

Fever

Fever is defined as a temperature higher than 37.5°C axillary and 38°C if measured rectally. It is accepted that axillary temperature underestimates the core body temperature by 0.5°C, but this is very approximate. Use an electronic thermometer when available¹.

Fever is often linked, but not exclusively, with infection. All clinical examinations should include checking for fever.

In a febrile patient, first look for signs of serious illness, then try to establish a diagnosis.

Signs of serious illness

- Signs of sepsis with signs of shock: circulatory failure, respiratory distress, purpura, confusion, coma.
- Signs of a systemic illness: meningeal syndrome, seizures, heart murmur on auscultation, abdominal pain, rash, etc.
- Patient's underlying condition: malnutrition, immune suppression, splenectomy, chronic disease, the very young and the very old, bedridden patients.

Aetiology

Many different diseases, infectious or noninfectious, acute or chronic, benign or malignant, may be accompanied by fever. Among the infectious diseases requiring immediate treatment, look for:

- purpura fulminans
- bacterial meningitis
- severe malaria
- severe bacterial skin infections
- acute pyelonephritis with urinary retention
- peritonitis or gastrointestinal infection
- pneumonia with signs of respiratory distress
- subglottic or epiglottic laryngitis
- endocarditis
- septicaemia

In the absence of signs of serious illness and obvious diagnosis, patients may return home with an antipyretic and should be educated to prevent dehydration (plenty of fluids) and to recognize symptoms that need medical attention. Patients should return for a new consultation if there is no improvement within 48 hours of the initial consultation or before if their condition deteriorates.

In case of doubt (e.g. about the evolution, the quality of surveillance) and depending on the context (geographical distance, problems of transport), it may be better to keep patients 12 to 24 hours for observation.

Complications

- Convulsions
- Dehydration
- Confusion, delirium
- Shock

It is important, particularly in children, to look for signs of these complications, to treat them, and most importantly to prevent them.

¹ Temperature should be measured over a period of 5 minutes when using a mercury thermometer.