

particularly in diseases due to internal parasites, such as bilharzia, ankylostoma, and trichinae. In trichinosis the eosinophile leucocytes may reach a percentage (of all leucocytes) of 40 to 80. Here we had one of 31 per cent., which pointed strongly towards trichinosis, as the other conditions where eosinophilia is present could be excluded. Consequently, Dr. Harris felt justified in setting in motion the sanitary machinery, with the result that Dr. L. P. Black, acting medical officer of health of St. Thomas's rural district, discovered the actual salted pork of which this man had partaken, and on Feb. 21st we examined this together and found many trichinae among the muscle fibres. A fresh specimen made by teasing or crushing the muscle and examined under a very low power, 70-100 diameters, shows the parasites very distinctly. In the pig as a rule the capsules are not calcified and hence are not visible to the naked eye. Later I made permanent specimens by embedding in paraffin and staining with hæmatin solution and eosin, the worm taking the hæmatin and the muscle the eosin. Frozen sections are no use as the worm drops out. To get a good specimen it is important that the sections are fairly thick.

On Feb. 26th I made a differential leucocyte count from a blood film taken from another patient, from the same farm, who had also eaten this pork. This was a woman under the care of Mr. C. Fenwick of Dunsford, who kindly supplied me with the film. A differential count gave the following result: polymorphs, 39 per cent.; lymphocytes, 24 per cent.; large mononuclears, 3.5 per cent.; and eosinophiles, 33.5 per cent.; a very similar result to the first case. This patient had been taken ill about the same time and had suffered from rheumatic pains and an elevated temperature, and at first had been supposed to be suffering from acute rheumatism.

In order to prevent the spread of the disease the Board of Agriculture was communicated with by Dr. Black, and an inspector was sent down to investigate the farm and its surroundings. He was fortunate in finding a dead rat on the farm. On examining its muscles it was found to be teeming with trichinae. It may not be generally known that pigs will often kill rats, which are the normal host of the trichinae, and probably have no objection to eating them, and hence become infected. Rats travel long distances looking for food in the country, and farms remotely situated may thus become infected. The Local Government Board has also made itself interested in this small epidemic, and in company with Mr. G. C. Hancock, one of its inspectors, I examined pork from neighbouring farms and the muscles of a rat caught for the purpose, but without results.

This outbreak of trichinosis shows the importance of bearing this disease in mind when cases occur with symptoms of pyrexia and muscular pains where the diagnosis is doubtful. If it had not suggested itself to Dr. Harris as a possibility in the case in the hospital, the epidemic, if one may so call it, would certainly have remained undiscovered. The differential blood count is also most important, and the large eosinophilia was so suggestive of trichinosis that it justified further steps being taken to find out whether the pork was infected or not.

Exeter.

CALCIUM LACTATE IN THE TREATMENT OF EPILEPSY.

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FOR some months I have been treating several epileptics with calcium lactate. The improvement in these cases since they were put on the drug is sufficiently marked to justify my recording the facts, as I have not heard of its being used before in the treatment of epilepsy. All the patients under this treatment have improved—some more so than others. They are all in an epileptic ward, where both day and night they are under constant supervision by nurses accustomed to recording epileptic seizures, so that complete reliance may be placed on the number of fits recorded. Reference to two of the more successful results obtained may perhaps persuade others to give the drug a trial.

CASE 1.—The patient was a female, married, aged 46

years; menstruation had ceased. She had had no family. There was no history of syphilis. She is said to have had a fright 17 years ago, followed by a slowly progressive right-sided hemiplegia, and two or three months later by fits. In December, 1908, her condition was as follows. She was quite lost to her surroundings, dirty in her habits, childish, incoherent, noisy, and spiteful. She showed little or no signs of right-sided paralysis, except slight swinging of the right leg whilst walking. The knee-jerks on the two sides were equal. She was having three to five fits in every 24 hours, most of them in the day-time.

The type of fit is a *petit mal* or "sensation." The attack starts by the patient screwing up her face; she then throws herself backwards and wriggles or rolls, making at the same time a bellowing noise. There is a momentary loss of consciousness but no actual convulsions and no cyanosis. The duration of the fit is less than 30 seconds.

On Dec. 19th, 1908, the patient was put on calcium lactate, 15 grains three times a day, and the following is a copy of the record kept:—

		Number of fits.		
		Day.	Night.	Total.
During the week ending	Dec. 26th	...	...	...
"	Jan. 3rd	...	...	...
"	Jan. 10th	...	...	...
"	Jan. 17th	...	...	...
"	Jan. 24th	...	...	...
"	Feb. 1st	...	...	...
"	Feb. 8th	...	...	...
"	Feb. 15th	...	...	...
"	Feb. 22nd	...	...	...
"	March 1st	...	...	...
"	March 8th	...	...	...
"	March 15th	...	...	...
"	March 22nd	...	...	...
"	March 29th	...	...	...
"	April 5th	...	...	...
"	April 12th	...	...	...
"	April 19th	...	...	...
"	April 26th	...	...	...
"	April 27th to 30th	...	...	...

She has also improved mentally, and now does a little polish-ing in the ward.

CASE 2.—The patient was a female, aged 33 years, single; she menstruated regularly. No history was obtainable except that she had been in lunatic asylums for epileptic insanity since 1894. In January, 1909, her condition was as follows. She was lost to her surroundings, had no memory, and was very dull and confused. She was in fair bodily health. She was having from three to five fits in every 24 hours, most of them in the day-time. The number of fits had not changed appreciably during her menstrual period.

As regards the type of fit: 1. Many of her fits are "sensations." If standing up she suddenly collapses and falls to the ground; if sitting down she "jumps" and falls off her chair. Recovery is immediate. 2. Some of her fits are typical, strongly marked major epilepsy with general con-vulsions, loss of consciousness, cyanosis, biting of the tongue, and frequently cutting of the chin, eyebrows, or nose on the ground.

On Jan. 7th, 1909, she was put on calcium lactate, 15 grains three times a day, and the following is the record of fits since:—

		Number of fits.		
		Day.	Night.	Total.
During the week ending	Jan. 14th	...	...	...
"	Jan. 21st	...	...	...
"	Jan. 28th	...	...	...
"	Feb. 4th	...	...	...
"	Feb. 11th	...	...	...
"	Feb. 18th	...	...	...
"	Feb. 25th	...	...	...
"	March 4th	...	...	...
"	March 11th	...	...	...
"	March 18th	...	...	...
"	March 25th	...	...	...
"	April 1st	...	...	...
"	April 8th	...	...	...
"	April 15th	...	...	...
"	April 22nd	...	...	...
"	April 28th	...	...	...
"	April 29th and 30th	...	...	...

* Menstr ting.