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ASIA EDITION

Australians one step closer to malaria vaccine

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Australian researchers make breakthrough in malaria vaccine



Singapore: Scientists in Australia have been studying people, who have developed an immunity to malaria. These scientists revealed that they've made a breakthrough in the fight against the disease, which causes up to one million deaths per year. The study, conducted at Melbourne's Burnet Institute, analyzed the antibodies of individuals in Kenya, who became immune to the parasite over time. Researchers focused on a key malaria protein called PfEMP1, according to Dr James Beeson, head, center for immunology, Burnet Institute, and the senior author of the study.

"The puzzle has been, what is the key point of attack of the immune system against malaria? We've established that one particular protein of malaria is the key point of attack of the immune system," Dr Beeson said.

Scientists studied children between the ages of one and 10, as well as adults. They found that the more times a subject had suffered the disease, the more antibodies they had. Researchers concluded that "repeated infections over time were required to generate antibody responses toward [the protein]". Dr Beeson is now focusing on developing a vaccine that will induce that immune response to the protein. The study was published in the *Journal of Clinical Investigation* and involved research from the University of Melbourne and the Kenya Medical Research Institute.

Malaria is spread through mosquitoes, which carry a parasite called plasmodium. Symptoms of malaria appear approximately 10-to-15 days after the bite and include fever, headache and vomiting. Malaria can be fatal when untreated as the disease disrupts the blood supply to vital organs.