

## THERAPEUTICS.

### THE PHYSIOLOGICAL ACTION AND THERAPEUTICAL EMPLOYMENT OF ERGOT.

Dr. S. Kersch (Betz's *Memorialien*, vol. xviii., No. 5.) finds that when a concentrated infusion of ergot is injected into the jugular vein of a dog, the animal becomes restless, howls loudly, and its extremities become perfectly rigid in less than half an hour. Its body is cold to the touch, and the temperature low. If one of the arteries in the limbs be now exposed, it is found to be strongly contracted, firm, and hard to the touch. The pulse-tracings obtained from the arteries show small and short curves, with long intervals between them, indicating that the pulse is slow and the expansion of the artery small. The effect of ergot on the arteries is still more distinctly seen by exposing the arteries of a healthy animal, and comparing them with those of a poisoned one. A concentrated infusion of ergot mixed with milk, and administered to pregnant cats, produces similar effects; but the restlessness and cries are more strongly marked, and the symptoms of intoxication are later in appearing. Within two days, at most, the young are expelled. The parent animals die from convulsions and exhaustion. A concentrated infusion of ergot administered to dogs along with milk produces, within three hours, great contraction of the arteries, so that the small ones become quite impalpable, and look like nerves. Ergot likewise causes contraction of the arteries, and consequent slowness and hardness of the pulse in man. In all the experiments on fasting animals, ergot produced violent retching, and in most of them vomiting. When the dose was large enough, almost all died on the fourth or fifth day from convulsions. Although ergot is much used in hæmorrhage after delivery, it is rarely given in puerperal fever; but Kersch was led by an accident to try it in this disease. In two cases which he details, as well as in several others, the best results were obtained; the pulse becoming slower, and the temperature falling shortly after the administration of the remedy. Kersch recommends a trial of ergot in febrile cases arising from various causes.

## PRACTICAL MEDICINE.

### CHRONIC POISONING WITH CHLORAL HYDRATE.

The symptoms of chronic poisoning as given by Dr. Austin (*Practitioner*, June, 1873), in his translation of Dr. Kirn's paper (*Allgemeine Zeitschrift für Psychiatrie*), divide themselves into four classes; 1. Erythematous eruptions or vasomotor paralyses and transitory neuroses of the skin and mucous membranes; 2. Permanent congestion with tendency to inflammation and sloughing; 3. Dyspnoea; 4. Blood poisoning.

One peculiarity of the chloral-erythema is, that it remains latent until it is started by some stimulus to the vascular system, but then appears with an intensity and rapidity which are proportioned to the existing current of general chloralisation. Thus in some patients a draught of beer will be followed within ten minutes by excitement of the heart's action and the appearance of spots of roseola on the face and neck, coalescing into a patchy erythema and disappearing in an hour. Erythema or urticaria may occur on other parts of the body, and may be succeeded by a papular rash. Swelling of the face may be present without the co-existence of a rash, and it may occur either with or without rash on other parts of the body. Mucous membranes may be affected in a similar manner, and conjunctivitis and catarrhal sore throat have been observed.

Chloral-dyspnoea may be ascribed to hyperæmia of the lungs, due to paralysis of the pulmonary vaso-motor nerves by the drug. The symptoms of blood-poisoning by chloral consist in the appearance of purpuric spots, œdema, and congestion of internal organs, diseases of the skin and mucous membranes, diarrhoea, conjunctivitis, bronchitis, formation of abscesses, and continuous fever.

### ON THE CAUSE OF VALVULAR MURMURS.

The principal auscultatory sign of valvular disease is the presence of a morbid murmur or *bruit*. It is generally said that murmurs may be caused in different ways, among which is the friction of blood against a roughened or narrow orifice. But Corrigan long ago attributed them to the vibration of the stream of blood flowing through a narrow space into a wider one; and certain French physiologists (especially Chauveau and Bergeron), have recently endeavoured to prove that this is their sole cause; and that friction is incapable of producing them. These writers have applied to this question the physical theory of the 'fluid vein,' investigated originally by Savart. Chauveau experimented partly on the arteries of living horses, partly on tubes through which the water was made to flow. Dr. Fagge thinks that he has proved that the murmurs developed in diseases of the blood-vessels are always due to the passage of blood from a narrower into a wider space, and the generation of a 'fluid vein.' Probably the same is true of all 'obstructive' cardiac murmurs; these have (in common with arterial murmurs), the peculiarity that they are heard only on the distal side of the obstruction and never on the proximal side. Now, regurgitant murmurs differ from them in this respect, that they are traceable in both directions. Thus aortic regurgitant murmurs are heard along the arteries as well as towards the apex of the left ventricle, mitral regurgitant murmurs are heard towards the apex as well as near the left scapula in the back. Ber-

geron has shown that this may be imitated in physical experiments, by providing the narrow orifice with a lip or rim projecting backwards against the current. In the cases under consideration the edges of the valves doubtless play the part of such a lip or rim. Dr. Fagge thinks, however, that it is doubtful whether the causes that can give rise to murmurs within a contracting cavity, like the heart, are limited to those that occur in physical experiments with water flowing through tubes. In simple dilatation of the left ventricle, it is conceivable that the edge of the healthy mitral valve may project into its cavity sufficiently to form a lip or rim during the systole, and that a murmur may thus be produced.—*Dr. Hilton Fagge in Guy's Hospital Gazette.*

### HÆMORRHAGE IN TYPHOID FEVER.

In a paper in the *Western Lancet*, Dr. Parsons gives some statistics in reference to the fatality of bleeding from the intestine in enteric fever. He has collected twenty-six cases in which this occurred, and of these he found that thirteen had been fatal at different stages of the disease. There were no fatal cases in the first week; of eight in which the bleeding occurred in the second week four proved fatal; of six in which it occurred in the fourth week four proved fatal, and in one case it occurred on the thirty-second day with a favourable result. Dr. Parsons notes the rarity of this symptom in the enteric fever of children; and in reference to the period of its occurrence he says, 'We might suppose that bleeding would be less dangerous, more likely even to be salutary in the congestion preceding ulceration, and the few facts just given tend to confirm that idea. In some cases, it is impossible to say how many, hæmorrhage is probably a natural relief to the overloaded vessels analogous to epistaxis.' Dr. Parsons has found oil of turpentine more useful than the ordinary astringents in checking the hæmorrhage of enteric fever.

## SURGERY.

### AUSCULTATION AS AN AID TO THE DIAGNOSIS OF STONE IN THE BLADDER.

Dr. Henry H. Head, Physician to the Adelaide Hospital, writes in the *Irish Hospital Gazette*, July 15: 'A short time ago, a gentleman consulted me for a paralytic affection; the investigation of his case led me to think he had, in addition to his other ailments, a calculus in his bladder. I urged him to consult a surgeon, which he refused to do, but said I might make any examination I thought right. I sounded his bladder, and was pretty sure I detected a stone, but did not think the evidence absolutely conclusive, when it occurred to me to try auscultation, to see if it would assist my diagnosis. I accord-