

## How to do a long case

### The type of patient

The type of patient selected for a long case is usually a child with several pathologies or complex medical, development, nutritional and other issues.

### The history and examination

You spend 40-50 minutes with the patient, then 10-20 minutes organising your thoughts (60 minutes in total). Then you present the case to the examiner in up to 30 minutes. You would present for about 12-15 minutes, and then summarise and discuss the case with the examiner and be asked questions for the rest of the time.

### Presentation, summary and discussion

- There is no one way to present, but it should be structured and follow a logical sequence: introduction, history, examination, summary, problem list, management approach.
- In the examination, do anthropometrics: weight, height / length, MUAC. Calculate WFA / WFH, and look up the z-scores. In the presentation interpret the anthropometric information: *"Ben's weight is 7.4kg, which at 13 months of age gives him a WFA of between -2 and -3 SD, and his length is 74cm, which gives a WFL of also between -2 and 3 SD, and his mid upper arm circumference was 13.2 cm, meaning Ben has moderate malnutrition."*
- A good way to begin the presentation is: *"Ben is a 5 year old boy **who was well until 3 months ago**, when he started losing weight. 1 month ago he developed a cough, which lasted 2 weeks, then in the last 2 days developed fever and lethargy..."* The point is to say when the child was last fully well. Many children have been chronically unwell, but we often communicate the duration of their illness from the time they developed the acute symptoms (e.g. "he presented with 2 days of fever"). This ignores that there may be other background issues going on.
- You should present as if you are the paediatric doctor / paediatrician who is taking over the management of the child, and outline the diagnosis (or diagnoses), the problem list, and your plan of management.
- Not every important piece of history or examination findings can be extracted in just one hour from a complex patient and their caregivers, no matter how good your clinical skills are. So recognise that (in real life) you often have to go back to the patient later to ask more questions, review previous laboratory tests, or review the patient's record, or interview another care giver. Sometimes it is useful to say this in your summary... "I would also want to enquire further about..."
- Some patients will have diagnostic dilemmas, and in your summary you should list the possible diagnoses in order of likelihood, and the evidence for the main diagnoses. Such as: *"Benjamin has evidence of Rheumatic Fever and Rheumatic Heart disease, because he has acute migratory large joint arthritis with persistent fever. The evidence for heart disease are the cardiomegaly clinically (his apex beat is displaced into the 6<sup>th</sup> left intercostal space in the mid-clavicular line), and he has a murmur which I think is mitral regurgitation, because it is pan-systolic, best heard at the apex, and radiates loudly into the axilla. I don't think it is a ventricular septal defect because it does not radiate below*

*the xiphoid process. Benjamin has evidence of congestive heart failure, with tachycardia, and fine crackles in both lung fields posteriorly, and a liver which is palpable 6 cm below the right costal margin. In addition, Benjamin cannot lie flat without becoming dyspnoeic, which indicates congestive heart failure. He has dullness to percussion at the bases of his lungs posteriorly, and I would want to do a chest x-ray to look for the degree of congestion and rule out pleural effusions.*" By linking the clinical evidence with the diagnoses you are demonstrating that you can integrate history and clinical signs and formulate a diagnosis.

- In your summary DO NOT simply repeat the clinical signs without organising them and using them to formulate a diagnosis or differential diagnosis. In the summary your INTERPRETATION should be given.
- Make a problem list.
- Most patients have both immediate needs and long term management issues, and you should discuss both, but usually cover the immediate needs first in your summary and discussion.
- Look beyond hospital, and address what is needed to get this child home safely to be with their family. The long-term needs may be medical, nutritional, social, the home environment, outpatient or community supervision of treatment, welfare and financial. Mention whatever is relevant to the patient and *be specific about the need for that patient*, and what could be done about it.
- Don't forget the psychological or mental health issues facing the child and the family. This might be stigma, feelings of hopelessness, or dysfunctional situations. Suggest how these, if present, might be addressed. Sometimes it is useful to ask to the patient and his/her family: "What worries you the most?" and "What do you understand about your condition?" Present this in your discussion. That makes your discussion patient-centred, and indicates to the examiner you are interested in the patient / family perspective.
- There are not solutions to every problem, and we should not pretend there are, but there is never nothing that can be done to improve the child's situation (that is, there is always *something* that can be done, even if it's just to relieve pain, or make them more comfortable, or be kind to them). Usually if we think hard enough, there is often a lot more medically we can do. In your summary you should indicate the short-term / immediate things that will help the child today or this week, and then some of their likely long-term needs.
- Be aware of iatrogenic (hospital acquired) problems, such as progressive malnutrition while in hospital, or hospital acquired infections, or drug interactions and side effects. State these in your problem list if they exist, and describe what you would do about them for this patient.
- Describe any other health care professionals need to be involved in the care of the child, this could be someone in the hospital, such as a physiotherapist or social worker, or a community health care provider, such as an MCH nurse. One paediatrician cannot do everything by themselves, it often needs a team to look after a complex patient, and you should indicate this in your discussion.
- State how you would communicate with the family what your management plan is. The family are an integral part of the team, looking after the patient, so indicate how you would best involve them in their child's care.