

Primary Care For Nephrologists: revisiting some new concepts.

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Immune Reconstitution Inflammatory Syndrome (IRIS):

IRIS was reported initially during the treatment of Human immunodeficiency virus with antiretroviral therapy (ART). It was noted that there was an increase in the paradoxical infectious process such as tuberculosis with improvement of the immune system. Most of the cases have been reported with mycobacterium tuberculosis (TB), however other organisms have been implicated also. Similar episodes were also noted in non-HIV patients undergoing treatment for TB, though milder and self-limiting. In patients responding to ART, almost 30% develop IRIS.

The occurrence of IRIS HIV depends on:

- 1: State of immune suppression especially CD4+ T cell at the time of initiation of antiretroviral therapy.
- 2: Response to antiretroviral treatment and recovery of the immune system.

Pathogenesis:

In patients with HIV or non-HIV patients recovery of T lymphocytes and activation of the immune system leads to systemic or local inflammatory reactions at the site of the preexisting infection. This inflammatory reaction is usually self-limited, especially if the preexisting infection is effectively treated. However, the response may be overwhelming leading to worsening of the overall clinical condition.

In non-HIV patients the pathogenesis is not well understood. It does appear to be immune mediated with recovery of the immune response. It was shown in studies that following the start of anti-tuberculous therapy the tuberculin test in patients with anergy prior to the therapy now become positive.

Clinical Features:

Worsening of signs and symptoms such as fever pulmonary or extra pulmonary manifestations.

Management:

The management of the infection, tuberculosis or other opportunistic infection should continue. Prednisolone at the initiation or development of IRIS may improve the outcome.

References:

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