

# APPROACH TO THE FEBRILE CHILD

## Learners Guide

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### PRE-READING

Please watch or read one of the basic pathophysiology links before the session.

What is the deal with fever?

NICE fever guidelines for kids • LITFL

Pediatric Fever Without A Source

## CASE 1: (20 MINUTES)

A father attends the ED with his 4 year child, who has a 2 day history of fever, his most recent temperature was 39.9 and this has prompted his visit to the emergency department. The father describes his child as being otherwise well, but is extremely concerned about the height of the fever.

1. Describe how you would assess the child?
2. What investigations and treatment options would you consider?
3. You are happy with your assessment of the child, and would like to discharge him, however his temperature is 38.5. How do you proceed?

## CASE 2: (15 MINUTES)

A 5 week old girl has been brought in by her mother. Her mother reports the child seemed irritable so she took her temperature and it was 38.2. Pregnancy and birth was unremarkable and there have been no concerns since her birth. The child is feeding well and the history and examination are unremarkable, observations in the ED have been within normal limits, apart from her current temperature which is 38.5. Your initial assessment has not provided you with an obvious source for the infection.

1. When is a temperature classed as a fever?
2. How would you investigate this child?
3. How would you manage this child if they had a white cell count of  $17 \times 10^9/L$ ?

## ADVANCED DISCUSSION (15 MINS PER CASE)

This is an opportunity to cover grey areas, diagnostic dilemmas and advanced management and escalation if there are more experienced trainees or senior registrars in your group.

## ADVANCED CASE 1

A 7 week old has been brought in by her mother because she felt very hot today, and has been 'a bit grizzly'. Mum has given paracetamol and brought her to ED. Her temperature is 37.6 on triage. On initial assessment you have no concerns and remaining observations are within normal limits.

**1. How should a temperature be taken?**

**2. How would you investigate and manage this patient?**

## ADVANCED CASE 2 (15 MINUTES)

A 3 year old boy has returned to ED with a history of 6 days of fever, they have seen the GP twice, two and four days ago, and told it was a viral illness. However the fever is persistent and his parents are concerned. His past medical history includes two admissions for viral wheeze when he was younger, but is otherwise unremarkable. All immunisations are up to date, he goes to nursery and lives with his parents, he has no siblings but his mother is 9 weeks pregnant. On examination the child seems grumpy, he has a fever of 38.8 and a HR of 150 he has a rash across his face and torso and evidence of conjunctivitis.

**You think the rash looks morbilliform, what are your concerns and how will you proceed?**

**What other differentials should you consider, and what examination findings would you be looking for?**

**How would you work this patient up?**

## Quiz

### Question 1

Which of these is true, a 60 day old with a temperature of 38.5:

- 1 Fulfils the criteria for a lumbar puncture
- 2 Can be discharged without further investigation
- 3 Needs IV antibiotics
- 4 Needs urine sent for urgent microscopy and culture

### Question 2

Which of these is false?

- A The height of the fever can make a difference to the how the child is managed
- B If a fever doesn't reduce with an antipyretic the child needs admission to hospital
- C A 28 day old with a temperature of 38.5 will need FBC, CRP and Blood cultures
- D It is recommended that children aged 4 weeks to 5 years have their temperature taken with an axillary probe or tympanic thermometer

## Question 3

Which of these is true?

**A**

Kawasaki disease can be diagnosed with fever for > 5 days plus 3 of the B symptoms

**B**

Fever of over 39 degrees in a 3-6 month old automatically needs a full septic screen

**C**

The higher the fever, the more likely it is to be a serious bacterial infection

**D**

Measles is infectious from 4 days before the onset of the rash to 4 days afterward

## Take home learning points

- 1 A fever in an under 3 months old needs further investigation
- 2 Examine the child fully to find the source
- 3 The height of the fever does not correlate with the severity of the illness (in over 6 months)
- 4 Antipyretics are not necessary if the child is happy
- 5 Fever for over 5 days needs further workup

## REFERENCES

[What is the deal with fever?](#)

[NICE fever guidelines for kids • LITFL](#)

[Pediatric Fever Without A Source](#)

[The pathophysiological basis and consequences of fever](#)

[Hot Garbage: Mythbusting fever in children](#)

[The Paediatric Assessment Triangle](#)

[NG143 Traffic light tool](#)

<https://vimeo.com/60599216>

<https://dontforgetthebubbles.com/finding-fever/>

[http://rolobotrambles.com/listen-look-locate-an-approach-to-the-febrile-child-tipsfornewdocs/Feel the heat](http://rolobotrambles.com/listen-look-locate-an-approach-to-the-febrile-child-tipsfornewdocs/Feel-the-heat)

[Ability of Mothers to Subjectively Assess the Presence of Fever in Their Children](#)

[https://dontforgetthebubbles.com/fever\\_under\\_60\\_days\\_of\\_age/](https://dontforgetthebubbles.com/fever_under_60_days_of_age/)

[Recurrent or Periodic Fevers - investigate or reassure](#)

[Measles - A brief historical & clinical review](#)

<https://em3.org.uk/foamed/15/7/2019/lightning-learning-measles>

[Guidelines on Post-Exposure Prophylaxis for measles June 2019](#)

[Kawasaki Disease](#)

[Kawasaki Disease](#)

[Simulation Library](#)

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