the plan of treatment in question commends itself to our notice, and it is one which, cautiously used, may be capable of rendering valuable service.

It is not desirable to stop here to discuss the different pathological doctrines as to the true nature of the various affections which, clinically, we all recognise as more or less malignant, since that, deeply interesting as it is, would lead us too far from our present purpose. On this subject, the work of my friend Mr. Henry Arnott will be found full of instruction; suffice it to say, that the cases to which I have referred are instances of what is called epithelial cancer or epithelioma, the least malignant of the cancers, owing probably to the rarity or tardiness with which it affects the internal organs.

One word, however, on the etiology of uterine cancer. Setting aside hereditary influence—on which point the most conflicting statements have been made—it is difficult to arrive at any satisfactory conclusion as to the causation of malignant disease of the womb. On the one hand, there is much in favour of Rokitsansky's view, that cancer probably originates in a peculiar state of the blood, which consists mainly in a preponderance of albumen with a hypinotic condition, or diminution of fibrine, seeing that the disease chiefly affects persons who are subject to miscarriages, over-suckling, and other pre-existing depressing conditions, such as menorrhagia and like exhausting discharges occurring before the disease has arisen.

But in opposition to this view, it may be urged that thousands of women suffer in like manner and never become cancerous, implying the existence of some more recondite cause than mere exhaustion of the vital fluids. On the other hand, the view of those who, like the late Mr. Moore, hold cancer to be originally a local affection, and to be excited by blows and such like, is supported by the fact that the womb is certainly exposed to the chance of injury in parturition, abortion, etc. Scanzoni's tables, which show that cancer of the womb is more frequent in multiparæ than in nulliparæ, may be quoted indifferently by the advocates of either hypothesis.

There is just one possible cause of malignant disease of the uterus which I should like to mention—it is syphilis. I have seen undoubted syphilis of the tongue of long standing develop into true cancer, so recognised by Sir James Paget, who saw the patient; and the possibility of a like occurrence in the uterus appears worthy of consideration.

Before concluding, one word seems called for on general therapeutic treatment in carcinosis, as Billroth calls the cancerous cachexia. I am convinced from observation that cancerous patients derive great benefit from judiciously directed general treatment, and am of opinion that it should never be omitted. Iron (especially the astringent forms), ergot, iodide of potassium, arsenic, cod-liver oil, and such like, for the improvement of the general health (besides opium, cannabis Indica, chloral, etc., which latter are obviously indicated for the relief of pain), are all highly serviceable, and should never be omitted in dealing with malignant disease.

ON PYÆMIA.*

By EDWARD COPEMAN, M.D., F.R.C.P.,
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THE occurrence of several deaths, during the past year, in our hospital from pyæmia (so called), induces me to bring before you a few remarks upon the subject, in the hope of being able to elicit by discussion some more definite ideas as to the nature and treatment of this very unsatisfactory disease. When fully established, it appears to resist treatment, and cannot be controlled; at least, such is the conclusion at which most of us must arrive from what we have recently seen. One of the theories with respect to its causation, is that pus is absorbed into the blood, poisons this vital fluid, and leads to secondary deposits in some of the important organs of the body. But my own firm belief is that the theory is without foundation, and that pus is never absorbed into the blood. Pus is a bland fluid, unirritating, healing, and the result of one of the natural processes for the cure of inflammation. In a healthy individual, I do not believe that pus ever does any harm unless it be confined in a space which will not give way to it, and make injurious pressure upon other organs. How often do we see abscesses, when favourably situated, become absorbed without any injurious consequences; how disappointed we feel if wounds which do not heal by the first intention do not suppurate; we augur from it that in such a case the patient's strength is not sufficient to allow the formation of pus, and we have little hope of recovery. How often do large wounds, after operations of various kinds, continue to suppurate for days, weeks, or months, and we have no fear of ill consequences arising from it so

long as the pus is *laudable*. My own opinion is that the true cause of pyæmia, which I would rather call *caecæmia*, rests in the constitutional condition of the patients, and that the disease is by no means confined to cases of surgical operations. We all know that the blood always contains the ingredients, so to speak, of pus, and can at any time form it when Nature seems to require it for the cure of inflammation. Whenever inflammation occurs, there is what Cullen called *spasm of the extreme vessels*; and this frequently results in the formation of abscess. In inflammation, whether acute or chronic, active or passive, there is congestion in the inflamed part, and generally there is matter formed for the relief of this congestion. We see it in the formation of matter in the glands under the jaw in scarlet fever, in the skin in small-pox, in the liver in hepatitis, in the lungs in certain forms of pneumonia, in the prostate gland, in the eyeball, in the cellular tissue in carbuncle and erysipelas, in various organs in different kinds of fever—in fact, in any part attacked by inflammation; and I look upon the occurrence of secondary abscesses after operations as instances of partial stagnation of the blood (passive inflammation) when it is in an unhealthy state, and unable, for want of nervous influence, to eliminate any morbid elements it may contain. This is especially the case with respect to the liver, which contains more blood than any other organ, and so abscesses are often found there; and I do not think it would be stretching the point too far if we were to say that the same thing occurs in the lungs in cachectic subjects, where a number of small abscesses form around passively inflamed bronchial tubes, eventually forming what we call tubercle, the absorption of the watery part of the pus leaving the residue in a semi-solid form. I do not say that this is actually the *rationale* of the formation of tubercle, but it seems to me as reasonable as any other, and quite in accordance with the ordinary rules of morbid phenomena terminating in abscess.

Speaking of an accumulation of blood in an organ—the spleen, for instance—and the consequent formation of tubercle, Dr. Carswell says: "In one cell you may perceive simply the blood coagulated; in another, it may be coagulated and deprived of its colouring matter; and, in another, converted into a mass of solid fibrin, having in its centre a small nodule of tubercular matter. And speaking of the fact that the superior and posterior portion of the upper lobe is the spot in which tubercles, if any exist, are almost sure to be found, and where they first begin to suppurate and soften, he adds that, in his experience, there is no deviation from this rule, except when some other portion of the lung may have been the seat of an inflammatory attack, which has determined the priority of tubercular disease in that portion." (Sir T. Watson's *Lectures*, 5th edition.)

We must all have remarked the extraordinary similarity of the symptoms leading to death in all diseases which lapse into a typhoid state, whether from fevers or inflammations, or after surgical operations; the rough dry tongue, the rapid feeble pulse, the relaxed skin, obtuse sensorium, colliquate perspiration, panting breathing, powerless muscles, relaxed sphincters, and very frequently vomiting of green or grumous fluid. Surely some common cause for this must be at work; and that cause I deem to be a morbid condition of the vital fluid—the blood; and this whether attended with secondary abscesses or not. There can be no doubt that this fearful condition of things may be very much promoted, if not actually caused, by air impregnated with a *materies morbi*, and that pure air and good ventilation are most desirable and necessary adjuvants in the treatment; but it should be borne in mind that such cases occur often in great malignancy in country districts as well as in hospitals; and, as far as my experience will guide me, a well regulated hospital is more healthy than many country villages during the prevalence of an epidemic which terminates in what we always used to call typhoid symptoms.

A word as to treatment in cases of so-called pyæmia after surgical operations. No doubt the principal points are good nourishing food, good pure air, and such an amount of stimulants as will *strengthen* without *accelerating* the pulse; such as will *diminish* and not increase the rapidity of respiration. But surely medicine may lend its aid, and in some instances turn the scale in the patient's favour, although the general state of things appears almost hopeless. I do not intend to weary you with any long detail of the treatment in general; there are several points so evident to all of us as to the use of tonics, aperients, and opiates, that they need not be enumerated. But there is one agent to my mind of great value, and which I have seldom seen fairly tried in cases of pyæmia after surgical operations. Once, on passing casually through a ward at the hospital, I met with Mr. — at the bedside of a patient who was apparently in a hopeless typhoid condition, and in whom, if he had died, it would have been probable, from analogous cases, that internal abscesses might have been found. I suggested to him the use of oil of turpentine. Mr. — replied that he thought the man would die; and, as he had nothing more to suggest for his relief, he

* Read before the Norwich Medico-Chirurgical Society.

would order him turpentine. The man recovered. You all know the analogy which exists between cases of puerperal fever and surgical fever; and I have, at various times, shown to you how beneficial the use of turpentine has been in many of the former cases; indeed, in this and in the adjoining counties, there is a rapidly growing belief in its efficacy; and I have been requested by several practitioners, conjointly as well as individually, to make my further experience known to them. This I intend to do shortly; and shall bring before this Society a sufficient number of cases, in addition to those I have already published, to corroborate the opinion I have so often expressed about it. Now, why should we not give it a trial in these cases of surgical fever? The patients die as it is. Why not make the experiment of turpentine? Speaking of fever, the late Dr. Graves (the greatest physician of his day) remarks as follows: "I have seen people's lives saved by a few doses of the oil of turpentine, and have watched its tranquillising effect on the nerves with pleasure and surprise." The mode in which he gave it was: oil of turpentine, 1 drachm; castor oil, 1½ drachm; water, 1 ounce; to be taken every sixth hour. I should very much like to find that our surgeons are disposed to give this valuable medicine a trial when their operated patients are *going*, not only when they have *gone*, into a typhoid state. Should it succeed, well; should it fail, no harm could have arisen from putting it to the test of experience in cases which almost always die without it.

SECONDARY UTERINE HÆMORRHAGE.*

By JOHN BASSETT, ESQ.,

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In a midwifery experience extending over a period of five-and-twenty years, I have met with thirteen cases in which there has been severe hæmorrhage from the womb during the period of childbed, but at a later date than eight-and-forty hours from the time of delivery. These cases have happened in about equal proportions amongst my own patients and those of other gentlemen. In all the instances the hæmorrhage was severe, and in two a fatal result followed from secondary conditions. The time of the coming on of the hæmorrhage varied from the third to the thirty-second day after delivery. Before relating briefly the particulars of these thirteen cases, I may premise that by the term secondary uterine hæmorrhage, is understood a loss of blood occurring after the discharge which accompanies delivery has moderated into the ordinary amount of the lochia.

The cases which have fallen under my observation may, for the convenience of description, be placed in three groups. The first group contains five cases, in which the cause of the hæmorrhage was irregular and inefficient contraction of the womb, with coagula in the interior. In four of these cases, hæmorrhage more or less severe followed the birth of the child; the patients were feeble women, of relaxed fibre and defective uterine power. In the fifth case, nothing particular was noticed at the time of the delivery. In two of them, which were first confinements, some laceration of the perinæum took place; but it was ascertained that the hæmorrhage did not come from this source. Two had been subject to hæmorrhage in their previous confinements. The remedies employed were pressure, ergot, local and constitutional astringents. All the patients recovered except one, which presented signs of local and constitutional inflammation, from which she died in the third week of her illness from the so-called phlebitis.

The second group contains four cases, in which the cause of the hæmorrhage was a portion of retained placenta. In one of these the hæmorrhage, which was profuse at the time of delivery, continued at intervals until the twelfth day, when the interior of the uterus was examined, and a piece of placenta about the size of a walnut was detached from the posterior wall; after this the symptoms subsided, and the patient made a favourable recovery. In the second case, the child was expelled suddenly after two severe pains some twenty minutes before my arrival at the house; no uterine action followed, and none could be produced by friction or stimulants. The placenta was lying in the vagina; the insertion of the cord being readily felt, the absence of the usual after-pains was explained on the ground of debility. The placenta was extracted without unusual force, but without the concurrent action of the uterus. Nothing particular was noticed in this case until the tenth day, when, on rising from her bed, a severe hæmorrhage set in. This quickly subsided on resuming the recumbent position, but returned on the fourth day. An examination was made, and a substance was detected within the anterior lip of the os uteri. This

I tried to detach with my finger; but, as it was hard and would not yield, I consulted Mr. Berry, who agreed with me as to the nature of the case, and also that it must be broken off. This was done by the exercise of some force, after which the patient had no unfavourable symptoms. In the third instance, nothing particular occurred at the time of the confinement; subsequently some unusual weight and bearing down was thought to be present. On the fourteenth day, severe hæmorrhage set in, and continued until the seventeenth, when I saw her; she was then blanched, and her life appeared in imminent danger. The interior of the uterus was examined, and a portion of placenta was detached from the anterior wall, near the bottom of the middle zone: the hæmorrhage ceased at once, but for months she remained pallid and weak. In the fourth instance, the delivery took place on the 11th February, 1869; the labour was premature; the child was stillborn and somewhat decomposed; the placenta was said to have come away naturally. This person had been liable to hæmorrhages at her previous confinements, and had been greatly reduced in health by frequent child-bearing. Nothing unusual happened until the 15th March, or thirty-two days after delivery, when profuse hæmorrhage set in; this was arrested by local treatment, but returned on the fourth day, at which time I saw her; she was then blanched and pulseless. I made a careful examination of the uterus, and, passing my finger through the os and up the cervix, I detached a portion of fleshy substance, which had a placental appearance, and was about the size of a marble. The mucous membrane was rough and elevated for some distance around its attachment. I was informed that no further hæmorrhage took place, but that she died in about a fortnight after my visit, from exhaustion, and that no *post mortem* examination was allowed.

The third group contains four cases, in which the cause of the hæmorrhage was different in each case. In the first instance, that of a widow, who had recently buried her husband under painful circumstances, the labour was tedious from irregular pains. Hæmorrhage and prolonged syncope followed the birth of the child. On the fifth day, febrile symptoms with pain in the uterus came on. On the seventh day, hæmorrhage supervened; and on the eighth, a piece of membrane the size of the palm of the hand, coated with lymph, was expelled. After this the hæmorrhage ceased, and the patient made a slow recovery. In the second case, a large fibrous tumour developed itself during pregnancy: it was associated with placenta prævia. The delivery took place about the eighth month. The labour came on spontaneously a few hours after the occurrence of pain and hæmorrhage, and was (the pains being rapid) unassisted, except by the detachment of the placenta and rupture of the membranes. After the termination of the labour, in consequence of the hæmorrhage continuing, when the uterus appeared to be contracted, the hand was passed into the vagina, and a large non-pedunculated growth was detected, attached to the posterior lip of the uterus. The hæmorrhage was controlled without much trouble, but returned in varying proportions during the month that she was kept in bed, preparatory to the *écraseur* being applied. An operation was undertaken as soon as it was thought desirable after her confinement. The tumour, about the size of a breakfast-cup, was removed by the chain *écraseur*; the part attached to the uterus being the broadest portion of it. The recovery was favourable, and no uterine symptoms have since appeared. In the third case, a partial inversion of the uterus attended labour, and this, from the insufficient efforts of the womb to rectify its position, became complete. To relieve the pain and hæmorrhage which harassed the patient, the *écraseur* was applied, and the dependent portion was removed. The recovery was complete and satisfactory. In the fourth case, the confinement in a woman forty years of age had been perfectly natural, and no untoward symptoms supervened until the twenty-seventh day, when hæmorrhage set in, and continued for four days with severity, notwithstanding plugging and constitutional styptics were resorted to. Nothing was learned from an examination as to the cause of the hæmorrhage; it was therefore ascribed to imperfect involution and enlargement of the uterine vessels from frequent impregnation. The recovery was favourable, and, I believe, that no subsequent unnatural discharge followed.

We are indebted to the celebrated Dublin School of Midwifery for nearly all the literature we possess on the subject of secondary uterine hæmorrhage. It may be briefly summarised as leading to a similar conclusion to that which the history of the cases I have related does—viz., that the causes of secondary uterine hæmorrhage are various; that the time of its setting in is uncertain; that it may consist of one or a succession of attacks; and that it is not, under ordinary circumstances, fatal. The three factors on which it seems to depend are—inefficient contractions of the womb, morbid states of the placenta, and incompetency or rashness on the part of the accoucheur. When we remember the very peculiar way in which the uterus sometimes behaves after it has emptied itself of its contents, in the size and shape it assumes we

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