Cutaneous tolerance to long term anakinra therapy: report of a 9 year experience and review of French pharmacovigilance

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Background: Anakinra, a recombinant human interleukin-1 receptor antagonist, is commonly used in the treatment of rheumatoid arthritis and also shown efficacy in some auto-inflammatory diseases. This drug is generally known for being well tolerated.

2 Objectives: - To explore cutaneous tolerance in patients who received a long-term anakinra treatment in our hospital
- To investigate the similar cases of adverse cutaneous reactions reported in the French pharmacovigilance database

Methods:

Retrospective study

French pharmacovigilance database

Medical files

Medical team collaboration

January 2007 to April 2016

Age > Sex
Anakinra induction > Dose
Cutaneous side effect > Naranjo score
Latency time > Evolution
Withdrawal and reintroduction > Biopsy if performed

Criteria
Hospital research
French pharmacovigilance database

Median age (years)
47
43

Sex ratio (F/M)
3.5
2.7

Mean interval of appearance (days) [bounds]
7 [2-365]
25 [1-122]

Drug discontinuation
44 % (4/9)
70% (26/37)

Reintroduction
0
23% (6/26)

Reappraisal of cutaneous reaction after rechallenging
NA
83% (5/6)

Clinical manifestations:
- Small inflammatory reaction on injection site
- Severe erythematous and edematous eruption
- Painful and pruriginous eruption
- Urticarial rashes on injection sites
- Exantheme
- Maculopapular rash
- Generalized urticaria
- Panniculitis on the 4 limbs
- Eczematous and puritic eruption
- Inflammatory plaques
- Psoriasis eruption

Results:

Two patients developed an acute onset of erythematous and very painful eruption localized in all injection sites in the same time which refers to a “recall syndrome”

Hospital retrospective study: 13 patients

9 (69%) developed mild to severe skin adverse reaction

French pharmacovigilance database

37 patients with mild to severe skin adverse reaction

Conclusion:
This study was the first to describe the real life tolerance of anakinra over a 9 years period in a wide spectrum of diseases. Our series highlighted an important rate of major side effects (69%) leading to treatment discontinuation. This may be of major concern as anakinra is usually used as rescue treatment for auto-inflammatory diseases.