ON A CASE OF GASTRIC HÆMORRHAGE.

By HENRY R. OSWALD, M.D. EDIN.

MRS. R—, aged twenty-four, had not felt well for several months (one of her most troublesome symptoms being pain in the epigastrium and back), when, on the evening of Nov. 13th, 1880, she fainted. The following is a record of the more prominent symptoms from the day I first visited the patient:—

Nov. 14th: At 4 A.M. vomited a large quantity of dark blood, and at 8 A.M. about a teacupful of bright-coloured blood. More blood of a bright hue was brought up at 6 P.M. Shortly afterwards the bowels were moved, the stool containing dark blood. Pain in the epigastrium. Mineral acid was prescribed. Ordered ice to be sucked, room to be kept cool, rest in horizontal position.—15th: Blood, fluid and coagulated, vomited at 2 A.M. Gallic acid prescribed.—16th: At 1 A.M. a small amount of bright blood, and at 7 A.M. a large amount of darker blood, fluid and coagulated, was vomited. Copious bloody motion during the day. Patient exsanguine, skin cold, pulse small and feeble. Till now she had taken ice and gallic acid. At this period, on account of the urgency of the case, I deemed it advisable to try ergot. An enema of half an ounce of the solution of the extract of ergot, in water, was used about midday.—17th: Patient vomited several times, but passed no more blood since the injection, either by mouth or rectum. A small enema of beef-tea and brandy given.—18th: Headache and nausea complained of, but no more sickness. A very slight menstrual flow began. Another beef-tea enema administered, and a little slop-food allowed. Bowels unmoved since enema of ergot. Pills of bismuth prescribed.—19th: No sickness; no bleeding; appetite returning. Bismuth continued.—20th: Headache; tongue coated and clammy. Food of a semi-liquid form fairly well taken.—21st: Headache and coated tongue remain. Has been ordered brandy each day since the 17th.—22nd: Still very anæmic. Appetite fair. Partook of whitening to-day, bread, and an egg. Brandy continued. The bowels not having been opened since the 16th, an enema of gruel was administered at 1.30 P.M. without result. Repeated at 10.30 P.M., and followed by a dark motion. No bleeding. Bismuth still prescribed.—23rd: Felt sick, but did not vomit. Appearance of patient still bloodless. Slept little. Ate fish, bread, and butter. Bowels moved without aid.—24th: Partook of some mutton. Late in the evening an injection was given, followed by copious dark motion.—25th: No movement of bowels.—27th: Symptoms gradually improved. Constipation remained obstinate, and required enemata at various dates. Ammonio-citrate of iron commenced on this day, and was taken till the recovery of the patient. In three weeks from the first day of attack she was able to leave her bed, and in six to descend from her bedroom. Nausea returned occasionally, but was amenable to treatment by bismuth. In January, 1881, the patient went to the seaside. No hæmorrhage had occurred since the 16th of November previous. In July, 1881, during my absence from town, Mrs. R— suffered from another attack similar to that just detailed, but much less urgent. It was happily soon subdued by astringents. At the present date Mrs. R— is in fair health. She always complains, however, of constipation, and of a feeling of constriction around the abdomen about the level of the umbilicus.

Remarks.—There can be little doubt this was a serious case of gastric ulcer. I have been induced to relate the symptoms, however, to illustrate the specific action of ergot rather than to give an exhaustive clinical account of that malady. In a comparison of the effects of belladonna and ergot on involuntary muscular fibre, Dr. Brown-Séquard observes that the latter drug acts chiefly on the uterus and the vessels of the spinal cord. I presume he speaks of its physiological action; for, in the present instance, the therapeutic effect of ergot on the stomach was sufficiently distinct and notable. So much blood had been lost—its colour at times leading one to suspect it was partly arterial—that in forty-eight hours from the beginning of the attack the patient's friends despaired of her recovery. No syncope took place after the vomiting commenced. Therefore, the action of the ergot enema was not thus adventitiously helped, and from the date of its administration not a drop more

blood escaped either by mouth or rectum. The dark fecal evacuations mentioned were owing to bismuth. In such a case, then, how does ergot act? Not to enter into its reputed primary action on the sympathetic system of nerves, I conclude that its effects are developed, through involuntary muscular fibre, in three directions.

1. Through the arteries. There is reason to believe the capillaries of the stomach contain in their coat a larger supply of non-voluntary muscular fibre than most arterial vessels. Consequently the contraction of these, after absorption of ergot by the system, is firm, and the flow of blood along them relatively inconsiderable or possibly nil. The chance of its escape at an ulcerated surface is thus materially diminished.

2. Through the veins. From the same cause the venous capillaries are similarly reduced in calibre, but also from their natural tendency to adapt their size to the supply of blood coming from the arteries. By this means the danger, if any, of regurgitation is obviated, and the ulcer left less disturbed.

3. Through the muscular coat of the stomach, which consists of three sets of fibres, longitudinal, circular, and oblique, of the involuntary kind, the influence of ergot is most probably again asserted. By contraction of these fibres the stomach, it may be inferred, is thrown into folds, compression of the bloodvessels passing through the muscular coat being one result, and perhaps some adaptation of the ulcerated parts to each other another. In this manner the muscles of the stomach assist the capillaries, and may also promote healing of an ulcer by approximating its edges.

In the treatment of gastric ulcer it is of extreme importance, especially in case of hæmatemesis, to feed the patient with nutrient enemata and to avoid, as far as possible, the ingestion of any articles to the stomach. For not only does the presence of food or drugs disturb the denuded part, but by exciting the function of digestion stimulates a flow of blood to it.

In conclusion I wish to observe that, whichever may be the organs most affected by ergot physiologically, it exercises in disease a distinct control over any involuntary muscle in which a breach of continuity exists leading to hæmorrhage.

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REMARKABLE CASE OF INJURY TO THE LEG FROM A FALL.

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THE following case is perhaps of sufficient interest to be put on record in THE LANCET.

On the evening of June 15th, 1881, I was hastily summoned to see a lad, aged fifteen years, who had injured his leg by falling off an outhouse. I was told that the limb was very badly cut, and that a "long worm-like thing" was hanging out of the wound. On arrival, I found my patient sitting on a chair, and at first sight it seemed as if there was little the matter with him, as he was laughing heartily, apparently amused at the serious view his relatives were taking of the accident.

Upon examining the right leg, I found in front a deep longitudinal jagged wound, about two inches in length, almost immediately over the lower end of the tibia, and about a couple of inches or so above the ankle-joint. From the lower end of this wound the tibiælis anticus muscle protruded almost in its entirety, the belly of the muscle lying on the dorsum of the foot. The hæmorrhage had evidently been very profuse, but had ceased when I saw the patient. Fortunately no large vessel had been injured, so, having satisfied myself on this point, I divided the tendon of the tibiælis anticus at the lower end of the wound, and removed the muscle. I then cleansed the wound thoroughly with carbolic water, washing away all dirt &c., of which there was a considerable amount. Upon trying to approximate the edges of the wound, I found, as I anticipated, that such could not be done, chiefly owing to loss of substance. I therefore applied a pad of lint soaked in carbolic oil, and bandaged the limb, enjoining perfect rest. After this point the history is simply that of a granulating sore; therefore I will not occupy space in giving details. The dressings were removed every alternate day. Everything went on