

Drug-Induced Fever

Drug-induced fever is a serious and confusing problem. Of medications that cause the fever the antibiotics are most frequent (especially beta-lactamase antibiotics and penicillins) but also sulfonamids, nitrofurantoin and antituberculous, Drug-induced fever doesn't have characteristic features. Most often it occurs 5 to 10 days after the start of treatment but it may occur also right after the first dose. Most probably, the drug acts like an exogenous pyrogen: Drug fever is usually a diagnosis of exclusion. Although most patients are surprisingly well while febrile, some are profoundly septic.

- Hypersensitivity reactions (beta-lactam, carbamazepine and phenytoin)
- Altered thermoregulatory mechanisms (atropine)
- Directly related to administration of the drug (Amphotericin B, biological agent)
- Direct extension of the pharmacologic action of the drug (Chemotherapy)
- Idiosyncratic reactions (Malignant Hyperthermia, Neuroleptic Malignant Syndrome and Serotonin Syndrome)

Most Common:

Beta-lactams (Piperacillin & imipenem) , nitrofurantoin, minocycline, sulfa, erythromycin, INH, procainamide, quinidine, hydralazine, methyldopa, allopurinol (with HCTZ), heparin, cocaine, carbamazepine and phenytoin.

Others:

Atropine, captopril, HCTZ, nifedipine, clofibrate, atropine, meperidine, aspirin and cimetidine

| Category of F.U.O | Definition | Common Etiologies |
|--------------------------------|---|---|
| Classic | Temperature >38.5°C (100.9°F) Duration of >3 weeks Evaluation of at least 3 outpatient visits or 3 days in hospital | Infection, malignancy, collagen vascular disease |
| Nosocomial | Temperature >38.5°C Patient hospitalized >=24 hours but no fever on admission Evaluation of at least 3 days | <i>Clostridium difficile</i> enterocolitis, drug-induced , pulmonary embolism, septic thrombophlebitis, sinusitis |
| Immune deficient (neutropenic) | Temperature >38.5°C Neutrophil count <=500 per mm ³ Evaluation of at least 3 days | Opportunistic bacterial infections, aspergillosis, candidiasis, herpes virus |
| HIV-associated | Temperature >38.5°C Duration of >4 weeks for outpatients, >3 days for inpatients HIV infection confirmed | Cytomegalovirus, <i>Mycobacterium avium-intracellulare</i> complex, <i>Pneumocystis carinii</i> pneumonia, drug-induced, Kaposi's sarcoma, lymphoma |