

Lime-water and thin porridge may be given occasionally.

PROF. WILLIAM EBSTEIN, M. D., OF GÖTTINGEN.

Cancer of the Stomach.—This writer observes that, in spite of our ill success with remedies so far, we ought not to give up all hope that a specific for cancer may be some day discovered. It is impossible to say whether the fact that cancer of the stomach is extremely rare in certain countries (Egypt, Vera Cruz,) may not be made of some therapeutic use; at any rate, the subject is worthy of continued attention.

VON BENEKE has recommended the treatment of cancer with non-nitrogenous food, and with such stimulants as wine and tea; and although he starts from purely hypothetical premises, his method may be worth a trial in dealing with a malady for which there is as yet no cure.

At the present time our treatment must be purely symptomatic. The dietetic management of the patient is all-important. In stenosis of the pylorus, with considerable dilatation of the stomach, the use of the stomach-pump has in some cases afforded remarkable relief by unburdening the organ of the mass of stagnant and fermenting food which it contained. While, however, some patients are able to tolerate the instrument day after day, on account of the after-comfort which they derive from it, others are so much exhausted by the operation, or so little relieved by it, that it is impossible to continue it. In this latter class of cases the patients do best under the use of remedies which arrest fermentation in the contents of the stomach. One may give:

701. R. Benzine,	gtt. x-xv.	
Mucilage,	f. ʒj.	M.

This amount four or five times a day.

Or, what suits many cases better, a few drops of carbolic acid, well diluted, five or six times a day. Both of these will diminish the frightful eructations of sour-smelling gas which rob the patients of their night's rest, and which narcotics do not in the least alleviate; and for the time they may completely arrest them.

In stenosis of the cardia, as soon as the diagnosis is tolerably clear, all attempts at passing a sound into the stomach must, of course, be abandoned, otherwise the consequences may be most serious. All we can do here is to nourish the patient by enemata.

Where the orifices of the stomach are not involved, although the peristaltic movements must necessarily be considerably impaired, yet so long as the growth remains localized, and the patient is not exhausted by hemorrhages or other accidents, the general symptoms may be less urgent. Sometimes it may even appear as if the patient's only malady were a severe chronic catarrh of the stomach. The treatment of this catarrh, and especially of such symptoms as the extreme anorexia, the nausea and the vomiting which characterize it, must then be our chief object. The best practice seems to consist in giving small quantities of food at frequent intervals, followed by two or three tablespoonfuls of very dilute hydrochloric acid (0.4 per cent.) In such cases transient benefit arises from small doses of *iodide of iron* in combination with bitters, the iodine apparently acting through its antiseptic and anti-putrescent qualities. In this way the harassing pain and discomfort caused by the perversion of the digestive functions may be much relieved. Narcotics should not be given too early, and the quantity of them should be as small as the severity of the symptoms will allow.

PROF. KUSSMAUL, OF FREIBURG.

In 1867 this writer first advocated the use of the *stomach-pump* in gastric cancer. He stated that relief only, but no cure, can be expected—1, in cases of cancerous stricture of the pylorus; 2, if the pylorus be very considerably contracted by a cicatrix; 3, if with even a moderate stricture the walls of the stomach have, in consequence of the chronic gastritis, undergone a permanent degeneration. That substantial relief may be afforded by the use of the stomach-pump is proved by the history of two cases of dilatation of the stomach thus treated by Dr. AFFLECK, in Scotland, as both patients provided themselves with stomach-pumps on their dismissal from hospital, to carry on the treatment for themselves. (*British Medical Journal*, May, 1872.)

DR. JAMES M. HUTCHINSON, OF PHILADELPHIA.

This physician reports (*Philadelphia Medical Times*, May 27th, 1876,) a case of *cancer of the pylorus*, in which great relief followed the washing out of the stomach on alternate days with dilute alkaline solution (a drachm of bicarbonate of soda to a quart of water) as recommended by KUSSMAUL.

The following conclusions seem to be deducible from Dr. HUTCHINSON'S case:

1. That washing out the stomach will be useful in dilatation of that organ dependent upon stricture of the pylorus, even if this be due to malignant disease, by lessening the frequency of the vomiting.

2. That it diminishes the intensity of the pain, by preventing extreme distension of the stomach, and by the removal of its irritating contents.

3. That it renders possible the introduction of food into the stomach, and its digestion.

DR. MILNE, OF LONDON.

Speaking particularly with reference to *uterine cancer*, this practitioner says in the *Obstetrical Journal for Great Britain and Ireland*, May, 1873, that the most reliable caustics are the chloride of zinc, the dried sulphate of zinc, and the nitrate of copper, and the cases suitable for their application are all those of encephaloid carcinoma and epithelioma, where the cervix alone is involved. As regards their mode of application, the dried sulphate of zinc should be first used, being applied to the diseased surface pretty freely through the speculum, the vagina being immediately thereafter plugged with cotton-wool, tipped at the uterine end with a little olive oil. This is to be applied till the slough comes away, after which the cervix is to be injected with a saturated solution of nitrate of copper. No caustic, he thinks, is better adapted to seek out, attack and destroy any cancer cells lying beyond the sore from which the slough has separated than nitrate of copper.

Dr. M. also administers internally, in such cases, ergot, continuing it in full doses, and for a long time. He believes it has a prophylactic effect on the re-appearance of the cancer, and leads to atrophy of the uterus.

DR. SAINT GERMAIN, OF PARIS.

702. R. Acidi tannici, ζ ij. M.
Glycerinæ, f. ζ ij.

Prepare little bags of gauze about an inch and a half long and a little larger than the thumb, fill them with dry linseed meal, and after having immersed them in the above solution, introduce them into the vagina for the relief of the pain accompanying cancerous ulceration of the uterine neck. One is allowed to remain in place for several

days and then removed; after free injection of the vagina a new sachet is introduced.

When the pain is very acute, the above solution may be replaced by the following:

703. R. Extracti belladonnæ, ζ ij. M.
Glycerinæ, ζ ij.

To be applied as above.

704. R. Acidi sulphurici, f. ζ ijss. M.
Aquæ destillatæ, f. ζ xv.

The patient being recumbent on the back, with the pelvis elevated, a glass speculum is introduced and a teaspoonful of this acid solution is introduced in contact with the cancerous ulceration, and retained there for five or six minutes, after which it is replaced by simple water. This operation is to be repeated twice a day. It is alleged that under the influence of this treatment the hemorrhages are more rare and less grave, and that the progress of the cancer is retarded.

PROF. ARMAND TROUSSEAU, PARIS.

705. R. Belladonnæ, āā ζ ss.
Stramonii foliæ, ζ jss.
Aquæ, O jss.

Boil down to a pint, strain, and add,
Tincturæ opii,

f. ζ ss-j.

This liquid is administered in the form of vaginal injections, to relieve the pains of uterine cancer. It is poisonous if given as enema.

RÉSUMÉ OF REMEDIES.

Aceticum Acidum has been used as a parenchymatous injection in malignant growths, and also as a local external dressing, with occasional good results. The *acetates* of lime and soda have been prescribed by Dr. E. CURRIE, of Paris with asserted good effect. (Dose, ζ ss daily.)

Alcohol. In the hypodermic use of this substance in cancer, Dr. HASSE (*Medicin. Centralzeitig*, February, 1874,) recommends that it be thrown, not into the new growth, but around its edges, thus obliterating the lymphatics which convey the infection, and producing atrophy of the growth itself. He repeats the injections every eight to fourteen days, allaying pain with ice-bags. His mixture is one hundred parts of alcohol to one of ether.

Ammonii Carbonas and *Chloridum* were often given internally by Sir ASTLEY COOPER. *Arsenicum*, both internally, as Fowler's solution, and externally, as a caustic, has been largely employed. (See above, pages 471, 472.)

Brominium, in uterine cancer, has been extensively employed by Dr. WYNN WILLIAMS. (Page 469.) The *chloride of bromine* is deemed of the highest value by Dr. LANDOLFI. (Page 474.)

Carbolicum Acidum is used pure, as an anæsthetic, before applying caustics.

Carbonicum Acidum, injected up the vagina, in uterine cancer, is a valuable means of relieving pain. (See Chapter II.)

Chloral. Dr. FLEISCHER uses chloral locally in carcinoma uteri. He first washes out the vagina thoroughly, and then passes up to the cancerous surface some cotton-wool wetted with a solution of chloral (ʒ ij to aquæ ʒ iij); this application is repeated every two hours. After a few applications, the pain is moderated, and the discharge becomes less offensive. (*Med. Chir. Centralblatt*, IX, 1875.)

Chloroform may be atomized as vapor on raw, painful surfaces.

Chromicum Acidum.

706. R. Acidi chromici, gr. c.
Aquæ destillatæ, f. ʒ j. M.

For hypodermic injection. Sixty drops of this may be thrown into neoplastic growths, at several points. The operation may be repeated every other day until there is produced redness and tumefaction. It should then be suspended for a week or two, and again resumed. The operation should bring about gradual absorption or atrophy of the mass.

Citricum Acidum, ʒ j-ij to aquæ f. ʒ viij, will frequently relieve the severe pain of cancer.

Condurango. The value of this substance in gastric cancer has recently been very carefully studied by Professor RÜHLE, of Bonn. He used Friedreich's macerated decoction:

707. R. Corticis condurango, ʒ ss.
Aquæ, f. ʒ xij.

Macerate for twelve hours and evaporate to one-half the amount. Dose, a tablespoonful three or four times a day. It should be a dark brown, somewhat turbid fluid, slightly bitter and aromatic.

Professor RÜHLE has seen no evidence that it produces actual retrograde metamorphosis of the cancer. He has, however, been repeatedly told by patients who have used condurango for cancer of the stomach, that the chief symptoms—vomiting, loss of appetite, and the pain itself—have abated; that in one case a decided improvement of general health took place; and in others, out-patients who had been on its use for some time, in consequence of this decided improvement, ceased attending, apparently believing themselves recovered.

Creosotum. In epithelioma, Dr. FORNE reports, in the *Montpellier Medical*, February, 1872, good results from the topical application of creosote. The whole surface of the ulcer is lightly but firmly touched with a brush dipped in the pure article, after which a piece of lint wet with a gummy solution of creosote is applied. The treatment should be repeated every third day. Fifteen

or twenty applications may be required, but he reports commencing cicatrization after the first half dozen.

Dr. JOHN FRISSELL, of West Virginia, has, for a number of years, used with great satisfaction the following antiseptic and detergent dressing to cancerous surfaces. It is diluted more or less with water, and applied by strips of old muslin:

709. R. Tincturæ gallæ, f. ʒ ij.
Tincturæ myrrhæ, f. ʒ j.
Tincturæ opii, f. ʒ v.
Creosoti, f. ʒ j.
Acidi aceticæ, f. ʒ ij. M.

For a lotion.

Cupri Nitras, in strong solution, is an efficient caustic.

Cupri Sulphas is employed as an escharotic.

Dioscorea Villosa. In cancer of the stomach, Dr. C. T. HART, of Wisconsin, says the wild yam is superior to any other agent he has tried in soothing the pain, distress and vomiting. (*St. Louis Medical Journal*, 1869.)

Ferrum. Various preparations of iron have been used in cancer. Dr. CARMICHAEL, of Dublin, claimed to have derived much benefit in epithelioma from washing the ulcerations with a solution of the sulphate. Professor H. H. SMITH, of Philadelphia, reported a case too far gone for operation, for which he prescribed Vallet's mass, gr. v-x, daily, and the powdered carbonate to be applied to the sore; and the patient lived eight years, the disease meanwhile making almost no progress. Dr. JUSTAMOND, of London, used to give gr. lx-c of the ammonio-chloride daily.

Gastric Juice. Professor SCHIFF, of Geneva, and others, have advocated the treatment of malignant ulceration by gastric and pancreatic juice. Dr. C. H. F. ROUTH, of London, who has tried the remedy, has reported favorably upon it.

Hydrastis Canadensis. Dr. EDWIN PAYNE, of London, has highly commended the yellow root, used in lotion, especially in epithelioma of the lips. It renders the parts much less painful, keeps the surface in a more healthy condition and neutralizes the fetor. His formula is:

709. R. Tincturæ hydrastis, f. ʒ j.
Aquæ, f. ʒ viij. M.

For a lotion.

Iodinium, in various preparations, is widely employed.

Iodoform, applied locally, relieves the pain.

Pepsina. (See Gastric Juice.)

Phytolacca Decandra has a wide-spread reputation in cancer. (Page 468.)

Plumbi Nitras. Nitrate of lead is a valuable application in epithelioma, warts, excrescences, etc.

710. R. Plumbi nitratæ, ʒ ij.
Aquæ rosæ, f. ʒ iv. M.

Apply three times a day.

Potassa Fusa. In rodent, epithelial or other cancerous formations that are superficial and of limited extent, the potassa fusa has advantages over any other caustic resorted to. Its effect is prompt, its action readily guided and controlled, and the destruction of the parts to which it is applied is complete. Its beneficial effects are not limited to the line of complete destruction. The cancerous proliferations which extend beyond the margins of a perceptible diseased condition, possessing a lower vital power than healthy tissue, are necessarily disturbed by the chemical action, while the pain produced by its use is often less than results from the use of the knife.

Potasse Liquor, recommended by Sir BENJAMIN BRODIE. (Page 468.)

Potassii Bromidum has been used as a caustic in cancerous affections. M. PEYRAUD, of France, employs the powder, and with it states that he cures cancroids, provided they be not too extensive. The application at times, according to the seat of the disease, may be very painful, especially if the cancroid be somewhat extensive. The eschar formed by the powder has the thickness of a two-franc piece. It is not produced immediately, it is only after twenty-four hours that it appears. It is semi-transparent, if the wound does not bleed. It also seems that the wound upon which it rests is diminished in extent; one would say that it shriveled. This eschar is rapidly eliminated. (*Progrès Medical*, No. 36, 1876.)

Potassii Chloras, in saturated solution, is an excellent application to epithelioma. Indeed, it has been claimed to have cured some cases. It was first brought to notice by LEDESCHI, in 1845.

Silica. In the *Edinburgh Medical Journal*, Nov., 1875, Mr. F. BATTYE states that silica, powdered very fine, greatly relieves the pain in cancer. His prescription was:

711. R.	Pulv. silica,	gr. iij.	
	Morph. sulph.,	gr. j.	M.

For three powders. One three times a day.

Possibly the anodyne action of the morphia was simply enhanced by fine trituration; at any rate, the effect was much better than the morphia alone.

Sodii Bicarbonas. Prof. BUSCH, of Bonn, has derived great benefit in epithelioma from frequent washings with soda. (*London Medical Record*, May, 1877.) His conclusions are: 1. Epithelial cancer commences in many cases as a simple proliferation of the superficial epithelium. 2. In this stage the disease is curable by persistent washing with solution of soda. 3. In certain favorable cases of superficial cancer of the face this method is successful, even when ulcers are present. 4. In many cases the recurrence of epithelial cancer after extirpation is prevented by alkaline washings of the cicatrix and adjacent parts. 5. It may be useful, as a prophylactic measure, to remove the epithelial deposits which sometimes take place on the breasts of elderly women.

Sulphuricum Acidum, used by M. MICHEL. (Page 479.)

Tannicum Acidum. According to Dr. SCHWALBE, this acid possesses the property of destroying the cancer-cells and favoring absorption of the products. The author has attempted the use of this substance in injections into various tumors, and he has seen a malignant lymphoma of the neck diminish con-

siderably under its influence. A tumor as large as a hen's egg, implanted upon the periosteum of the lower jaw, and the development of which had been very rapid, necrosed quickly under the influence of these injections, and soon fell off.

Terebinthina. Chian turpentine in pills with sulphur, gr. iij of the former to gr. ij of the latter, was claimed in 1880 as a curative agent in uterine cancer, by Dr. JOHN CLAY, of Birmingham. Other observers have not sustained the claim.

Thuja Occidentalis has been used both internally and locally to cancerous affections, with asserted advantage.

Zinci Chloridum is the most widely used of all the escharotics in cancerous affections. (Above) It is highly recommended by European surgeons. Its power to arrest phagedenic action is remarkable. It not only has a cauterant property, but it is peculiarly alterative. It may be mixed with flour or other substances to form a paste. One part to three of flour is preferred by some. In epithelioma, Dr. GARRETSON prefers it in its purest form. He believes that anything less than killing the part outright will always be found productive of far more harm than good; therefore he covers the part to be acted on with the undeliquesced crystals of the chloride, corroding away, by the immediate repetition of this agent, the parts, until the diseased scales are all destroyed. The chloride has also been given internally, gr. $\frac{1}{2}$ in a wineglassful of caraway water every morning.

Zinci Sulphas has been also used as an escharotic.

Mineral Waters. The Eaux de Celles (Ardèche), in France, have been recommended by various eminent French surgeons as beneficial in cancer. In the United States, the Missisquoi water, in Franklin county, Vermont, is said, on high authority, to have proved a valuable palliative in this disease. Both these waters contain considerable quantities of alkaline carbonates and other ingredients, and resemble each other in a general way, but present nothing which we could single out as probably active against cancerous disease. Sir JAMES PAGET attributes their value to the influence they exert on the arthritic diathesis often present in cancer. He says of the Missisquoi water, that its influence on cancer itself, is, he believes, absolutely nothing, "but it sometimes gives comfort 'by the way.'" (*Clinical Lectures*, page 338.)

It is probable that some of the mineral springs containing arsenic would be available in cancer. Such a one is that of the stream called Whitbeck, rising in the Black Combe Mountains, in West Cumberland, England, which percolates through arseniferous cobalt ores, and contains arsenic in determinable quantity.

Electrolysis. Various surgeons in Europe and America have reported cures of schirrhous or other malignant tumors by electrolysis. A powerful apparatus must be used, such as that of KRUGER & KIRSCHMANN (that of ALTHAUS is too weak.)

Drs. BEARD and ROCKWELL state that pain may be relieved, and sometimes a reduction in size may be obtained, by the ordinary method of electrolysis, or by simple external faradization or galvanization; and by these methods, also, the tumor may be arrested in its progress for a long time. The prognosis in epithelioma is good, but of schirrhous doubtful. In cancer-

ous tumors of the breast, those which involve but a limited portion of it, where the skin is soft and yielding, and of natural color, not unfrequently yield to electrical treatment. Not only is the pain relieved, but the tumors grow softer and smaller. Sometimes their growth is arrested, and they remain stationary for years. Even in the worst forms of cancer the surgeon is frequently able to relieve the terrible pain that accompanies it by galvanization. "It is not sufficiently understood what a magic influence an intelligently-directed application of the constant current exercises, as a rule, over the throbbing pain of schirrhus."

The electrolytic treatment of malignant tumors has also been carefully studied by Dr. WILLIAM B. NEFTEL, of New York. He sums up his researches with the positive declaration that the most malignant tumors, such as true cancer, "at a certain stage of their development, can be radically cured by electrolysis, employed according to certain methods." The method he employs is by inserting needles around the mass, and increasing gradually and slowly the current intensity. The treatment is comparatively painless, and may be applied to cases which are quite far advanced. Little reaction follows it, and with judicious after-treatment a fair percentage of success may be expected. Dr. NEFTEL'S cases have been published in *Virchow's Archives*, and elsewhere, and deserve careful consideration.

Pressure. (See page 470.) A recent writer in the *Lancet*, 1878, remarks that it is obvious if pressure is to be effective it must be applied around the periphery of the growth, where the cell proliferation is most active. This must be obtained, it is said, by the careful adjustment of pads of cotton-wool. The neatest plan would seem to be the employment of compressed sponges, which might be bandaged firmly around a tumor of the breast, and then allowed to swell by imbibition of water. The constriction of the chest would of course be great, and thoracic respiration seriously interfered with. But the patient might be kept in bed, where abdominal respiration might suffice.

XV. THE TREATMENT OF SCROFULA.

PROF. S. D. GROSS, OF PHILADELPHIA.

This writer observes that few practitioners really understand the nature of strumous diseases. They seem not to know that they occur under the most varied forms, and that the treatment must be varied to meet each case.

For practical purposes it is sufficient to consider scrofulous patients divided into two great classes, the vigorous and the weak. The former are no doubt in the minority, but are nevertheless a well-marked and not infrequent class.

As a general rule, it is well to begin the treatment with a mild yet efficient aperient, to clear out the bowels and improve the secretion. After this, if the patient is feeble and exhausted, a tonic course should be instituted; but if, on the other hand, he is strong and plethoric, as denoted by the state of his pulse and complexion, much time will be gained and structure saved by the use of antiphlogistics, especially tartar emetic and Epsom salts, in the form of the saline and antimonial mixture (F. 5), properly guarded with tincture of opium. While the lancet must be employed with great care, Dr. GROSS is satisfied that it is often of immense benefit in arresting the morbid action. In scrofulous inflammation of the eye, throat and lymphatic glands, its effects are often marked and permanent. But these active measures must ere long in the case be superseded by other remedies, similar to those generally applicable in the more common form of the disease.

Among these, *iodine* may be regarded as the most important. When a purely alterative effect is desired, it is best given in the form of

LUGOL'S CONCENTRATED SOLUTION.

712. R. Iodinii, ℞i.
Potassii iodidi, ℞ij.
Aquæ destillatæ, ℥vij. M.

From five to ten drops every eight hours, in a wineglassful of sweetened water, gradually increased to fifteen, twenty, twenty-five or thirty drops, according to the tolerance of the system.