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PART I.

ORIGINAL COMMUNICATIONS.

ART. III.—*Chyliform Ascitic Fluid*. By T. GILLMAN
MOORHEAD, M.D., F.R.C.P.I.; Physician, Royal City of
Dublin Hospital.

CHYLIFORM or pseudo-chylous serous effusions, although not of extreme rarity, have not yet been generally recognised as one of the varieties of inflammatory or passive exudates which may collect within the subcutaneous tissues or serous sacs, and it is, in consequence, of importance that all examples of such should be reported, even though for the present no definite clinical importance can be attached to their occurrence.

The terms chyliform and lactescent are applied to these effusions to indicate their main characteristic—namely, that of milkeness, and at the same time to point out that the milky appearance is not due to the actual presence of chyle, but rather to some other as yet imperfectly known substance. The true chylous effusions in which some morbid alteration or wound of the thoracic duct or its tributaries has allowed an outpouring of fatty substances to take place have long been recognised, but it is only within comparatively recent years that the chyliform type has been described, the earliest

writers on the subject being Letulle in France, and the late Sir George Duffey in Ireland. When first recorded, considerable doubt was thrown on their existence as a distinct type, but the accumulation of evidence within the last twenty years now allows no question to be entertained on the matter.

As far as one can judge from the literature, chyliform effusions are more common in the peritoneal cavity than elsewhere, and the case that I now bring forward is a further evidence of this statement. The notes of it are briefly as follows :—

The patient is a woman, aged forty-seven, who was admitted to the gynæcological wards of the Royal City of Dublin Hospital on the 8th of August last, complaining of abdominal distension and of general swelling of the extremities. She stated, on admission, that she did not remember having had any previous illnesses, and had always been an exceptionally healthy woman till the commencement of her present trouble, some three months previously. She had, however, always been a pretty heavy drinker, and latterly had been constantly indulging to excess.

After physical examination a diagnosis of vascular cirrhosis of the liver was made, and a Talma-Morrison operation was recommended. This operation was performed a few days later, and during its course the diagnosis was confirmed, the liver being found to be enlarged, firm and nodular on the surface, while the other abdominal viscera and the peritoneum were healthy. The effusion present at this time presented the ordinary characters of a serous transudate. Soon after the operation the ascites returned, and the patient was accordingly transferred to the medical wards, where I tapped her on the 29th of August and on the 7th and 17th of September, about 200 ounces of clear yellowish fluid being removed on each occasion. She was again tapped on the 30th of September, and on this occasion it was found that the fluid had become quite milky in appearance, so much so that I at once thought that it was an example of true chylous ascites, and was at first at a loss to account for its appearance. Since then paracentesis abdominis has been performed on eight successive occasions, the fluid each time presenting a milky character. Very little change has taken place in the condition of the patient since I first saw her, except that the fluid does not now accumulate so rapidly as at first, and that there has been marked improve-

ment in her strength and general appearance. The liver still remains palpable, and is quite firm to the touch. The urine, which contains albumen as soon as a large collection of fluid has formed, becomes at once normal after tapping, and only occasionally presents a few hyaline casts. The blood is in almost every respect normal, and the serum is perfectly clear, this last point being of some interest as pointing to the fact that the milkiness is the result of some local condition and not due to any unusual state of the liquor sanguinis. This condition of the serum is indeed what one would expect, as Castaigne has shown that lactescent serum is found only in acute nephritis, in which disease, according to the same observer, it is far from uncommon.

Description of Fluid.—The fluid is distinctly milky in appearance, is of alkaline reaction, and has a sp. gr. of 1012. On standing, a slight amount of coagulation always takes place, and a small clot of fibrin forms, without, however, altering in any way the general appearance. On boiling and adding acetic acid it coagulates, and the resulting filtrate is quite clear and free from albuminous material and from sugar. Centrifuging also fails to produce any change, and the resulting very scanty deposit is composed of red blood cells and a few endothelial cells and neutrophiles, while the fluid examined directly under the microscope does not show any fat globules or granules. The amount of albumen present, as determined by Esbach's method, has varied from 6 to 9 parts per 1000, and the total nitrogen determined by Kjedhall's method on one occasion was .25 per cent. As ordinary shaking up with ether and caustic potash produced no visible change I asked Professor Werner to estimate the total quantity of fat present, and he has found it to be only .02 per cent., a very low figure, when it is remembered that some chylous effusions may be as rich in fat as ordinary milk. Precipitation of the proteid by saturation with ammonium sulphate leaves a perfectly clear watery-looking fluid, which gives no reaction to the biuret test for peptones, and the same remarks hold good for the fluid obtained after the addition of salicyl-sulphonic acid and filtration when hot.

The above description of this fluid shows it to be identical in character with what has been previously described in some thirty cases, but unfortunately for the present throws no additional light on the subject. Dr. Robert Hutchison.

reporting a case in 1902, states that the turbidity may be due to one of three things—namely, lecithin, a mucoid substance, or a proteid—and from the small amount of phosphorus present in the sample that he analysed came to the conclusion that neither of the first two named substances could be present. That lecithin, however, even in small quantities, may, by combining with albumen, lead to turbidity is referred to by Taylor and Fawcett quoting Joachim, and is possibly the substance present in my case, though the dried proteid residue contained no traces of phosphorus that I can detect. Whether the condition is of any pathological or clinical importance remains a matter for the future, when more numerous cases are reported and their features analysed. Looking through the reports that I have been able to obtain I have noticed that in several of them some chronic fibrous peritonitis was present, and I think that it may ultimately be shown that either nephritis of some variety or chronic peritonitis is an invariable accompaniment of these effusions. In the present case the rapid recurrence of the ascitic fluid and the good general state of the patient leads me to believe that some peritoneal fibrosis must now be present as well as the liver cirrhosis, and that despite the knowledge that no such thickening was observed at the operation three months ago. Such a condition would coincide with Hale White's well-known views on the subject of recurring ascites, and would, I think, facilitate our conception of how the milkiess can arise by the addition to the non-milky liquor sanguinis of inflammatory or breaking down products at the actual site of transudation.

ART. IV.—*The Surgical Aspects of Bronchiectasis, particularly in Children and Young Adults.* By CHARLES GREENE CUMSTON, M.D.; Surgeon to the Floating Hospital for Children, Boston, Mass.

ALTHOUGH the study of inflammatory dilatation of the bronchi has been gone into since it was first taken up in 1818 by Laennec, it was not satisfactorily concluded until