

### Problem 1.1

An 8 month old boy presents with a high fever for 3 days without any other signs of infection. On day 4 he develops an erythematous maculopapular rash just as his fevers begin to resolve.

- What is this illness and how would you treat him?
- What are the other causes for a maculopapular rash in this age group?

### Problem 1.2

A four year old boy is found to have a heart murmur on routine examination at the GP surgery. The murmur is a Grade 2/6 systolic murmur, best heard at the left sternal edge which does not radiate.

- How would you proceed?
- How would you distinguish between an innocent and a pathological murmur?

### Problem 1.3

A fifteen year old girl presents with weight loss and polyuria for the last month.

- What is your differential diagnosis?
- What are the important components of history, examination and investigation?
- Outline the broad aspects of management for the most likely diagnosis

### Problem 1.4

An 8 year old girl presents to ER with a 21 day history of malaise, poor appetite and non-specific leg pain. More recently she has developed some petechiae and bruising. She has no fever. On examination she has hepatosplenomegaly.

- What is the differential diagnosis and which investigations would be most helpful?
- For the most likely diagnosis, what factors may influence prognosis, and what are the current success rates for treatment?

### Problem 1.5

A family come to see you for advice following the sudden and unexpected death of their 4 month old son. In particular they would like to know if there is anything they can do to protect any future children they may have.

### Problem 1.6

The parents of a two and half year old boy bring him to the ER because he turns blue when he gets angry, and can't catch his breath.

- How would you assess the patient and what advice would you give to the parents?