2. Teaching Differential Diagnosis

Differential Diagnosis is a process that must be taught. It is not an intellectual skill that people are born with. Medical schools may or may not have taught students this skill in their undergraduate training, & they certainly haven't learned how to do a differential in your specialty, so always start by assuming the clerk or resident doesn't know how to do this.

How do you teach the process?

This is one of the most important procedures the clerk/resident needs to develop. It is well worth your time near the beginning of a rotation to teach this process.

Demonstrate & deconstruct

In this step, you will be acting as a deliberate role model/medical expert moving the learner from unconscious incompetence to conscious incompetence by walking the learner through each step as you perform it. If time with the patient is limited, do the deconstruction in a later debriefing session.

Ask your students to take notes using the 6 steps on the table to the right as a guideline. Some key points to emphasize with the learner are:

- use key words from the presenting complaint to develop 3 hypotheses (most dangerous, most common?)
- use the hypotheses to ask questions in the directed history
- use the information obtained to refine the differential
- review the relevant anatomy/physiology to inform the physical exam
- use the results to determine further investigations required.

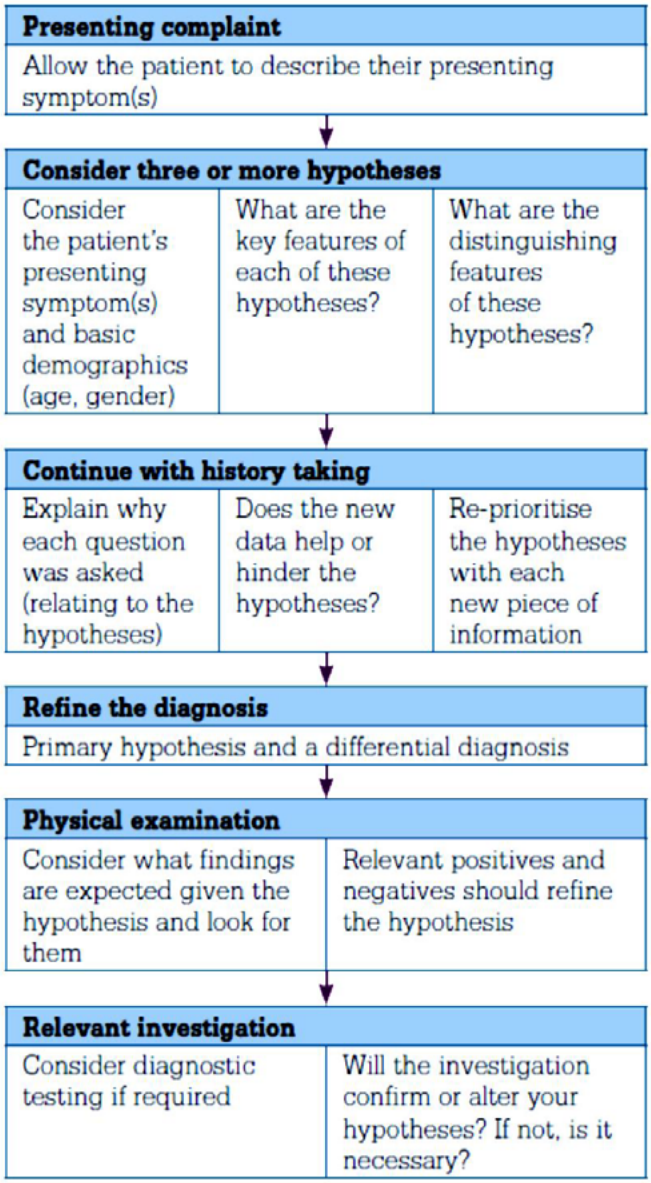

Figure 1. Flowchart of a teaching consultation with a focus on clinical reasoning

from Clinical Reasoning, a guide for improving teaching & practice

Comprehension

In this step, you will be acting as a coach, moving the learner from conscious incompetence to conscious competence. Demonstrate the process again without explanation, but have your learner take notes about how they would approach each step in the diagnostic thinking process. Go over their notes with them.

Performance

In the final step, you act as a clinical supervisor giving students direct feedback on their diagnostic thinking. The combination of practice & feedback moves the learner towards unconscious competence. Very few students truly reach the unconscious competence stage except for the most common diseases & conditions during their post graduate training.