and, I think, also to a great extent by the medical profession, as a more or less innocuous drug.

In the early part of 1902 I was hurriedly called one night to a patient who was said to be dying. On arrival at the house I found the patient, a strong and perfectly healthy man, about 25 years of age, in the following condition. He was at an open window, gasping for breath, his head hanging over the window-sill; his face was intensely congested and then changed to a pale livid hue for an interval, after which there was a return to a deep purple. His ideas were confused, he made wandering and inconsequent remarks, and when I drew him from the open window he made persistent, though badly coördinated, efforts to return to it. He had a sense of impending suffocation, which only hanging his head out of the open window somewhat mitigated. His general movements were extremely restless, the extremities were cold and clammy, and the pulse was very slow; convulsive movements of both hands and feet occurred every now and then; his fingers were tightly clenched on his hands. He then became semi-comatose and sank into a state of stupor, from which I had very great difficulty in rousing him, and as soon as I desisted from my efforts the stupor returned, his head sank forward, and he fell into the comatose condition again. His general condition now became alarming and all my efforts to rouse him failed.

The history of the attack was as follows. He went home to supper in perfect health and made an ordinary meal with his usual appetite, carried on conversation, and generally was in his usual excellent health and condition. He was a very strict teetotaler and never took any alcohol. After supper he remarked that he had "a bit of a cold" and that he would take a "good dose of eucalyptus" on going to bed. He accordingly, by his own account, swallowed a large teaspoonful of the oil, plain, and within a few minutes of his doing so he complained of a severe smarting pain down the œsophageal tract and in the gastric region, followed by the symptoms which I have detailed. His breath had a powerful odour of eucalyptus and his pupils were inclined to be contracted but only to a small extent. I gave him first stimulants, as he was very collapsed, and then a good dose of ipecacuanha and sulphate of zinc; after this he vomited freely the contents of his stomach which filled the room with the odour of the eucalyptus oil mixed with them. Soon after vomiting the symptoms began to abate, his ideas from being confused became more collected and he was able to give me a clear account of what had happened, the semi-comatose state disappeared, and he gradually returned to his ordinary health and condition. The next morning he was quite well and went about his usual business.

The oil which he had taken he had purchased in the town and it was possibly not very pure or of a very good quality. I asked him whether he had often taken the oil; he said, "Oh, yes, whenever I have a cold I take about 15 drops." It had never affected him when so taken, but he remembered that on one occasion, when he had taken half a teaspoonful at a dose, he became very giddy and a little confused; these symptoms, however, did not last long or go any further; he identified the sensations he had then as being the same as the initial symptoms of the attack I have described before he became confused and lost consciousness and there is no doubt that his condition was due to an over-dose of the drug.

It would be interesting if any of the readers of THE LANCET could furnish particulars of any cases which they may have met with of untoward symptoms following on taking a large dose of this oil.

Fielsburg, Orange River Colony, South Africa.

TWO CASES OF POISONING FROM THE APPLICATION OF ATROPINE TO THE EYES.

BY PERCY B. SPURGIN, L.R.C.P. LOND., M.R.C.S. ENG.

THE two following cases are of interest owing to their severity and the unusual means of poisoning; also as showing the marked idiosyncrasy which the children displayed with respect to the action of the drug.

The first patient was an excitable girl, aged ten years, who had been attending an eye hospital for cataract and had been given for instillation "guttæ atropinæ" containing four grains of atropine in the ounce. One day in July, 1901, I

was sent for urgently to see the child and found her covered with a diffuse rash closely resembling that of scarlet fever. Her temperature was 102.7° F. and her pulse-rate was 140. Her fauces and tonsils were much inflamed; she had a typical strawberry tongue and frontal headache but there was no vomiting. Inquiry elicited the fact that an hour previously the drops had been instilled, the patient then appearing to be quite well. An aperient powder and a saline mixture were prescribed. In the evening all the symptoms had considerably abated. Next morning the rash had disappeared completely, the throat was normal, the tongue was clean, the pulse-rate was 98, there was no headache, and the child had slept well. In two days she had recovered completely.

The second patient was a girl, aged three and a half years, who had been attending the same hospital for strabismus and had been having instillations of "guttæ atropinæ" containing two grains of atropine in the ounce. Sent for one morning I found that the child had vomited and was rather collapsed. Her temperature was 101.3° F. and her pulse-rate was 116. Her tongue was furred, her throat was slightly inflamed, and her chest and back and the upper part of her thighs were covered with a scarlatiniform rash. The same treatment as in the previous case was adopted with the addition of half a drachm of brandy in half an ounce of water, administered immediately, and a hot-water bottle applied to the feet. On the same evening she was better and on the next morning she was feeling quite well and all signs had disappeared.

In neither case was there subsequent desquamation. The diagnosis in both cases was poisoning by the "guttæ atropinæ." Careful inquiry elicited the fact that in neither case did the "guttæ" drop or trickle into the mouth; the rapidity of absorption and the speedy appearance of symptoms—in each case under one and a quarter hours—were remarkable.

Wimbledon, S.W.

A CASE OF (?) TUBERCULOUS MENINGITIS TREATED WITH IODOFORM OINTMENT.

BY HENRY C. WILSON, L.R.C.P. IREL., L.F.P.S. GLASC.

ON July 16th, 1905, I was called to see a boy of delicate aspect, aged six years. He was feverish, his temperature being 102° F., his pulse-rate 120, and he had been vomiting throughout the day. I gathered from the mother that during the previous week he had complained of headache, had cried if spoken to, was irritable, and not of his usual disposition. On the following morning his condition was much the same and he continued to vomit. In the evening, when I saw him again, he was in a semi-comatose condition. On the 18th the characteristics of meningitis were well developed. Retraction of the head, Kernig's sign, *tache cérébrale*, and twitchings of muscles were present. The pupils were dilated, the face was alternately flushed and pallid, and the boy could be roused only with difficulty. An ice-bag was kept applied to the scalp. A saline mixture containing iodide and bromide of potassium and calomel in a small dose were prescribed. On the 19th he remained much the same but was weaker and more comatose. His temperature was 101° and his pulse-rate was 80. The muscles of his left leg were rigid and his condition altogether was most unfavourable. In the evening an ointment consisting of 15 grains of iodoform in an ounce of vaseline was rubbed into the scalp and the back of the neck and instructions were given that this was to be done thoroughly every eight hours. On the 20th there was no alteration in the patient's condition. His temperature was 100° and his pulse-rate was 74. On the 21st he took notice of his surroundings to some extent. Iced milk and soda water were given and retained. On the 22nd he was much improved; he had taken more notice and had spoken. On the 23rd the improvement was continued and from this time he progressed slowly, gaining in strength and weight; his general condition is also returning to what it was previously to the illness. The use of the ointment was continued for about two weeks.

Two years ago the patient's brother, eight years of age (whom in appearance the parents inform me he greatly resembles), was attacked with precisely the same symptoms and died after an illness of six or seven days; his case was diagnosed by a consultant and the medical man in attendance as tuberculous meningitis. I understand that there is on the

mother's side a tendency to pulmonary tuberculosis. The history and symptoms would, I think, point to the meningitis being very probably tuberculous and until the inunction of the iodoform ointment the prognosis was apparently hopeless.

Catford, S.E.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

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

ST. GEORGE'S HOSPITAL.

A CASE OF ACUTE NON-RHEUMATIC ARTHRITIS TREATED WITH ANTISTREPTOCOCCIC SERUM; RAPID AMELIORATION.

(Under the care of Dr. H. D. ROLLESTON.)

FOR the notes of the case we are indebted to Dr. H. Robinson, house physician.

On Oct. 7th, 1904, a female, aged 51 years, was admitted to St. George's Hospital with the following history. About one month before admission the patient's knees became swollen and painful; this soon subsided but one week later the wrists and the joints of the fingers were similarly affected. Shortly afterwards the knees again swelled and also the ankles and great toe-joints. There was sweating at night and the appetite, never very hearty, was even poorer than usual. Since childhood she had had fleeting "rheumatic" pains in the shoulders but never any attack of acute rheumatism. A few years ago the right elbow had been swollen and stiff throughout the winter. She had never had chorea nor was there any family history of this or of acute rheumatism. One sister suffered

After admission the patient was treated with a liberal diet and iodide of iron medicinally. She was kept in bed and required constant aperients whilst under treatment; the bowels were kept regularly opened throughout. The temperature remained persistently elevated, fluctuating between 100° and 102°; it was noticed that the evening reading was almost always lower than that of the morning and a four-hourly chart showed that the maximum occurred at 2 A.M. and the minimum at 2 P.M. The pulse-rate in the first week varied from 90 to 120 beats per minute. On the fifth day after admission the temperature, pulse-rate, and articular swelling remained as before and a course of sodium salicylate was tried. One and a half drachms of this drug were given in an alkaline mixture during the 24 hours but without influencing the signs in any way. On the following day iron was resumed, this time as the tincture of the perchloride in 15-minim doses. The joint swellings now began to subside and Dr. H. R. D. Spitta, who was asked to withdraw and to cultivate some of the fluid from the wrists, found the distension of those joints insufficient to warrant the use of an exploring syringe. But the pain and pyrexia continued and another salicylate course was ordered, three drachms being given in 24 hours. On the following day the same amount of natural sodium salicylate was administered but no benefit accrued. The application of an icebag to the affected joints gave temporary relief only. After a fortnight's treatment the results obtained seemed to be limited to the disappearance of the effusions and the lowering of the pulse-rate to from 80 to 100, instead of from 90 to 120. Aspirin was being given for insomnia but produced little effect on the joints. A further salicylate course of three drachms a day and a further trial of iron as Griffith's mixture during the second fortnight were accompanied by some diminution of pain, but this was only slight and the pyrexia continued unabated. Arthritic atrophy began to show itself at this time. On Nov. 8th ten cubic centimetres of polyvalent antistreptococcic serum prepared at the Pasteur Institute were injected; within 36 hours the temperature fell to 99°, a point only four times reached in the preceding five weeks; after this the highest reading recorded was 99·8° and the lowest 99° until the 14th, when ten cubic centimetres of the polyvalent serum prepared at the Lister Institute were injected. A marked reaction followed this (*vide* chart),

Chart showing course of temperature between Nov. 1st and Dec. 1st. A, 10 cubic centimetres of antistreptococcic serum injected. B, Rash.

from chronic "rheumatism." The patient had ceased to menstruate about three years. There was no history of gonorrhoea. On admission the temperature was 102·6° F. No source of possible septic infection was found either in the mouth or elsewhere. There were no physical signs of disease in the lungs or in the abdominal viscera. The heart's impulse was slightly displaced outwards and its character, with that of the cardiac sounds, suggested slight dilatation, but there was no evidence of valvular lesion. In the extremities the hands showed ulnar deflection at the wrists. Most of the inter-phalangeal and metacarpo-phalangeal joints were enlarged and red; they were painful and stiff but did not grate when moved. The wrist-joints were markedly swollen but the elbows and shoulders were unaffected. The metatarso-phalangeal joint of the right great toe was enlarged and grated when moved. Both ankle-joints were swollen but not painful and there was slight effusion in both knees, greater in the right than in the left. The movement of these joints was attended by a sensation of crackling. No abnormality of the nervous system was discovered. There was no appreciable muscular wasting. The urine deposited phosphates on heating but was acid to litmus. During the patient's stay in hospital it frequently contained indican and on one or two occasions chlorides were absent without apparent cause. Early in January, 1905, albumin was present for a few days.

the temperature rising to 103° on the 16th and falling thence gradually to normal. An urticarial rash over most of the large joints, which was ascribed to the first dose of serum, appeared on the 17th, and a copious morbilliform eruption on the 24th, plentiful on the trunk and sparser on the limbs, was similarly explained by the second administration. A prophylactic course of calcium chloride failed to prevent the second eruption. From Nov. 25th to Dec. 2nd the chart showed a maximum of 99° and a minimum of 98°. By this time the joints were greatly improved and pain was absent, though much stiffness remained. On the latter date another ten cubic centimetres of serum prepared at the Lister Institute were injected, followed as before by a febrile reaction (up to 102·6°), by a decline to normal (on Dec. 6th), and by an urticarial eruption on the trunk and lower extremities (on Dec. 7th). After this the temperature remained normal and the inverse type which had been the rule up to the first serum injection was never again encountered. The progressive improvement of all the joints continued and on the 14th it was noted that "there is slight creaking in the right shoulder and some stiffness of the knees. In the hands there is marked wasting of arthritic type and much ulnar deflection. The left hand is the worse of the two and in this there is considerable stiffness of the middle and ring fingers. Patient can use her