

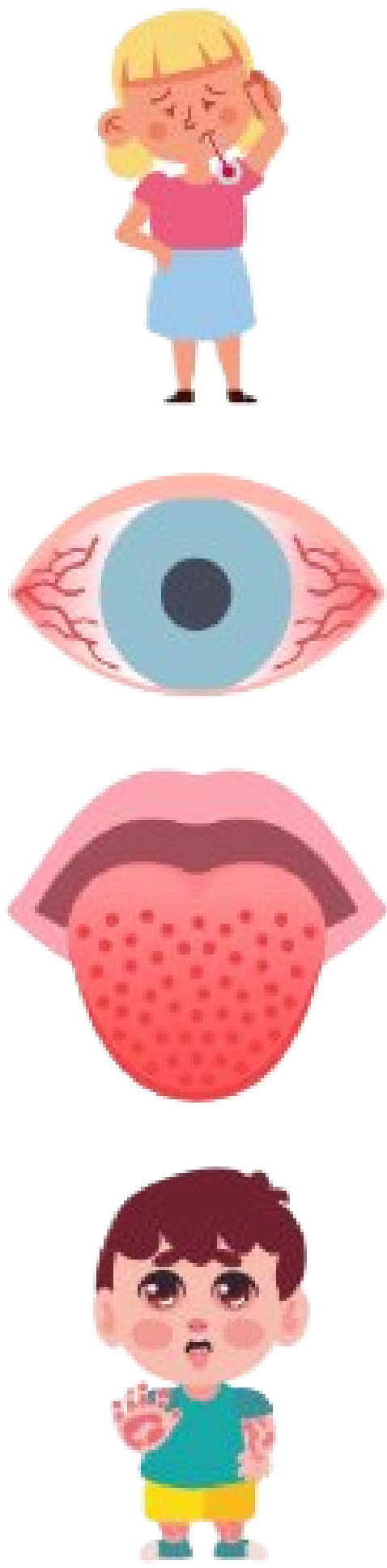
Raising awareness of Kawasaki Disease among doctors in Paediatrics: A regional pilot.

Dr Rosemary Lugg¹, Dr Megan Harty², Dr Eva Wooding¹
1. University Hospitals Plymouth NHS Trust 2. Royal Devon University Healthcare NHS Foundation Trust

Background

Kawasaki disease (KD), the UK's leading cause of acquired cardiac disease, is generally perceived to be rare in our population. However, incidence has increased 4-fold over the last decade¹. This perception, likely contributes to well documented diagnostic delays. Average time to diagnosis is 7.8 days from symptom onset. Yet treatment <7 days is advised to facilitate best cardiac outcomes. Diagnostic challenges include non-specific biomarkers and symptom profiles². Only 30% present at <1 year of age, yet this group are most likely to develop aneurysms³. Therefore, identifying these children early is particularly essential. Discussion with resident doctors in the region showed that teaching on KD was relatively uncommon and that doctors felt a lack of diagnostic confidence. Our programme aimed to raise awareness of KD presentations among the Paediatric resident workforce.

Early recognition and treatment of Kawasaki disease facilitates best cardiac outcomes.



Clinical case-based sessions

A regional training programme on KD was developed, using a real case example from a BMJ Case Report⁴. This aimed to create interactive, case-based sessions which would raise awareness about KD amongst clinicians.

The case was selected to highlight a more unusual but important presentation, with the follow features:

- 3 months of age
- BCG scar inflammation
- Lack of classical conjunctivitis/ extremity swelling/ lymphadenopathy

The program was initially piloted face-to-face in one Trust, with a cohort of clinicians ranging from Foundation trainees to Consultants.

Following feedback from the pilot, the session was fine-tuned and expanded with rolled out regionally to multiple Trusts using both face to face and video-link delivery. With further feedback collected.

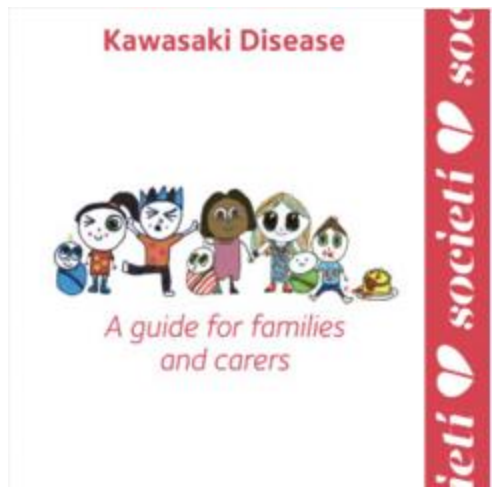
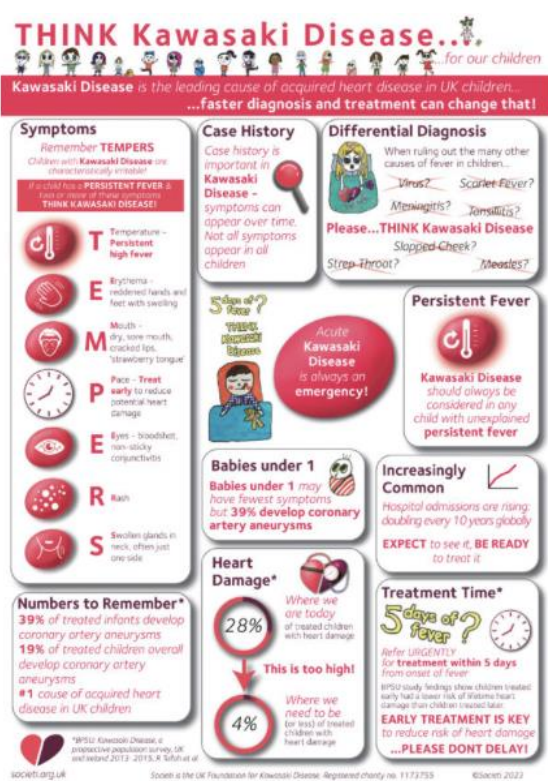
Physical resources

Societi⁵, The Foundation for KD (a UK charity), provided excellent physical resources for participating Trusts. These included:

- Posters
- Educational pamphlets
- Family information booklets

The goal of these resources was to embed KD awareness in the clinical working environment, and act as a physical prompt for clinicians. Suggested areas for implementing these were Paediatric Assessment Units and Emergency departments.

Furthermore, it provided a resource which families could be sign posted to when future cases arise.



Societi resources⁵

Feedback and future work

Feedback was collected using LearnLoop, in both numerical scoring format and free text, with thematic analysis. Candidates self-identified a number of take home learning points, see Figure 1. Overall numerical scoring for the pilot session was 94.3/100, and increased to 95.3/100 when expanded regionally following the first feedback cycle. Candidates reported increased clinical confidence in diagnosis of KD, following the session and confirmed the value of case-based learning. Feedback suggests that a longer study day or regional workshop would have merit and meet an identified learning need. Data collection on change in practice was beyond the scope of this pilot, but would be interesting future work.

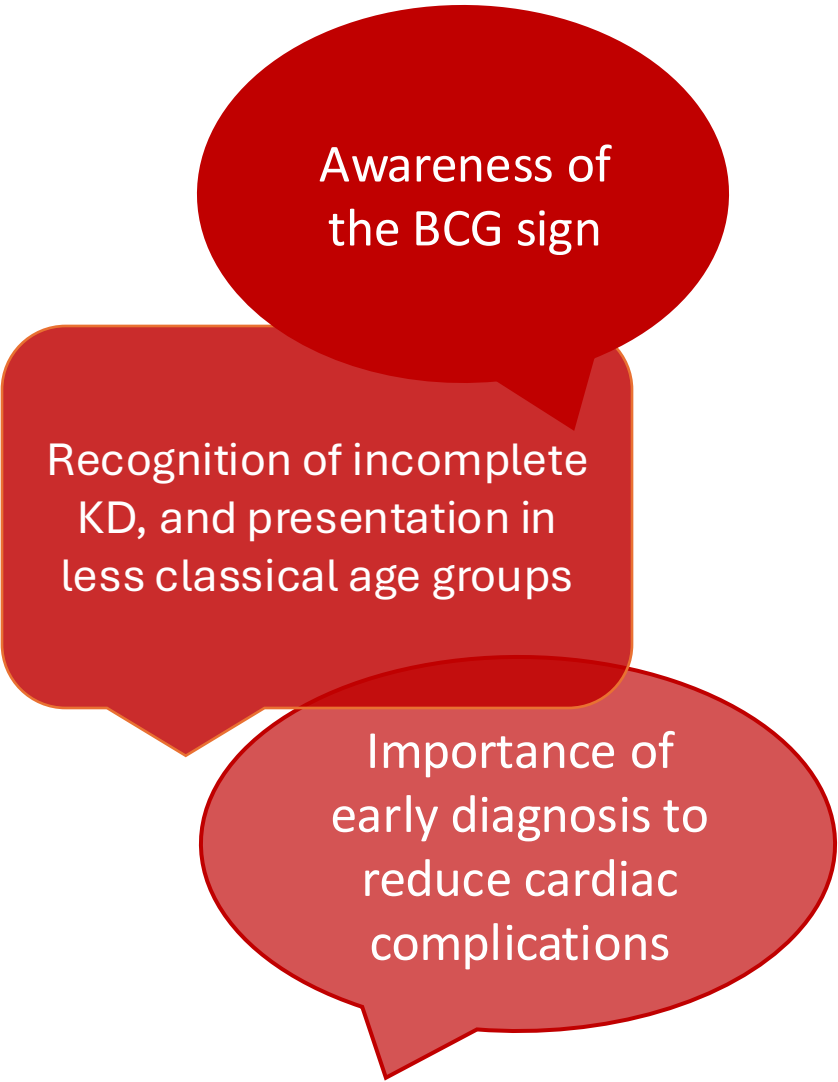


Figure 1. Take home messages from learners.

References:

1) Tulloh RMR, Mayon-White R, Harnden A, et al. Kawasaki disease: a prospective population survey in the UK and Ireland from 2013 to 2015 [published correction appears in Arch Dis Child. 2020 Mar;105(3):e5. doi: 10.1136/archdischild-2018-315087corr1].Arch Dis Child. 2019;104(7):640-646. doi:10.1136/archdischild-2018-315087

2) Harnden A, Tulloh R, Burgner D. Kawasaki disease.BMJ. 2014;349:g5336. Published 2014 Sep 17. doi:10.1136/bmj.g5336

3) Brogan P, Burns JC, Cornish J, et al. Lifetime cardiovascular management of patients with previous Kawasaki disease.Heart. 2020;106(6):411-420. doi:10.1136/heartjnl-2019-315925

4) Lertamornkitti N, Wangjirapan A. A 3-month-old infant with atypical Kawasaki disease. BMJ Case Rep. 2018;2018:bcr2017221456. Published 2018 May 30. doi:10.1136/bcr-2017-221456

5) <https://www.societi.org.uk/>