



Mini Review

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Illustrated Parasitic Sequence on One Page

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The image displayed within this article is a watercolor illustration that shows the life cycle of the malaria parasite of the *Plasmodium vivax* organism. As a complex life cycle involving processes in more than one host, the female Anopheles mosquito and the human being, the life cycle is often presented as a diagram that requires flow arrows to explain the cyclic patterns within the mosquito's body, the human body and the interchange between them. This pictorial flow chart was created as a combination of anatomical and scientific illustration combined with a suggested flow diagram that presents each event in the cycle in a pictorial manner. In doing so, it follows a long-standing tradition within drawing, painting and illustration: that of depicting multiple, sequential events on one page. The relationship between diagrams and illustrations within medical and scientific texts has had a busy history as the relationship between highly finished paintings and illustrations as placed within those scientific and medical texts can be perceived to be attractive and compelling but often not quite so informative as diagrams and other visual material such as microphotographs.

This tension has been noted for some time and the searching out of a joint, overlapping area that combines elements of the pictorial with the diagrammatic, is an ongoing venture that includes traditional and more recently developed media. The complex sequence of events within malarial infection are well known in many interested and involved circles and it is not the purpose of this article to go into full written or diagrammatical detail regarding the

infection of a human being by the infected female Anopheles mosquito via saliva injected through the insect's hyper-dermic, hollow needle-type mouth part as it is injected into the human blood vessel; nor is it proposed that this text should dwell on the subsequent events within the human bloodstream as the infection agents make their way to the specialist cells within the human liver, there to mature and replicate before making their way to infect red blood cells to develop further: causing the blood cell to rupture, allowing further infection of blood cells. These infected red blood cells can then be taken up into the gut and gut-lining areas on a previously non-infected female Anopheles mosquito later feeding from the bloodstream of the infected human being. After development in the insect's gut area the infection agents travel to the salivary glands of the now infected mosquito, ready for injection into the next human carrier.

The image, below, attempts to illustrate that complex inter-host process in a pictorial manner that does not use text annotations or call outs but employs clockwise reading of the events and colour-wash coding of backgrounds to denote the internal and external locations that the events take place within (Figure 1).

Acknowledgments

None.

Conflict of Interest

None.



Figure 1: The image of the malarial life cycle below was produced by the author.