>Rationale</b>		
	Are reasons for development of the document stated?	Yes	
<b>3.</b>	<b>Development Process</b>		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
<b>4.</b>	<b>Content</b>		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
<b>5.</b>	<b>Evidence Base</b>		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
<b>6.</b>	<b>Approval</b>		
	Does the document identify which committee/group will approve it?	Yes	
<b>7.</b>	<b>Dissemination and Implementation</b>		
	Is there an outline/plan to identify how this will be done?	Yes	
<b>8.</b>	<b>Document Control</b>		
	Does the document identify where it will be held?	Yes	

	Title of document being reviewed:	Yes/No	Comments
<b>9.</b>	<b>Process to Monitor Compliance and Effectiveness</b>		
	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Yes	
	Is there a plan to review or audit compliance with the document?	Yes	
<b>10.</b>	<b>Review Date</b>		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
<b>11.</b>	<b>Overall Responsibility for the Document</b>		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

<b>Executive Sponsor Approval</b>			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
<b>Relevant Committee Approval</b>			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
<b>Responsible Committee Approval – only applies to reviewed procedural documents with minor changes</b>			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

### Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring?  Name the lead and what is the role of the multidisciplinary team or others if any.	What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element?  How often is the need complete a report ?  How often is the need to share the report?	What committee will the completed report go to?
Element to be monitored	Lead	Tool	Frequency	Reporting arrangements
<p>'This guideline will be reviewed in accordance with the specified review date. Any Datix incidents reported in the interim and in relation to content will be examined in accordance with Trust process'.</p>				

