D-32 *Anopheles tessellatus/Plasmodium vivax* interactions: role of the peritrophic membrane

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Female mosquitoes obtain their protein requirements from a blood meal. The peritrophic membrane formed between the ingested blood and the epithelial cells of the midgut could influence digestive physiology and also the establishment of a malaria infection in the vector, when the blood meal contains mature gemetocytes. Microscopic examination of Giemsa stained smears of midguts of *Anopheles tesssellatus* fed blood containing *Plasmodium vivax* gametocytes demonstrated that the motile zygote the ookinete was formed 12 h after a blood meal; the density of ookinetes was higher at 18 h.

A distinct peritrophic membrane was formed 18 h after a blood meal and this extended forward from the posterior midgut and persisted at 30 h in *An.tessellatus*. No ookinetes were observed in the midgut at 24-30 h. The formation of the peritrophic membrane was studied in *An.tessellatus*. Peritrophic membranes were not seen in all blood fed mosquitoes, between 18-30 h after a blood meal although the digestion of blood is completed. Results suggest that the peritrophic membrane of *An.tessellatus* may not play a role in the establishment of an *An.tessellatus/ P.vivax infection.*