Immune responses to filarial parasites.

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Filarial nematode parasites are long-lived organisms which are responsible for one of the major tropical diseases. Their ability to survive may be related to the antigen-specific anergic state observed in carriers of the parasite. Severe disease symptoms are associated with the breakdown of anergy. Different stages of the parasite life cycle are anti-genetically distinct, and a state of concomitant immunity is therefore possible which prevents superinfection. The evidence for these conclusions is discussed, in the context of the need for an effective vaccine against filarial parasites which will avoid any risk of increasing disease severity.