List of Cases collected from Medical Literature (continued).

No.	Reporter's name.	Abortion; premature labour; or labour at term.	Number of days after which symptoms appeared.	Duration of disease in days.	Result.	Treatment.
47	Dr. Merkel.	Abortion.	—	—	D.	Antitoxin.
48	"	"	—	—	D.	"
49	Dr. Rubeska.	"	9	9	B.	"
50	"	Labour.	19	—	D.	"
51	Dr. Pitha.	"	8	—	D.	Antitoxin, chloral, and anaesthesia.
52	"	"	8	—	D.	Antitoxin, chloral, and anaesthesia.
53	"	"	8	—	D.	Antitoxin.
54	"	"	8	—	D.	"
55	"	"	6	—	D.	"
56	Dr. Krauz.	"	7	—	D.	Antitoxin, urethane, and morphine.
57	"	"	9	—	D.	Antitoxin.
58	"	"	6	—	D.	Antitoxin and urethane.
59	"	"	10	—	D.	Antitoxin and urethane.
60	Dr. Leyden.	"	10	—	R.	Antitoxin (intracerebral), chloral, and morphia.
61	Dr. Pitha.	"	5	—	D.	Antitoxin (intracerebral) and morphia.
62	"	Abortion.	9	—	D.	Antitoxin (intracerebral) and morphia.
63	"	Labour.	9	—	D.	Antitoxin (intracerebral) and morphia.
64	"	"	5	—	D.	Antitoxin (intracerebral), morphia, and chloral.
65	Dr. R. N. Roy.	Abortion.	6	3	D.	—
66	"	Labour.	4	1	D.	—
67	Dr. Mallik.	"	15	—	R.	Chloral, 13½ drachms.
68	Dr. Mootoo-samy.	"	5	4	D.	—

References.—1, 2, Edinburgh Monthly Journal, April, 1850. 3, 4, Selected Obstetrical Works, Simpson, 1871, p. 573. 5, Essay on Puerperal Convulsion, p. 232. 6, 7, 8, 9, 10, Selected Obstetrical Works, Simpson, 1871, pp. 574-578. 11, American Journal of the Medical Sciences, January, 1842. 12, 13, 14, British and Foreign Medical Science. 15, Dublin Quarterly Journal, vol. xxx., p. 288. 16, Edinburgh Medical and Surgical Journal, vol. viii., p. 415. 17, London Medical Repository, vol. i., p. 192. 18, THE LANCET, vol. i., 1838, p. 388. 19, THE LANCET, vol. i., 1840. 20, Selected Obstetrical Works, Simpson, p. 590. 21, 22, Brit. Med. Jour., 1865. 23, 24, 25, 26, Dublin Quarterly, 1865. 27, Brit. Med. Jour., vol. i., p. 113. 28, 29, Obstetrical Transactions, vol. xiii. 30, British Gynaecological Journal, vol. i., p. 159. 31, Brit. Med. Jour., Oct. 7th, 1883. 32, Edinburgh Medical Journal, August, 1862. 33, Ibid., July, 1864. 34, 35, 36, American Journal of the Medical Sciences, January, 1866. 37, Ranking's Abstracts, vol. i. (1873). 38, 39, 40, London Medical Record, April, 1885. 41, 42, THE LANCET, July 31st, 1886, p. 218. 43, THE LANCET, August 17th, 1889, p. 313. 44, Annals of Surgery, August, 1900. 45, THE LANCET, August 8th, 1896, p. 381. 46-59, Annals of Surgery, September, 1900. 60-64, Ibid., October, 1900. 65, 66, Indian Medical Gazette, 1874, p. 182. 67, Ibid., 1877, p. 70. 68, Ibid., 1877, p. 290.

must look to the following points: (1) to destroy the bacteria at the seat of infection by thoroughly anti-septicising the parturient canal and by subsequently keeping it aseptic; (2) to eliminate the toxins already absorbed by brisk purgation and intra-cellular injection (under the breasts) of normal saline solution; (3) to overcome the symptoms induced by the action of toxins—viz., the increased reflex irritability of the higher nerve centres—and this is best accomplished by keeping the patient absolutely quiet in an isolated place and by chloral in very big doses, given either per os if possible, per anum, or hypodermic injection of apomorphia, hyoscine hydrobromate, or morphia; and (4) to neutralise the poison already absorbed

and to immunise the body after local infection has taken place. Both of these indications ought theoretically to be met by the injection of the serum of immunised animals. But the mode of action of the antitoxin has not yet been acceptably explained. Moschowitz, in his masterly contribution on the antitoxin treatment of tetanus, published in the Annals of Surgery of August, September, and October, 1900, gives no very decided opinion with regard to the neutralising effect of antitoxin, after a careful analysis of 358 cases. Antitoxin treatment, he says, appears to have a distinctly beneficial influence on the course of tetanus and the statistics he has collected show that with this treatment the general mortality of tetanus has been reduced from 90 to 40 per cent. But the puerperal cases, taken separately, show no improvement in the percentage of recoveries. With regard to the question of immunising the body after local infection has taken place, this would involve the injection of antitoxin as a prophylactic measure in all wounds when there is reason to suspect the possibility of the subsequent development of tetanus. By such treatment it is asserted that an extensive epidemic of puerperal tetanus in a lying-in hospital at Prague was cut short and numerous instances of good results from a similar course have been recorded in veterinary practice.

Calcutta.

MERCURY AND IODIDE OF POTASSIUM INTERNALLY GIVEN WITH PILOCAR- PINE HYPODERMICALLY IN DISEASE OF THE EYES.¹

By G. HERBERT BURNHAM, M.D. TOR., F.R.C.S. EDIN.,
ASSOCIATE PROFESSOR OF OPHTHALMOLOGY AND OTOTOLOGY AT THE
UNIVERSITY OF TORONTO, TORONTO, CANADA.

CASE 1.—In August, 1899, a patient consulted me regarding an inflamed condition of the right eye. I found at the upper and inner part of the eyeball in the ciliary region very severe scleritis, limited, and the patch of exudation large, swollen, and deeply congested. The adjacent cornea was infiltrated with a cloudy opacity up to, and slightly beyond, the pupillary margin, and there were much pain, photophobia, &c. I gave for ten days mercury and iodide of potassium and used atropine locally. The severity of the symptoms was relieved, but the progress of the sclero-keratitis was not stayed.

Early in September, 1899, I began treatment. The scleritis was now more extensive and the cornea was infiltrated almost throughout its whole extent. I gave pilocarpine daily in doses of one-sixth of a grain for two weeks, and then at intervals of from four to six weeks for seven injections, one each day, and have so continued up to the time of writing. The iodide of potassium and mercury have also been continuously used. The scleritis has traversed the whole ciliary zone up to the point of beginning, but under most favourable conditions—that is, the part first affected has been the most severely attacked and every adjoining part taken in was less severe, till finally, when the disease came again to the inner canthus, it was merely a blush. Moreover, the previously affected parts have kept improving and have never relapsed. In January, 1900, the sclero-keratitis was cured, but there was left a decided corneal haze, interfering very much with vision so that nothing could be read at 20 feet. The treatment was no longer necessary in regard to the scleritis, but it had to be kept up so as to clear up the cornea and thus to restore normal vision. This is being done, and now the vision is $\frac{2}{60}$. The cornea is still clearing up and I fully expect almost or quite normal vision again. There has never been any sign of a return of the disease, and the appearance of the formerly severely inflamed sclera is now normal.

The prognosis regarding this form of sclero-keratitis is gloomy. It is stated in our best text-books that the treatment is at best but palliative; the disease is certain to relapse and continues in this way for years till finally vision is not only impaired or practically lost, but ciliary bulging

¹ A paper read at the thirty-third annual meeting of the Canadian Medical Association held at Ottawa on Sept. 12th, 13th, and 14th, 1900.

takes place, leading to marked staphylomatous changes. Under the combined treatment of mercury and iodide of potassium internally and pilocarpine hypodermically there need be, I think, no such result, but a permanent curative effect may be secured. The patient's history is tuberculous.

CASE 2.—The other case is that of a boy, aged 12 years, suffering from acute sympathetic ophthalmia—that is, a very severe cyclo-irido-keratitis. When the sympathetic trouble, which showed itself rapidly, was first noticed, the other eye, which had been injured by a penetrating wound, extending well up into the cornea from just at the ciliary region, was excised, the date being Jan. 25th, 1900. Under atropine the pupil at once became fully dilated. Mercury and iodide of potassium were given and the eye at first improved. On Feb. 2nd, eight days after the excision, the sympathetic inflammation again plainly showed itself. I now began combined treatment. For the first 12 injections of pilocarpine, that is the first two weeks, the effect was not full, though I gave as much as one-sixth of a grain. I felt that there was some reason for this, for one-sixth of a grain is a very large dose for a boy 12 years old. The throat was very slightly affected by the atropine and apparently there was no noticeable constitutional effect. However, I stopped, by more careful pressure upon the canaliculi, all passage of it into the throat when one-tenth of a grain gave a full effect. The pupil was now, at the end of three weeks only, dilated one-third, the exudation into the ciliary region and iris tissue causing the narrowing to take place. The pupillary margin was very firmly bound down and the capsule of the lens in the pupillary area was covered with a semi-translucent coating of lymph. On the 24th, four weeks since the excision and about three weeks since the beginning of the combined treatment, another acute attack came on and the condition was as follows. There was much general infection, the tension was +1, there was severe pain, and keratitis punctata was present throughout the whole cornea—in fact, a well-developed case of sympathetic cyclo-irido-keratitis; there was perception of light only. Under the usual prognosis with respect to similar cases there was a very hopeless outlook. On the 27th the eye was quieter; the tension was +. On March 20th the eye was still improving and vision was better. The combined treatment was still kept up and the eye kept doing well till the 23rd when there occurred a very acute exacerbation with severe pain; the tension was +1 and there was perception of light only. On the 31st the eye was better. Between this date and the beginning of September the combined treatment was kept up. An improvement which was most uniform, thorough, and unbroken by any symptoms of relapse resulted. The sight also gradually improved till now (Sept. 6th, 1900) the vision is $\frac{1}{2}$ less two letters. The absorption has continued very satisfactorily so that the pupillary margin has given way throughout almost its whole extent. The pupil, however, is dilating very slowly, due to the exudation into the iris tissue. This absorptive process I confidently believe will continue till finally the whole of the affected region will again be restored to a healthy condition. The tension is now normal. This is the first case of acute sympathetic ophthalmia which I have had the opportunity of treating in this way, and the results at the end of about eight months fully convince me that the result will be for all practical ends an eye normal as regards vision and its general condition. This boy has taken internally ever since Feb. 2nd, 1900, five grains of iodide of potassium thrice daily after eating and the twenty-fourth of a grain of bichloride of mercury before eating. One-tenth of a grain of pilocarpine was given hypodermically every second day after the first two weeks for five months continuously. During the remainder of the eight months at the end of every two weeks I have given an injection every second day for six injections and am still going on with them. His general health is good.

Other cases previously published by me,² added to those now given and also many minor ones not reported, have given results better than those obtained by other treatment so that I feel justified in advocating the superiority of the combined form of treatment. During four years as resident house surgeon at Moorfields Eye Hospital I saw a good many cases of sympathetic ophthalmia, and I am persuaded that under any other treatment the result in Case 2 would have been that, under the best of

circumstances, the eye would have been greatly impaired. The treatment may be said to owe its efficacy to its power of arousing to excessive activity, in a vigorous and sustained manner, the normal physiological processes in diseased tissues, and thus acting so in accord with the efforts of nature as to bring about a restoration to a normal condition. I am now using this treatment, in this belief, in a case of double conical cornea with so far very encouraging progress. Toronto.

A Mirror

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

ST. THOMAS'S HOSPITAL.

A CASE OF INFLAMED CYSTIC OVARY WITH PELVIC CELLULITIS AND PERITONITIS WITH DEVELOPMENT OF SEPTICÆMIA SUCCESSFULLY TREATED WITH ANTI-STREPTOCOCCIC SERUM.

(Under the care of Dr. W. W. H. TATE.)

IN the following case the evidence of the value of anti-streptococcic serum is very strong, in spite of the fact that the patient refused to allow the blood to be examined bacteriologically. Even, however, if the patient will not permit an examination of the blood, much information may be obtained from a bacteriological examination of the uterine cavity. W. Williams¹ examined 44 cases of puerperal fever and streptococci were found in only eight of these. Most observers are agreed that the evidence is against anti-streptococcic serum being of much value except in isolated cases, yet as the injection very rarely appears to be in any way harmful it would be well to give the serum an extensive trial, a bacteriological examination of the blood being made whenever possible. For the notes of the case we are indebted to Mr. Hanway R. Beale, senior obstetric house physician.

A married woman, aged 37 years, was admitted into St. Thomas's Hospital on Oct. 13th, 1900, under the care of Dr. Tate. The patient had had 10 children and no definite miscarriages; her last child was born three years ago; the confinements had been normal. The present illness began in July, 1899, three weeks after a menstrual period, when the patient had a sudden flooding after lifting a tub; she supposed that she lost three pints of blood. The vagina was plugged, but the hæmorrhage persisted for three weeks, when some operation was performed at a cottage hospital where she stayed one month. The patient thought that she was pregnant at the time. On Oct. 4th there occurred a discharge of blood and yellow matter of offensive odour, and in November a second operation was performed similar to the previous one. At this time there was also frequent and painful micturition. The operation was followed by a high temperature and severe abdominal pain lasting six weeks; in December the uterus was curetted, and two weeks later a perineal abscess was opened. After this she was well until June, but she did not menstruate during this period. Menstruation commenced after one week's severe abdominal pain. In July a lump was noticed in her right side but operation was not deemed necessary. In September frequency and pain on micturition became continuous and pain in the lower part of the abdomen was worse. She was seen by Dr. B. H. Kingsford of Woking, who diagnosed pelvic cellulitis and sent her to St. Thomas's Hospital.

On admission into St. Thomas's Hospital she was found to be of cachectic appearance and complained of great pain in the lower part of the abdomen and pain and frequency of micturition. There were great tenderness just above the symphysis pubis and a sense of fulness and great tenderness about the right flank, and there was a resistant tender

² Archives of Ophthalmology and Ophthalmic Review.

¹ American Journal of Obstetrics, September, 1898.