

MIDWIFERY.

CHARACTER OF THE BLOOD IN MALIGNANT AFFECTIONS OF THE UTERUS.

It has long been a matter of uncertainty whether in cancerous disease the blood undergoes a peculiar and constant change in its composition or its quality. The subject is one of considerable importance, and has latterly engaged the attention of Heller, who has examined carefully both the chemical composition and the microscopical characters of this fluid, in persons affected with carcinomatous diseases. It has been recently stated by Engel that the blood in cancer undergoes a pathological change which consists chiefly in the development of an excessive quantity of albumen, whilst in tuberculous diseases the fibrine is the element which is in excess both in the blood and in the morbid material poured out. This statement, however, is in the opinion of Heller merely hypothetical, and is based on evidence furnished by no direct chemical analysis, which alone can determine the question. Heller therefore took advantage of several cases of malignant affection of the uterus and vagina, which fell under his notice, and he examined carefully the blood passed by flooding, as also portions drawn directly from the arm. Omitting the particulars of the various cases, the general results only to which his researches led him, need be here stated.

His microscopical examination of the blood proved the following chief points: 1st. That the blood corpuscles in cancerous disease always present a great variety in their size, some of them being smaller than natural, and others considerably above the average size; some are even three times larger than ordinary. The smaller ones are usually finely indented, granulated, or mulberry-like; the larger ones invariably smooth. This variety in size of the blood corpuscles, though always present in the blood in cancerous disease, is not peculiar to this kind of blood, for it also occurs in blood which contains pus. 2. That when blood is examined according to the method employed for the detection of pus in it, peculiar cells may be found in it, which correspond in form and other peculiarities to the ordinary cells of cancer. This is a fact which had not been hitherto made out, but about which there is now no doubt. 3. That in addition to the above peculiarities, there are observed by the microscope minute bodies of a more or less crystalline form, and possessed of a bright golden-yellow metallic lustre, which are most distinctly seen on darkening the field of the microscope. When viewed by transmitted light they appear in part colourless or yellowish, and in part of a bluish tint, showing a play of colours. These peculiar glittering particles may in most cases be distinguished with the naked eye after the blood has coagulated, appearing either as golden pellicles in the clot, or as glittering particles floating in the serum.

The chemical analysis of the blood furnished results equally decided in their nature. In the first place there was observed a constant, absolute, and relative increase in the quantity of fibrine, both in the hemorrhagic blood as well as in that withdrawn by venesection. The quantity of fibrine varied, and this variety was most marked in the hemorrhagic blood; sometimes in this latter the quantity amounted to as much as 13.42 parts in 1000; in one case even to 16.44 parts. In the blood drawn from a vein the quantity was always above natural, yet seldom greatly exceeded three parts in a 1000. On comparing the quantity of fibrine in the blood discharged by hemorrhage from the uterus with that in the blood drawn by venesection, it would seem as if nature was endeavouring to get rid of a portion of excessively fibrinated blood by a spontaneous discharge from the uterus of blood loaded with fibrine. The albumen was presented in its normal quantity, or if anything rather below it, so that there are no grounds for regarding the cancerous diathesis as an albuminous one, or for considering the cancerous material as composed of albumen. The quantity of blood corpuscles was always very small, both in the hemorrhagic blood as well as in that drawn from a vein. Sometimes the disposition of corpuscles was so great that complete anæmia of the body was found after death.

The view, therefore, that the cancerous diathesis, is an albuminous one; and therefore opposed to the tuberculous diathesis, which is a fibrinous one, is completely erroneous, for the quantity of fibrine in the blood in cancerous affections is always in excess and the diathesis therefore in such cases should be regarded as a

fibrinous one, just as it is in tuberculous disease, where also an excess of fibrine (together with a diminution of red corpuscles), prevails in the blood.

This is another argument against the view of antagonism, which has been stated, though without good foundation, to exist between the cancerous and tuberculous diathesis.—*Lond. Med. Gaz.*, from *Heller's Archiv.*, 1846.

VOMITING OF PREGNANT WOMEN.

Dr. Stackler has communicated to the Medical Society of the Bas Rhin, two cases of obstinate vomiting, in pregnant women, in which the symptoms yielded to the black oxide of mercury, given in the dose of five centigrammes (three quarters of a grain) daily. There was not the least trace of salivation, nor any other inconvenience, after the use of this medicine. Dr. Jauger referred to cases of hysterical convulsions, and vomitings, sympathetic with the condition of the uterus, which had been cured by the black oxide of mercury. According to the physician, the medicine is equally appropriate in irritated states of the organ, whether in pregnancy or otherwise. Should further experience confirm this property of the black oxide of mercury, its importance will be readily comprehended by those who recollect how extremely severe are the obstinate vomitings with which females are occasionally attacked during gestation. Professor Forget took occasion of the communication of Dr. Stackler, to quote the case of a woman, who had been reduced to the last degree of emaciation by these nervous vomitings, and, at length, died, during the sixth month of pregnancy.—*Prov. Med. and Surg. Jour.* July 1, 1846, from *Gaz. Med. de Strasbourg*.

MATERIA MEDICA AND PHARMACY.

OBSERVATIONS ON COLCHICUM.

By M. DONOVAN, Esq.

The effects which colchicum produces on the human body are now well ascertained, although the mode of preparation, and the parts of the plant to be preferred, are not yet agreed on. Some prefer the dried bulb, some the recent bulb; one employs the wine of the bulb, another the vinegar of it, another the extract made by evaporating the vinegar; the oxymel has even been a favorite; but the seeds appear to be most generally approved of.

Before the grounds of preference can be understood, it is to be inquired how far the drying of the colchicum bulb interferes with its powers. Analogy tends to render it probable that the efficacy is impaired. Other bulbs, as garlic, onions, leeks, &c., are not only altered by drying, but rendered altogether destitute of these stimulating qualities for which they are valued. Squill, it is true, is not rendered powerless by drying, but its activity is certainly lessened. Dr. A. T. Thomson says:—"The acrimony on which its virtue depends is partially dissipated by drying and long keeping, and completely destroyed by any heat above 212 deg." If the colchicum be injured by drying, how much more so must be the acetous extract, in the preparation of which, unless a steam bath be employed, the heat rises above 212 deg. The vinum colchici of the three British pharmacopœias is made from the dried bulbs, and therefore must be of inferior efficacy.

I believe the most efficacious preparation of the bulb is the wine produced from it in its recent and undried state, as recommended by the late Sir Everard Home, who published three papers on it in the *Philosophical Transactions* for 1816 and 1817. In these papers he has given an account of its preparation, and of its effects, therapeutic and physiological. He directs two pounds of the recent bulbs, undried, to be macerated with twenty-four ounces of sherry wine in a gentle heat for six days.