

A Handbook of
GERIATRIC CARE

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Edited by
O.P. Sharma



Viva

Fever

Anand P Ambali



in Osteoporosis
in an elderly

DEFINITION

Fever is defined as an elevated core body temperature of more than 38 Centigrade. It plays important role in host defence. The regulatory centre of fever is less sensitive in elderly. Absent or Blunted response to fever is common in elderly.

ETIOLOGY

Infective causes – Pneumonia, urinary tract infection, soft tissue infection, gastroenteritis, prostate gland infections.

Non-infective causes – Polymyalgia rheumatica, temporal arteritis, malignancy, hyperthyroidism, drugs, stroke, pulmonary embolism.

Drugs like tricyclic antidepressants, selective serotonin reuptake inhibitors, benzodiazepines, buspirone.

PATHOPHYSIOLOGY

The rise in body temperature in response to pyrogens is blunted with increasing age. The homeostatic response of the body temperature deteriorates with advancing age. The ability to cope and respond to exposure to hot or cold environment is compromised in old age. There will be reduction in perception of the thermal environment to which behavioural responses are not seen. The above mentioned factors deprive the benefits of fever in old age. A blunted fever response to infection portends a poor prognosis.

CLINICAL FEATURES

History of fever, its onset, duration, type of fever, associated with chills or rigors should be noted. Following questions should be asked:

- History of travelling to endemic area, organ transplantation, replacement surgery
- Night sweats, exposure to pets, use of immunosuppressants.
- Joint pain, bed ridden status, burning micturition.
- House hold contacts having fever, lethargy, incontinence and diabetes.
- History of cigarette smoking and alcohol.
- History of seizures.

Symptoms like increased thirst, giddiness, decreased appetite suggest fever in older people.

Signs Delirium during fever is common. Look for rash, bed sores, signs of meningitis, icterus, Pallor and signs of infective endocarditis. Look for presence of urinary catheter

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& central venous catheter. System examination to be carried depending upon presenting symptoms. Temperature recorded in oral cavity or rectum is preferred but the core fever is measured using eardrum reflectance in elderly.

INVESTIGATIONS

Complete blood count, Erythrocyte Sedimentation Rate, C-Reactive Protein, HIV Deficiency Virus (HIV), Widal test, Dengue Antigen, Brucella Antigen, Peripheral smear for Malaria, Chest X-Ray, Ultrasound of Abdomen and Pelvis, Urine for microscopy and Culture of Blood, Sputum or Urine.

MANAGEMENT

General strategies are to rehydrate, use of paracetamol, tepid sponging, and adequate intake of salt and water and care of tubes if *in situ*.

Specific therapy once diagnosis is made.

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