

in a varix they are free to move about, but when in the distal lymphatics it is more usual to find them coiled up in small cyst-like dilatations. When set free, and placed in water or salt solution they move about very freely, coiling and uncoiling themselves very rapidly, often apparently getting themselves into an inextricable tangle.

The adult male is about 70 m.m. long, very slender, and shows a greater tendency than the female to curl when in water or salt solution. The oral end is slightly tapered and club shaped. The tail end also tapers, the tip being rounded off abruptly.

The female filaria is the larger, both in diameter and length. The anterior and posterior extremities are similar to the male. The two uterine tubes occupy the greater part of the whole length of the body, and are seen to contain numberless ova in various stages of development while near the external opening the embryos can be seen in the fresh condition, actually moving about.

The embryos which are found in the circulating blood are minute, colorless, snake-like worms, about 1-80 inch in length, 1-3200 inch in diameter. Each is enclosed in an exceedingly delicate sheath considerably longer than the worm it encloses. It moves freely backwards and forwards in this, the part not occupied collapsing, and trailing about after the head or tail as the case may be. The head end is abruptly rounded; under a high power there can be seen, when the movements of the animal have about ceased, a six lipped, prepuce-like structure which is constantly covering and uncovering the end of the worm. Occasionally a short, sharp, fang-like projection is momentarily shot out, and quickly retracted.

In fresh drawn blood the movements of the worm are very rapid, and it is impossible to make out any structure beyond the sheath. The little animal is constantly moving backwards and forwards within its sheath, and violently lashing about. The corpuscles near it are much agitated by the continual movements of the embryo. Wriggling about so actively the embryo does not as a rule move very far from the one place, and soon has a place about it quite clear of corpuscles; but occasionally it will insinuate itself amongst the corpuscles and move away from the field.

All that are seen are of the same size; they undergo no further development until they are taken up by their intermediate host, the mosquito. The number of embryos found in a drop of blood will vary according to the time of day the examination is made. As a rule a preparation made during the day will give a negative result, or not more than an occasional specimen. As evening approaches the embryos begin to enter the peripheral circulation, and their numbers gradually increase until midnight, after which they gradually decrease until seven or eight o'clock, after which none are to be found until evening again.

The number found in each drop at midnight will vary from ten to twelve to as many as five or six hundred, depending no doubt on the number of females, and upon whether they are reproducing at that time. Assuming that the parasites are equally distributed throughout the circulation there may be as many as forty or fifty millions circulating at one time.