

CASE 13. Lily L., æt. 22.—*Epilepsy*, since the age of 7.—Much indicanuria.

CASE 14. Kate W., æt. 30.—*Vertigo*, “*dazed feelings*,” flushing and trembling.—No hysteria. Observed several months. Much indicanuria constantly in spite of regular action of the bowels. The symptoms much relieved and the indicanuria diminished under a vegetarian diet and the use of intestinal antiseptics.

CASE 15. James D., æt. 39.—*Alcoholism*.—Complains of severe vertical pressure pain. Observed four weeks. Constant indican.

CASE 16. Clara B., æt. 10.—*Night terror*.—Much indican.

CASE 17. Louisa C., æt. 33.—*Headache*.—Depression. Much indican.

ON “WASHING” DYSENTERIC STOOLS.

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THE examination of the intestinal evacuation in dysentery has an importance, in relation to diagnosis and treatment, similar to the examination of the sputum in phthisis—similar, but greater; for in phthisis the results of physical examination are more clearly demonstrative of the nature and stage of the disease than inspection, palpation, and percussion of the abdomen in dysentery. These processes do, indeed, furnish useful information. The shrunken tender belly, the pain elicited by pressure along the course of the colon, the resistance, the perception of thickening of the whole or some portion of the large intestine, the detection of scybalous accumulations,—these are aids to diagnosis and localisation of lesion which cannot be neglected, and are perhaps more helpful in chronic than in acute cases.

Symptoms subjective and otherwise are also valuable; but the scrutiny by eye and microscope of the pathological products—the castings off from the diseased surface—afford more positive knowledge of the character and stage and curability of the disease than signs and symptoms. In some cases simple inspection of excreta is sufficient. The evacuations in acute cases, and in early stages of these, may consist simply of a tablespoonful or so of blood-stained mucus, with a few small clots, and rounded or oval scybalous matter surrounded by sanious fluid. The pathological product in such instances solely constitutes the stool, or lies apart from feculent matter so completely that it can be thoroughly seen and examined, or taken for microscopic or cultivation purposes without difficulty or obscuration by admixture with other intestinal contents. These cases are, however, a small minority, and are mostly those in which the disease is located not far from the anus,—rectal or low-down sigmoid. In the great

majority of cases, more particularly in those of long standing, the pathological products are mixed up with feculence in such a way as to conceal them, and render necessary some means by which they may be separated. This may happen when the stools are liquid or solid. When diarrhœa coexists with dysentery, as often happens in the catarrhal stages of acute cases, and in chronic cases where there is defective absorption of fluid, and perhaps exudation from denuded or ulcerated surfaces, the feculent mass is gruelly or pultaceous, variously coloured—ochre, brown, umber, olive, or green—and probably gummy or glistening, but the mass seems to be uniform and its constituents are concealed. When the stool is solid, it may be lumpy and scybalous, or in rounded or flattened cylinders. These may be covered with clear or cloudy mucus; but in the interior of the masses, important things, such as casts and exuviæ of sorts, may be hidden from view. It becomes necessary, therefore, to disintegrate and dilute the mass, and if possible separate the pathological products from the feculent material. This can be done by adding water in considerable volume and successive quantities to the mass, decanting and observing after each addition of fluid, and finally retaining the residue for more careful examination. This process of "washing" dysenteric stools was first introduced into practice by Dr. Edward Goodeve, Professor of Medicine in the Calcutta Medical College. It is habitually employed in India; but recent books and papers published in this country on tropical diseases and on dysentery do not refer to the practice, and this constitutes a sufficient reason for setting forth here its method and advantages in detail.

Technique of the process.—The stool is received in or transferred to a vessel of considerable capacity—the pan of a commode, for example. This is filled with water poured from a height of a foot or so, from a jug or ewer or tap. Masses may, if necessary, be broken up by a glass rod or stick. After allowing the material to settle for a minute or so, the fluid is slowly decanted into another vessel, so as to present to view a thin layer. The feculence floats and passes over with the fluid; the pathological products and heavy particles of feculence subside. What passes out is carefully watched and noted, and what remains may be again and again washed by adding fresh volumes of water and decanting, until the material has been freed of offensive and compromising stuff, when it may be transferred into a white plate or dish for examination. The process may be employed in other intestinal diseases, sprue for example. In most cases of dysentery, accurate study of the intestinal discharges cannot be made in any other manner.

The information gained by this process of washing the stools may be summarised as follows:—

1. The colour of the fluid indicates the amount of blood con-

tained in the evacuations, according to the depth of the tint when it is sanious.

2. The size, shape, and character of feculent masses when solid may be noticed, and inferences may be drawn as to the condition, calibre, and tone or irritability of the diseased gut.

3. The nature and activity of the digestive process may be inferred from the state of the excreta. Undigested masses of meat or farina may be seen, or curdy lumps of imperfectly digested milk observed.

4. The character of the ingesta may be determined. Imperfectly masticated and undigested pieces of potato, vegetables, or fruits are easily identified, and grains of unboiled rice or sago discerned, and seeds of oranges, figs, grapes, etc., described. Many of these things sink and are seen amongst the residuum. The dieting of the patient can thus be very effectually watched and controlled.

5. The lighter particles of mucus float in the water, and this may be flocculent or tenacious—clear, rosy, branny, or ropy. Inferences are drawn from these characters, as regards the stage and intensity of the dysenteric process and effects of treatment. Clear or rose-coloured flecks indicate an early (catarrhal) stage; branny particles, a dysentery undergoing satisfactory cure; and ropy masses, a slower process of recovery in a more protracted case.

6. The residuum may show blood clots of various kinds and sizes, masses of jelly-like mucus, lumps of more solid inspissated mucus, and casts or exuviae of various sorts. These latter are the most important pathological products, indicating a grave malady of some standing, and destructive lesions of varying kind and degree. The nature of the destructive process may be surmised from the character of these casts or sloughs. They may be pulpy and circular, or oval, soft, and disruptible, yellowish or greenish, consisting of a pus-infiltrated mucosa, and representing castings off of an inflamed mucosa or submucosa. They may be stringy, tenacious, and angular, consisting mostly or entirely of detached submucosa. They may be greenish or drab-coloured, thick, large, or cylindrical, the result of coagulation necrosis of an extensive diphtheritic deposit on and in the walls of the intestine. They may be dark, pulpy, offensive, and soft, due to a process of gangrene. The relation of these different products to diagnosis, prognosis, and treatment is obvious and most important.

7. The products thus obtained can be subjected to further examination, for bacteria or amœbæ for example, or preserved with spirit or carbolic water for further study.

8. The results of treatment may to some extent be judged. Changes in the character of the evacuations are best appreciated when these are subjected to this system of analysis. Pills or tablets may be seen which have passed through unaltered and

unused. Grains of ipecacuanha or other powders, or of reduced bismuth, may be observed, which perhaps increase or perpetuate the irritation.

The intelligent treatment of dysentery necessitates continuous and systematic examination of the stools, and the method which I have described largely robs this proceeding of its unpleasantness, while it contributes most materially to thoroughness and enlightenment.

A CASE OF MURDER AND SUICIDE.¹

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WHEN two bodies are found in the same room with fatal injuries upon them, several questions of medico-legal interest and importance arise. Among these, one of the first requiring an answer is, whether we have to deal with death from accident, suicide, or murder, or a combination of two of these conditions.

The accidental death of two persons together, as a result of external violence, is as a rule recognised without difficulty, from the surroundings and nature of the injuries, the cause of death being usually obvious, and all the circumstances pointing to a sudden and unexpected calamity.

The question of murder or suicide is not always so easily determined, and a decision upon this point can in most instances only be arrived at after careful consideration of the whole circumstances and an examination of the injuries.

By the circumstances are meant chiefly those connected with the position and surroundings of the bodies, and it is of the highest importance that the medical man who is required to give an opinion in such cases should have the opportunity of making his examination of the bodies and the immediate surroundings before they are in any way interfered with.

The position of a body may be wholly inconsistent with a theory of suicide, or, on the other hand, it may afford strong presumptive evidence of it; and in the same way the position of any weapon found, or of marks of blood on furniture or in the room, may afford circumstantial evidence of the strongest character, leading to the discovery of an unsuspected crime. It is obvious that where a decision on so vital a point as the determination of the question of murder or suicide may rest largely, in certain cases, upon such circumstances as the position and surroundings of a body; and, more especially in cases where two bodies are involved, no interference with them should take place until an examination has been made by a competent authority.

¹ Read before the Edinburgh Medico-Chirurgical Society, 17th January 1900.