

cerned in child-bearing? But who can tell precisely, what the vital relations of the ovaries, uterus and mammae are, each to the other, or in what manner or to what extent the functional activity of any one of them affects the organic, vital condition of the others? In the child-bearing woman, the ovaries, uterus and mammae, each in turn, has a term of rest. In the sterile woman the ever active ovaries and uterus need rest. Can it be procured for them by arrest of menstruation, the result of artificially induced lactation? If so, the sterile patient may well rejoice over the brighter prospects for her "keeping house." If so, the gynecologist will rejoice over his power to substitute one function for another, for thus he will get rid of the hindrances caused by the monthly menstrual nixus, and secure greater facility and ability to completely cure his patient. Given the substitution of functional activity of the breasts for functional activity of the ovaries, more happy results of treatment of "female diseases" will gladden the hearts of patients and physicians.

Correspondence.

FILARIA SANGUINIS HOMINUM.

To the Editor of the CANADA LANCET.

SIR,—In your October issue there appears some correspondence on the very interesting subject of *Filaria* from Dr. E. A. Hall, of Glamis, and inviting additional information with regard to it. With your kind permission I will endeavor to add a few of the points desired, without attempting to exhaust what is already known.

Filaria Sanguinis Hominum is associated with, and generally considered now to be the etiological factor in chylous urine, some forms of hæmaturia, and nævoid elephantiasis. The knowledge we possess is of very recent date, as fifteen years ago it was entirely unknown. Dr. Lewis, an Army Surgeon, at Calcutta, was the first to discover in 1870 the embryo form of *filaria* in chylous urine. In 1872, he made a further discovery of the same species of *filaria* in the blood taken from the finger of a Hindoo patient. There are two forms of the hæmatozoon, viz: the adult and embryo. The former measures about three to four inches long and about the thickness of a hair, is supposed to dwell in the lymphatic system, and from there

pour forth its young, but has been found in hydroceles and lymphatic abscesses. The latter measures about $\frac{1}{10}$ to $\frac{1}{5}$ of an inch in length, and of the diameter of a red corpuscle, thus enabling it to pass wherever blood can go, even through the finest capillaries. It is enclosed in a transparent sheath or pellicle, and found chiefly in the blood and urine. The majority of cases reported have been residents of warm countries, but four or five have been recorded as originally from Europe. Of these, Dr. Beale mentions one as never being out of Norfolk, and Dr. Roberts another who had always lived in Lancashire.

One of the most peculiar and interesting features in connection with the habits of this parasite, is the regular periodicity with which it makes its appearance in the blood. Dr. Stephen Mackenzie, in 1881, before the pathological society in London, exhibited a soldier, born in India, suffering from chyluria and hæmaturia, accompanied by *filaria*. The blood was examined every three hours with the following results. The *filaria* were far more plentiful or only found at night; they usually appeared about 9 p.m., reached the greatest number at midnight, and entirely disappeared by 9 in the morning. Experiments were made with this patient, to see if this periodicity could be changed, and strange to say, when the time for sleep was reversed, by making the patient sit up all night, the *filaria* were more numerous in the daytime.

Dr. Manson, of Amoy, from whose observations, the profession has reaped much of interest on this subject, has recently been fortunate enough to discover, that the mosquito, is an intermediary host. He has satisfied himself, that the proboscis of the mosquito enters the capillaries, and the *filaria* are withdrawn and probably deposited in water along with the larvæ of that insect, hence to the human subject and so on.

That the *filaria* produces hæmaturia and chyluria, there cannot be the slightest doubt, but how, is not clearly established. It involves too many theories for a letter of this kind. The most probable is the mechanical one. It is extremely likely that the embryo ultimately casts off this translucent sac or sheath in which it is enveloped, becoming then possessed of boring propensities, perforates the capillaries and lymphatic vessels, thus producing those symptoms which almost invariably accompany their presence.