A Primer on Inflammation for Psychiatrists

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Abstract

The immune system is critical for maintaining homeostasis. It is composed of multiple cell lineages that act in concert to clear pathogens and insults through orchestrated mechanisms comprising immunological recognition, effector functions, immune regulation, and memory. These functions are dependent on the two arms of the immune system: the innate and adaptive immune systems. Some of the complex mechanisms mediated by these systems are described here, including toll-like receptor activation, cytokine production, antigen recognition, and antibody production. Altogether, the immune system's actions are tightly regulated to provide protection against pathogens and insults and to maintain homeostasis.