A diagnostic process is based on the same principles irrespective of specialty:
listening to the patient, examining the patient systematically and pursuing a line of reasoning

To listen, look and think

As a clinical teacher of medicine, I often start a new semester by asking the students: What should a general practitioner do to determine whether a patient has cancer? The most common answer is that tests need to be taken: blood tests, biopsies, x-rays, scopic examinations, MRI or PET scans. For us teachers, it is intriguing to note that hardly anybody mentions the obvious: that the doctor first needs to ask key questions about the patient’s symptoms and concerns, the answers to which may corroborate a suspicion of cancer, such as weight loss, fatigue, persistent coughing, changes in bowel movements and wounds that refuse to heal.

The importance of the case history to medical diagnostics can hardly be overstated. It is nevertheless a fact that many diagnoses are overlooked or delayed because doctors have failed to notice important information in the case history (1). Faith in new and sophisticated methods granted to us by medical technology may reduce our ability to appreciate the importance of basic information and clinical observations.

On the other hand, a case history alone is rarely sufficient to make a diagnosis. During the recording of the case history, inexperienced students may already worry whether they will be able to make a correct diagnosis. As doctors, many of us have experienced the embarrassment and difficulty of having told the patient what we believe to be his or her condition, only to discover later in the same consultation that the patient obviously suffers from something completely different. In this situation, restoring confidence can be a challenge. Often, a suspicion of what disease the patient is suffering from will emerge at an early stage of the process, but all possibilities of differential diagnoses need to be kept open until the physical examination has been performed, often for even longer. Diagnoses must not be made prematurely through guesswork or on thin ice. Making a diagnosis is not a guessing game.

The function of the medical case history is primarily to establish information on symptoms and other issues that may form part of the basis for a diagnosis. It is equally important, however, that when recording the case history, the doctor behaves in a way that elicits the patient’s confidence in him or her (2). The doctor needs to observe the patient’s behaviour and reactions to various questions in order to form an impression of the patient’s general health, personality and preconditions for following up the treatment.

The importance of a patient-first approach is not forthcoming, and that the patient feels put off and not listened to. This harms the doctor-patient relationship. The doctor should not look at the patient’s afflicted limb or at a computer screen when recording the case history – it is better to look the patient in the eye, as one would do in any other conversation. Only when the patient appears to have finished (or has gone astray) should the doctor interpose with clarifying and purposeful questions. This is not as time-consuming as one might imagine (2).

In my opinion, the case history should be completely recorded before the physical examination commences, since addressing sensitive issues may be difficult once the patient has undressed. Time can rarely be saved by recording the case history and performing the physical examination simultaneously. In critical situations, however, this may be necessary for obvious reasons.

Students ought to learn how to undertake the physical examination in a systematic and structured way that follows a consistent sequence of issues and adheres to established conventions. Making notes of findings along the way may be wise. Every specialty has its own way of doing this, but they all share the practice of starting from broad, general observations before registering specific findings according to a pre-defined template that ensures inclusion of all factors and findings.

When a diagnosis is to be made, this can often be on the basis of pattern recognition, i.e. a set of symptoms and findings that the student recognises and that fit the description of a disease. On other occasions, one must focus on one or more symptoms, information or findings to establish a line of reasoning that leads to a possible, assumed or certain diagnosis. Requisitions for supplementary tests should be made purposefully with the objective of strengthening or weakening diagnostic possibilities. When tests have been taken and the diagnosis has been made, treatment can be initiated.

At the start of a new autumn semester and a new academic year, there is reason to draw attention to the importance of medical students being trained in appropriate recording of case histories, structured physical examination and diagnostic reasoning. These are among the skills that are required to become a good doctor: the ability to listen, look, and – most importantly of all – to think.

References