affected with the most distressing itching, without any outward manifestation whatever; and the paroxysms, which ten days before had been chiefly at night, were now less intermittent, and present throughout the day. The incessant irritation and loss of sleep threatened to undo all the good effects of the change; the more so, that the pernicious mental reaction produced by the patient brooding over her misery, and dreading its results, probably aggravated the intensity of the pruritus in proportion to the amount of shock that the maternal instinct received; for I learned that, previously to her last confinement, three years ago, a similar train of neurotic phenomena had occurred, and, although of less duration and intensity, yet the pruritus had so prostrated both body and mind as to bring her to the verge of mania.

On July 30th, I prescribed fifteen grains of the bromide of potassium to be taken at bedtime, with the following lotion as a topical application, being one that I had frequently used with excellent results in pruritus of the perineum: Borax, 200 grains; liquor morphine hydrochloratis ʒiiss; glycerine ʒj; water to eight ounces. The weather at this time was delightfully dry, warm, and exhilarating; so daily sponging every morning on rising, light clothing, quiet and frequent exercise in the open air, coolness and free ventilation of the bed-chamber, with a simple but nutritious dietary, were the several factors insisted upon as being likely to act beneficially.

On August 4th, the pruritus was as bad as ever. The remedies, giving no relief, were withdrawn; and, temporarily, elder-flower water, as a pleasant addition to the morning bath, was adopted; with glycerine for the varicose saphenous veins, in the neighbourhood of which the pruritus was especially intolerable; although I may remark that she had experienced the mere varicosity for the past ten years, which always disappeared after confinement.

On August 7th, I prescribed an emulsion of bitter almonds, with the addition of the dilute hydrocyanic acid of the *British Pharmacopæia*, to be sponged lightly over the parts most affected; and, with frequent applications during the day, and sometimes during the night, the pruritus became endurable. A week later, on August 16th, an attack of heartburn and loss of appetite supervened, complicating matters so as to render her miserable in the extreme. For this I gave her ten grains of the subnitrate of bismuth, four minims of the dilute hydrocyanic acid, with an ounce of infusion of chirayta, twenty minutes before meals, twice or thrice a day, with seeming benefit; but, unfortunately for any therapeutic credit, no sooner had the gastralgia gone than it was superseded by an attack of facial neuralgia, which lasted for ten days; and during this period the pruritus entirely vanished. Painful as the neuralgia was, the greater intermittency of its attacks afforded such intervals of comparative comfort, that my patient frequently expressed the hope that it might remain, rather than the pruritus should recur. The neuralgia, however, was in its turn superseded by the pruritus, which now involved the mucous surfaces of the mouth, throat, nose, and eyes; and this new feature proved so exquisitely distressing and completely preventing sleep, that I forthwith ordered hydrate of chloral in soporific doses at bedtime. On September 3rd, fifteen grains were given, increased next night to twenty, as the sedative action was insufficient. This quantity procured some sleep, from which my patient awoke refreshed, free from the pruritus, able to enjoy her breakfast, and pass a comfortable forenoon. Indeed, after the second night, she assured me that she had slept more soundly than she had done for three months past, as never a time elapsed without her being awake either by the pruritus or the effects of her involuntary scratching even to laceration of the skin. The use of the emulsion of prussic acid and bitter almonds was continued, to allay the attacks which occurred during the day. I tried unction of aconite, but was obliged to stop its use, as it gave rise to disagreeable tingling sensations, without in any way relieving the pruritus.

On September 10th, delivery with natural labour took place with great facility; and the chloral draughts, which had been given up to this time, were suspended on the following day.

In the first attack of pruritus, to which I incidentally alluded, this affection ceased by degrees, finally disappearing by the third day after confinement; but in the present instance this did not take place till ten days later, although during that time the severity and consequent distress were incomparable to the same symptoms before parturition. Up to the present time, my patient has enjoyed excellent health.

The whole case exhibits, I think, the proteiform aspects generally characteristic of neuroses; and a neurosis of the vagus appears to have been the starting-point. The occurrence at the outset of heartburn, one of the common troubles of pregnancy, and the apparent efficacy of the remedies employed for its relief, received another interpretation when an attack of facial neuralgia supervened immediately on its cessation; while the interchangeability, again, of this affection with pruritus indicated a certain correlation to exist among them—a view most in-

terestingly corroborated by a repetition of their first mode of manifestation.

The influence exerted by the gravid uterus can only be subordinate to an inherent predisposition to such neurotic affections; and, without any speculations as to what the nature of this predisposition may be, the interconnexion of the neuroses receives a probable explanation—firstly, in the relation existing between the nucleus of origin of the vagus, and the nucleus of origin of the sensory or ganglionic root of the fifth nerve, near the floor of the fourth ventricle; and, secondly, in the intimate and close connexion of their two nuclei with the grey matter of the cord continued in the medulla oblongata. For, inasmuch as the heartburn and itching of the throat depend upon the neurosis of the vagus, and the neuralgia and itching of the conjunctival, nasal, and buccal mucous surfaces are a neurosis of the fifth nerve, so the general cutaneous pruritus depends upon a neurotic affection of the nerves of common sensation.

REMARKS ON THE USE OF ERGOT IN CASES WHERE THERE IS WEAKNESS OF THE HEART.*

By JAMES THOMPSON, M.B., Leamington.

THE action of ergot on the circulation of the fœtus has been often discussed, and various opinions have been expressed on the subject. The majority appear to believe that the action on the fœtus is fatal if prolonged beyond two hours, and in this I fully concur. I have never seen any remarks bearing on the action of ergot on the circulation of the mother, and some cases which have recently occurred have forcibly impressed this matter on me. The first case was in a fourth pregnancy, during which the subject had been repeatedly under my care for what she called "fits of benumbing." These attacks came on suddenly, she could not stand, and saw and heard indistinctly; this was followed by violent palpitation of heart and severe headache; the duration of these attacks was often two hours, more or less. An examination made after one of these attacks revealed great weakness of action, but no valvular deficiency. Tonics were given and she obtained much relief, and the frequency of the attacks was much decreased. When the confinement approached, much anxiety was entertained for her safety. Unfortunately there was partial placenta prævia, which caused some hæmorrhage, checked by cold and rest successfully. Slight hæmorrhages occurred at intervals for two days, while the os dilated slowly. At 7 P.M. on the third day, a considerable gush of hæmorrhage came down as the os suddenly dilated; the vagina was plugged and pressure applied to the abdomen; the hæmorrhage was fully controlled; the dilatation of the os proceeded slowly; there seemed to be a want of contractile power in the uterus. With the concurrence of an experienced medical friend, ergot in infusion was given at intervals, which brought on pains, and the fœtus was expelled in three hours, still-born, and the placenta quickly following; no more hæmorrhage, and the patient expressed herself as comfortable; and there was no marked symptom that the circulation had suffered more than might be expected. My friend and I congratulated ourselves on the successful issue of the case; but thirty minutes afterwards my patient said: "I fear one of those fits is coming on." The pulse was weak, and she complained of cold and faintness. We ascertained that the uterus was firmly contracted, and that no hæmorrhage had taken place. Hot beef-tea with brandy was given at once in liberal doses, afterwards ammonia in ten-grain doses, with ether and other stimulants; but with all, the action of the heart became weaker and weaker still. Mustard poultices were applied hot over the cardiac region, electro-magnetism to the phrenics and through the diaphragm, and subsequently carbonate of ammonia in solution was injected hypodermically; but all was of no avail, and the patient died apparently of syncope three hours and three quarters after delivery.

The question which presents itself naturally is, what was the real cause of death? Was it due to constitutional weakness only? I am strongly impressed with the belief that it was due to the action of ergot on the maternal circulation. I presume the action was cumulative, and that it acted by producing forcible contraction of the muscular tissue of the heart and large arteries. No doubt exists that ergot acts on unstriated muscular tissue in the uterus—why should it not act on the same muscular fibres in the heart. There was no noted change in the circulation during the progress of the labour; and it may be presumed that when the necessity for the use of contractile power in the uterus ceased, that the action was transferred to the same unstriated muscular

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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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