

In dermatomyositis an autoimmune reaction is thought to be triggered by an initial infection with a pathogen expressing protein antigen similar in structure to a membrane protein found on capillary endothelial cells in muscle and skin. A normal immune response against the pathogen is initiated by phagocytes such as dendritic cells that engulf the pathogens and degrade them. Antigenic peptides derived from pathogen proteins are displayed on HLA class II receptors on the dendritic cell surface and the activated cell migrates to regional lymph nodes to stimulate CD4+ helper T lymphocytes.

