four hours' cessation I judged further administration unnecessary. Still it seems remarkable in view of his reports that the patient, after the heroic doses given, responded throughout without suggestion to the calls of Nature, and was able so obviously to keep jealous watch, waking or sleeping, over the movements of his wife. The statement that "the full effect of the drug is not manifest for at least twenty-four hours after the last dose" is well borne out. With regard to this method being "a new departure in the treatment of acute mania," I would refer to Clouston,² when he says: "I have used the bromide alone in acute mania extensively and experimentally. In small doses it seems to have no effect. In very large and continuous doses, say a drachm every three hours, continued for many days, it will cause bromism and quiet the patient; but when its influence is over he becomes as bad as ever. I have never seen any medicine where the maniacal excitement and the physiological brain torpor of the drug seemed so visibly to fight for the mastery." It would appear from this that the same quantity of the drug per diem is more potent when given in larger doses at shorter intervals.

REFERENCES.

¹ BRITISH MEDICAL JOURNAL, January 20th, 1900. ² *Mental Diseases*, third edition, 1892, p. 171.

THE TREATMENT OF THE PAROXYSMAL STAGE OF WHOOPING-COUGH.

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THE following drugs have been mentioned as of service in the treatment of this disease: Alum, antipyrin, acetanilide, belladonna, bromides, cannabis indica, carbolic acid, chloral hydrate, creosote, lobelia, opium and its derivatives, phenacetin, quinine, etc. This list, on account of its prodigality, is confusing to the novice, and appears to show that there is a considerable difference of opinion with regard to the correct treatment of pertussis. In the early months of the year I sent round a circular to a number of general practitioners in the hope of obtaining an answer to the following questions: Are all these drugs in actual use? Which drugs are considered to yield the best results? Which drugs are most frequently employed? An examination of the answers to this circular furnished the following conclusions: The list of drugs is considerably diminished. Those commonly employed and chiefly depended upon are antipyrin, belladonna, bromides, carbolic acid, creosote, and opium. While as accessory and occasionally useful drugs are mentioned chloral hydrate, quinine, butyl-chloral-hydrate, etc. The antispasmodics are always combined with expectorants, of which the alkalies are the greatest favourites. Inhalants appear to be in general use, the ones referred to being carbolic acid, creosote, bromoform, and chloroform. None of the other drugs in the first list have been employed by my correspondents. The relative popularity of the various drugs is as follows: Belladonna, 32 per cent.; carbolic acid, 28 per cent.; bromides, 20 per cent.; creosote, 12 per cent.; antipyrin, 6 per cent.; opium, as paregoric, 2 per cent. These results, while not pretending to be authoritative or exhaustive, are interesting as coming from a good representative group of general practitioners.

None of the answers I received were enthusiastic except from those who had used creosote. This remedy was strongly praised. It appears to have little effect when given internally, and must be used as a vapour. The results obtained are far more satisfactory when the inhalation is continuous than when it is intermittent. The simplest and best method is to sprinkle the drug on a cloth, and hang the cloth in the nursery or sick room to dry. In this way a highly-impregnated air can be constantly supplied to the patient. Many other methods can be employed, but none are so satisfactory as this. The inhalation appears to be free from danger except where the chest is full of moist sounds, in which case its effect should be carefully watched.

The method of treatment I have found most satisfactory is the following: Commence at once with the continuous inhalation of creosote. Clear the lungs of bronchitis as much as possible before using any special internal antispasmodic remedies. In broncho-pneumonia, however, belladonna appears at once to do good. In all cases, if or when the chest is

fairly clear, and the circulation good, antipyrin may be given in suitable doses. Expectorants should be combined with the antipyrin. Good air, warm clothing, light, and wholesome food are necessary in all cases. I have followed these rules for the last six years, and am quite satisfied with the results. The average length of time required for cure in a variety of cases last year was 19.8 days, but these figures in no way represent the benefit derived from the creosote treatment. In every case the diminution in the numbers of paroxysms was so immediate that the patients willingly put up with the inconvenience of the smell of the drug for the sake of its manifest advantage. This in itself is a sufficient testimonial to the remedy to warrant its more extensive employment.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

ABDOMINAL WOUND INFLICTED BY A RHINOCEROS.

On March 11th I received a telegram asking me to see a man who had been severely wounded by a rhinoceros about eighteen miles away. I was unable to get to the spot until about 11 P.M., the accident having occurred about twelve hours previously. The patient was a Soudanese orderly belonging to the Uganda Rifles. He was a man of about 40 years of age. After the injury had been inflicted, he had to walk about 2½ miles to get into camp. Everything in the way of examination and treatment had to be done in a bush tent, by the aid of the light from a couple of hurricane lamps, and without any experienced assistant. The abdominal wound was in the left inguinal region, occupying the anterior abdominal wall for a length of about 6 inches, about 2 inches above, and almost parallel to Poupart's ligament. Protruding beyond the wound, and resting on the adjacent parietes, were several knuckles of gut, all bloodstained, and looking very ragged. The visceral peritoneum was hanging in shreds but there was no perforation of the intestine visible.

I enlarged the original wound, so as to allow an examination of the gut above and below the protruded portion, and also to give a freer access to the abdominal cavity. The intestine thus brought into view appeared quite normal. Doubtless the injected appearance of the external knuckles was largely due to the severe constriction they were subjected to by the edges of the wound interfering with the venous return. I thoroughly cleansed the protruding gut, as well as the adjacent portions. The abdominal cavity, as far as I was able to make out, did not show signs of extravasation into it. I next carefully loosened the parietal peritoneum from the subjacent transversalis fascia, the delicate layer of extraperitoneal fat rendering this comparatively easy.

The protruded knuckles were now carefully returned, and the parietal peritoneum of either side was brought together by sutures, the muscles were brought together by another set of sutures, and the skin and superficial fascia of either side were drawn together by a third line of sutures. The wound was dressed antiseptically, and I placed a firm pad over it, to resist as far as possible the pressure of the internal viscera on this weakened spot. On the buttock of the same side there was a deep wound, evidently inflicted by the second horn of the infuriated beast. This was dressed and a dose of opium administered. Unless any alarming symptoms should supervene, I asked his commanding officer to have him carried to the station in forty-eight hours, and by train to Makindu Hospital, where I could have him directly under my care.

In two days the patient came to hospital appearing to be in very good spirits. There was no pyrexia. The abdominal wound was healing perfectly; the action of the bowels was regular, and there was no pain over the wounded region. Progress from this time onwards was very rapid, the patient being discharged on March 21st, eleven days after the accident.

I would have kept him longer, but he appeared at the door of my hut on the morning of March 21st whilst I was at breakfast, and expressed a wish to return to his duties. Before leaving I got a rough tuss made with a large pad to rest on