

TNF-alpha inhibitors: Complications

Five inhibitors of TNF-alpha are approved for the treatment of a variety of inflammatory illnesses (eg, rheumatoid arthritis [RA], Crohn disease) by the US Food and Drug Administration (FDA). These medications are:

- **Etanercept** – A soluble p75 TNF-alpha receptor fusion protein
- **Infliximab** – A chimeric (mouse/human) anti-TNF-alpha antibody
- **Adalimumab** – A fully human monoclonal anti-TNF-alpha antibody
- **Certolizumab pegol** – An antigen-binding fragment (Fab') of a humanized monoclonal antibody coupled to polyethylene glycol
- **Golimumab** – A human anti-TNF-alpha monoclonal antibody

Complications:

Acute: hypotension, bronchospasm, urticarial (true allergic – mediated by IgE) or anaphylactoid (non-allergic) reactions

Delayed: serum sickness type – skin rash, joint pain, myalgias, fatigue, fever (immune-complex type reactions)

Neutropenia

Infection

Demyelinating disease -confusion, ataxia, dysesthesia, paresthesia, Guillan-Barre syndrome

Heart failure

Pulmonary fibrosis

Hepatotoxicity (rare)

Psoriasis

Malignancy

Auto-immunity

Question:

A 45 year-old patient is started on Infliximab for Crohn's Disease. Development of the following is an indication to stop the medication:

- a. S3 on auscultation
- b. Myalgia
- c. Acute psoriasis
- d. Fever

Answer: A - In a patient who develops HF while on a TNF-alpha inhibitor, a drug-induced cause should be suspected, and use of the medication should be suspended