tissue in the heart; and in this case there was no doubt irritability of the heart, and that it was liable to suffer from the action of ergot. In a similar case again occurring, I would combine some special stimulant with the ergot, in the hope of averting any similar evil consequences. Generally when ergot is given in repeated doses it causes sickness, and the stomach rejects a quantity of ergot which, if it be retained, might affect the maternal circulation. In this case no sickness took place, which may, perhaps, account for its effect on the system of the mother. The lesson to be taken is that, we should prescribe ergot with great care in cases where the circulation is weak or irritable.

A second case took place soon afterwards. A lady, mother of six children, summoned my assistance for uterine hæmorrhage. She was not aware she was pregnant, but circumstances pointed out that she might be so, and of six weeks' standing. Liquid extract of ergot was given, icebags applied, and cold water injections to rectum and vagina; the other usual injunctions were given, but little benefit resulted; considerable hæmorrhage took place still, and this began to tell on the patient; giddiness, palpitation, etc., appeared. I then gave ergot in infusion fresh made; this proved powerfully styptic for the hæmorrhage, but my patient suffered most violent palpitations, tightness in chest, and feeling of suffocation. When the palpitation ceased, the pulse-beat was 55 per minute, and the feet and hands were very cold, and the patient said there was considerable loss of power in the lower extremity. I am forced to think that the ergot acted on the maternal circulation, and so hampered its movements that the force of the circulation was much less than it should have been.

KOUMISS, BLANDA, SYRE, SIGRE, OR AIREN.

By JAMES T. GEORGE, M.R.C.S.E., Keith, Banffshire.

FOR upwards of twenty years I have used as a restorative medicine the vinous liquor procured by the fermentation of cow's milk, and although a liquor has been for some ages employed by several tribes of Tartars, as procured from the fermentation of mare's milk, it was with difficulty I could learn the particulars of the mode of preparing it. The books which I consulted, which were various, gave me little satisfaction concerning it. All writers say it is a vinous liquor obtained by the fermentation of milk, but none describe the mode of preparing it, or the purposes in medicine to which it is applicable. M. Paulus Venetus, in a work published in the thirteenth century, only mentions it to be a common beverage among the Tartars. Another writer on the Russian Empire gives a formula, which, if followed, could not be attended with success; for he mentions that the Kalmucks take off the thick substance, which, when sour, rises to the top of the milk, and employ this in food, and the remaining liquor is drank. But should any part of the milk be taken away no fermentation will or can take place; all the parts of the milk must be left in their natural proportion. The method which I have adopted in my own practice with success, and which was communicated to me by a Russian gentleman, is as follows.

Take of newly-drawn milk any quantity; add to it a little water, and pour the mixture into any vessel. Use as a ferment an eighth part of the sourest cow's milk that can be got—but at any future preparation a small portion of old koumiss will better answer the purpose. Cover the vessel with a thick cloth, and set it in a place of moderate warmth. Leave it at rest twenty-four hours, at the end of which time the milk will have become sour, and a thick substance will gather on the top; then with a stick, made at the lower end like a churn staff, beat it until the thick substance be thoroughly blended with the subjacent fluid. Leave it again at rest for some time; repeat the beating, after which pour it into a narrow vessel like a churn, agitate the liquor until it be perfectly homogeneous. In this state it is called *airen*.

Its taste, if properly prepared, ought to be a pleasant mixture of sweet and sour (agitation must be employed every time before use). When it is necessary to have it quickly made, heat the milk before applying the sour milk, and agitate every hour or half hour. By doing this it is obtained in twelve hours. If well secured in close vessels, and in a cool place, it can be kept a long time without injury to its qualities. There appear to be three things necessary to the vinous fermentation of milk; heat, souring, and agitation, the chief being agitation. In fermenting vegetable juices nature is sufficient to keep the parts of the fluid in mutual action, while milk is no sooner soured than a separation of its parts takes place; the cream rises to the top, while the cheese either falls to the bottom, or is suspended in the whey. When these parts are brought into close contact with one another by agitation, frequently repeated, a vinous liquor is produced, which, in my practice, I have found highly beneficial as a dietetic, and of considerable virtue as a medicine.

In cases of general debility I have given it largely, with essential service, as a nutritive. W. G., aged 26, was sent to this place from Edinburgh for change of air. He had been under a mercurial course for a venereal affection, which left him in a very weak state. He was much emaciated; his face of a leaden hue; his eyes sunken; he had slight cough, with expectoration of toughish phlegm; his appetite was impaired, and he was feverish toward night. On using the wine for about two months he got perfectly well and fat. He drank daily two quarts with a relish, and without any intoxicating effect. During the time he was under the medicine he required no purgative, and it seemed to act as a diuretic. I have found it of great use in typhoid fever, the patients using it for meat and drink. In a few cases no other remedy was used, young and old taking it. In nervous, dyspeptic, and hypochondriac subjects, its use for some time has a powerful restorative effect, giving flesh and strength. Invalids, not only without disgust, but with a sort of pleasure, drink it in large quantities, and, even when they do so, without headache or other unpleasant feelings, which the abuse of other fermented liquors produces. As stated, I have used it in various complaints with success, above my most sanguine expectations; and, in pulmonary consumption, when cod-liver oil cannot be taken, I have found it (but at the same time using whisked cream) equally, if not more efficacious, in relieving cough and giving plumpness to the body. From its mild acid, its vinous spirit, and its oily qualities, I consider it to be a cooling antiseptic, a mild stimulant and tonic, and a valuable nutrient. In acute diseases, with marks of weakness and putridity, in cases of excessive irritability, in dyspepsia, in phthisis, and in hectic, from ulceration or suppuration.

I again repeat, that all that is necessary for its preparation is, after it is sour, frequent agitation. No spirit can be produced from any one of the constituent parts of milk taken separately, nor any two of them unless mixed with the third. The closer it is kept the more spirit is obtained. If made in a glass vessel, that is to say if it undergo fermentation in it, it must not be more than two-thirds filled in case the bottles burst. When it is bottled for keeping any time, the bottles must not be full, and the corks must be fastened as in lemonade bottles.

ON UTERINE INFLAMMATION AND DEFECTIVE INVOLUTION OF THE SEXUAL ORGANS SUBSEQUENT TO THE CHANGE OF LIFE.*

By EDWARD JOHN TILT, M.D.

MY having written a work on diseases of women at the change of life enables me to affirm that one kind of uterine inflammation is much more frequently met with after the menopause than medical men are aware of. It is our own fault if we have remained ignorant of this fact; inasmuch as we have deprived ourselves of the opportunity of ascertaining it, by carefully dinning into our patients' ears that the change of life would bring with it a complete immunity from uterine disease which has been the torment of their lives, the result of this has been, that many women do not seek advice, when, after the menopause, a considerable amount of pelvic heat, pain, and muco-purulent vaginal discharge, denote inflammation of the vagina and cervical mucous membrane; and only consult us when these symptoms are very acute, and have thoroughly interfered with the duties of life.

In only two cases I have seen a severe attack of inflammation of the cervical mucous membrane to occur after the menopause in women who had *never* previously suffered from uterine inflammation. So I admit that, as a rule, we are fully justified in telling women who *have* never suffered before the menopause, that it will effectually bar the occurrence of congestion and inflammatory diseases of the womb, because, when healthy, the sexual organs then become subject to a process of physiological involution which gradually hardens the ovaries and the womb, diminishes their size, and contracts the vagina, unless matrimonial habits be kept up.

This process of physiological atrophy, which is the rule for healthy sexual organs, no longer holds good for the sexual organs that are still diseased at the menopause. If there be a small fibroid in the substance of the uterine walls, or a little polypus inside its cavity, or if what is much more frequently observed, the cervix be hypertrophied on the seat of fibroid degeneration, the sexual organs may retain their acquired size for the next ten or fifteen years without making any attempt at physiological atrophy. So long as such is the case, women are liable to inflammation of the sexual mucous membranes, although

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to a less extent than when inflammation could be kept up by menstrual congestion. In fact, the recurrence of inflammation of the uterine mucous membrane after the menopause is to be explained by cessation of menstruation not having been followed by the involution of the sexual organs.

I have hitherto spoken of the involution of the sexual organs as an uniform process, but it may be only partially effected. Thus, if after the menopause there remains a remnant of internal metritis while the cervix is healthy, the latter may so shrink as to render the cervical canal impermeable to the fluids secreted by the diseased lining of the body of the womb, so as to cause a considerable amount of uterine tormina. This is the explanation of the cases long ago described by Dr. Mathews Duncan as "leucorrhœa of old women". I shall not consider these cases, because I have not met with more than five during the last twenty years; and I have never once had occasion to puncture the cervical canal to afford an exit to the pent-up fluid—an operation that has been not unfrequently resorted to by Dr. Mathews Duncan.

Having thus cleared the ground, I shall briefly draw your attention to the only uterine inflammatory disease that I have found to be of frequent occurrence after the menopause; that is, a more or less acute inflammation of the mucous membrane lining the cervix, and the vagina; for, although cervicitis and vaginitis may be separately met with, cervicitis generally brings on vaginitis—vaginitis being much more severe near the os uteri; and sometimes an ulcer surrounding the os uteri extends to the neighbouring folds of the vagina. This ulceration is not a very serious matter in itself, and may exist for years without coming to worse; but it gives important evidence of the cervical lining being in a similar morbid state, and shows the urgency of applying some kind of caustic to this diseased membrane.

When these affections occur after the menopause, they are less acute, but much more difficult to cure, than before the change. The same amount of cervical ulceration after the change does not wake up the distressing symptoms with which we often have to contend at a previous period of life. This may be partly due to the lowered tone of vital activity, partly to the fact that the submucous tissues of the cervix do not participate in the inflammation. Nevertheless, inflammation of the cervical and vaginal mucous membranes is often attended by a considerable amount of pelvic heat and pain, by back-pain and inability to walk, by a muco-purulent discharge, disturbance of the vesical functions, and an aggravation of any nervous phenomena to which the patient had been previously liable.

With regard to the rate of activity of vital phenomena after the menopause, it may be safely said that, while heteromorphous tissues often grow rapidly, inflammation is singularly chronic. The sluggishness of the tendency to repair on the part of the inflamed mucous membrane may be to a certain extent measured by the comparative length of time that an eschar will take to fall from the mucous membrane, according as the caustic is applied before or after the menopause. Thus when, after the change, the solid nitrate of silver is applied to the ulcerated os, the eschar may take nine or ten days to fall off; whereas it is known to fall off, from the fourth to the fifth day when the caustic is applied, under similar circumstances, to younger women. It is, therefore, obvious that a speedy cure should not be promised.

I have fully explained how defective involution of the sexual organs renders them liable to inflammation; and when, at the menopause, I find that a patient has a hard and an enlarged cervix, instead of encouraging her to believe that she is to suffer no more, I take care to tell her that she is likely to have occasional relapses for many years to come, if she be not careful. These relapses have been attributed to a chill, to overwalking, to too frequent coition (for in some women there seems to be no limit of age for the continuance of matrimonial habits). I have noticed these attacks to recur in spring and autumn in some patients.

Exceptional cases of inflammation of the sexual mucous membrane after the menopause can only be explained by a cachectic tendency to disease, on the part of all the mucous membranes. In these women, there is an habitually congested state of the vagina and of the cervical mucous membrane, with an atonic ulcer round the os uteri, which does not always admit of being permanently healed. In one case of this description, the prolonged application of a solution of nitrate of silver every fifth day did not cure the patient; and I only now have recourse to surgical treatment when the symptoms become worse and the discharge purulent.

The following case well exemplifies the difficulty of curing some of these patients. A lady had enjoyed good health, but had a severe attack of uterine inflammation, after being confined of her last child at thirty-five. She occasionally suffered from it, until menstruation ceased at forty-six; and, when forty-eight, she had a severe attack, from walking on wet grass. Several applications of nitrate of silver did no

good; and, when she passed through town, I repeatedly ascertained that there was always an angry patch of ulceration, of about the size of a shilling, on the posterior lip of the os uteri. As this interfered very little with the patient's comfort, she did nothing until there came a very severe and almost constant pain in the back and right lumbar nerves. I then made two successive applications of the acid nitrate of mercury; but the ulcer was just the same when she came to me three months afterwards. I then applied the potassa fusa cum calce; but the patient started for Ben Rhydding before the ulcer was healed. There she underwent a long course of hot and cold water treatment, which had no effect on the spinal neuralgia; and when she passed through town to take the Bath waters, I still found the ulcer, though smaller and less angry.

This case gives an idea of the difficulties sometimes met with, although they were doubtless increased by the patient's objection to being controlled.

The practical hints to be derived from this paper are: 1. That the occasional recurrence after the menopause of inflammation of the sexual mucous membranes may be safely predicted to those who have long been martyrs to inflammation of the entire womb, when they presume too much on their partly recovered strength; for I have always found this to occur whenever I have had the opportunity of watching such patients for the ten years that followed cessation: 2. That we may safely predict inflammation of the sexual mucous membranes to those who overtax their strength after the menopause, whenever the uterine tissues are being constantly teased by a small interstitial fibroid or a polypus, when the cervix is hypertrophied or of a fibroid consistency, and also when women are cachectic and have always one or more of their mucous membranes in a diseased condition.

CASE OF JAUNDICE.

By WILLIAM DATE, Crewkerne.

J. C., aged 35, a stalwart, muscular, tolerably temperate agricultural labourer, has always enjoyed good health up to the present attack. In the evening of March 18th, 1872, he complained of headache. The following morning the headache was more severe: he said he could not see well, and remained in bed. Next day he felt better and got up, but did not go to his work. In the evening I saw him.

March 20th (Evening). He was throwing himself about the bed, moving incessantly, and talking wildly. When spoken to authoritatively, he became quiet for a minute and answered questions, but if left alone he speedily relapsed into delirium. He complained of intense pain in the head, horrible dreams, and dimness of sight. He said he could see objects, but they seemed wrapped in a cloud. He shrunk from a bright light. His pupils were contracted; the face pallid; lips leaden coloured, giving the countenance a cadaverous appearance. The tongue was thickly coated with white fur. Pulse 120; respirations 30; temperature 104.6 deg. Bowels freely moved in consequence of medicine previously administered. The urine could not be observed.

March 21st (Morning). The pain in the head was better, but not gone; he was very drowsy, but more rational. He had some restless unquiet sleep. Free purging continued; the motions were dark and offensive. The urine was copious and natural in colour. Pulse 102; respirations 28; temperature 103 deg.

March 22nd. He had had some quiet sleep. He said his head felt heavy and "queer"; the pain was quite gone. He could see well again; the pupils were more active. He had passed two motions—the last one very light in colour. Urine rather yellow; skin slightly tinged with yellow. There was no tenderness nor enlargement of the liver. He vomited once this morning for the first time. Pulse 100; respirations 24; temperature 102.6 deg.

March 25th. There was no return of headache. He complained of tenderness in the calves of his legs. The skin and urine were of a deeper yellow colour. Careful examination revealed nothing abnormal about the liver. The motions were costive and white; the tongue brown and dry. Pulse 110; respirations 28; temperature 102.7 deg.

March 28th. The skin had a deep yellow colour; the urine was very dark. There was no tenderness nor alteration in the size of the liver. The tongue was cleaner. Pulse 88; respirations 21; temperature 99.8 degrees.

It is useless to occupy space with further notes. From this time the case progressed as one of simple functional jaundice, and made an uninterrupted but rather protracted recovery. The interest centres entirely in the first three days of attendance. During that time there was not one single symptom indicative of jaundice or of disease of the liver. The intense pain in the head, delirium, disturbed vision, intolerance