Individuals with Pulmonary Tuberculosis Have Lower Levels of Circulating CD1d-Restricted NKT Cells.

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Abstract

Mycobacterium tuberculosis (MTB) is a leading cause of mortality worldwide from an infectious agent. Natural killer T (NKT) cells recognize mycobacterial antigens and contribute to anti-MTB immunity in mouse models. NKT cells were measured in subjects with pulmonary tuberculosis, MTB-exposed individuals, and healthy controls. NKT cell levels are selectively lower in peripheral blood mononuclear cells from individuals with pulmonary tuberculosis than in both MTB-exposed subjects and healthy control subjects. This apparent loss of NKT cells from the peripheral blood is sustained during the 6 months after the initiation of MTB treatment. These findings indicate that NKT cells may be an important component of antituberculosis immunity.

Footnotes

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