

On the treatment of cancer / by John Clay.

Contributors

Clay, John, 1821-1894.

Publication/Creation

London : J. & A. Churchill, 1882 (Birmingham : The "Journal".)

Persistent URL

<https://wellcomecollection.org/works/dwenduya>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

ON THE
TREATMENT OF CANCER.

BY

JOHN CLAY,

PROFESSOR OF MIDWIFERY IN QUEEN'S COLLEGE, AND
OBSTETRIC SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM,
ETC., ETC.

LONDON :

J. A. CHURCHILL, 11, NEW BURLINGTON STREET.

—
1882.

PRICE ONE SHILLING.

LIBRAIRIE
JACQUES LECHEVALIER
23, Rue Racine, PARIS VI.

ON THE
TREATMENT OF CANCER.

BY

JOHN CLAY,

PROFESSOR OF MIDWIFERY IN QUEEN'S COLLEGE, AND
OBSTETRIC SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM,
ETC., ETC.

LONDON:
J. & A. CHURCHILL, 11, NEW BURLINGTON STREET.

—
1882.

NO. 20

SPECIALTY MICROFILMED

1964

DURING the last two years I have contributed various papers to the *Lancet*, on the treatment of Cancer—especially cancer of the female generative organs—by Chian turpentine. As the original paper cannot now be obtained—the number of the *Lancet* being out of print—and as I am frequently asked for copies of my contributions, it has appeared to me desirable to publish them in a collected form for the convenience of those who may wish to refer to them. Increased experience, moreover, while confirming the statements made in the original paper, has led to improvements in the application of the remedy, and also to the employment of certain aids in the treatment of the disease. It may, therefore, be useful to make some general remarks by way of preface to the reprinted papers.

There is considerable difficulty in procuring the genuine Chian turpentine, and this difficulty is enhanced by the contradictory statements published respecting the physical properties of the drug. A large quantity of Strasbourg turpentine has been exported, and extensively substituted for Chian turpentine. I have received information through a trustworthy source, from Scio, that a number of foreign merchants have bought up a large quantity of the fine gum in that island and have mixed it with different kinds of turpentine. The fact of this mixture coming direct from Scio has led those unacquainted with the physical properties of the pure drug to consider the imported mixture genuine. Canada balsam has also been substituted for the genuine drug. It is of the first importance on the grounds of humanity, and in the interest of science that the pure drug only should be used. It being almost impossible to verify the genuineness of a drug supplied to one's patients, it is worthy of mention that the genuine article can be obtained from Messrs. Southall, Barclay, and Southall, of Bull Street, Birmingham, who have a large supply of it, procured from a reliable source direct from Scio. The following directions for determining the

purity of the drug were published in the *Lancet* for May 15th, 1880, and a large acquaintance with its properties since that time has convinced me of their correctness, and has left little to be added to the directions given:—

“As regards the sources of the drug which has been employed throughout my investigations in the treatment of cancer of the female generative organs, I may state that we had a small supply in the Hospital Dispensary which I supplemented from a chemist in Birmingham. The two specimens were identical as regards their appearance, taste, and smell. We thus had a sufficient supply to carry us through the cases reported in *The Lancet* for March 27th, 1880, as well as some for the treatment of private cases. Knowing the difficulty of procuring the Chian turpentine genuine, I relied in the first instance upon the character given in Watts' Chemistry, Vol. v., page 920, as tests of its purity. The drug I used was many years old, and agreed with the following description given by Watts:—‘yellowish-green, has an odour of fennel and elemi, and an aromatic taste like that of mastic. It dissolves completely in ether, and partially in alcohol, leaving a glutinous residue.’ Subsequently, I procured Flückiger's and Hanbury's Pharmacographia, from which I give their excellent description of the drug: ‘Chian turpentine as found in commerce and believed to be genuine, is a soft solid, becoming brittle by exposure to the air; viewed in mass it appears opaque, and of a dull brown hue. If pressed while warm between two slips of glass it is seen to be transparent, of a yellowish-brown, and much contaminated by various impurities in a state of fine division. It has an agreeable, mild terebinthinous odour, and very little taste. The whitish powder with which old Chian turpentine becomes covered shows no trace of crystalline structures when examined under the microscope.’

“The specimens I used corresponded in every particular with these two descriptions, but it may be useful to describe more in detail some of the properties above mentioned.

“The pure drug is of such a solid nature that a portion taken between the fingers may be rolled into the form of a pill without adhering to the fingers; thus it is very different from the large number of spurious specimens which have been supplied to the public, and which for the most part have been of a syrupy consistence. The odour of the genuine drug is peculiar. If a portion be softened between the fingers the fragrant odour can

be readily perceived, and it is not by any means similiar to that of turpentine oil, whilst the spurious kinds smell strongly of the latter substance. The taste of the pure article is characteristic in not being unpleasant. Indeed, it is almost tasteless; I have kept a piece in my mouth for two hours and scarcely knew that it was there. The taste of most of the spurious kinds is very bitter, and so unpleasant that I now rarely adopt the above-mentioned mode of testing the drug. The brittle yet elastic nature of the pure drug is very striking. If a piece is warmed and rolled out, and is allowed to cool, and is then dropped on the floor, it generally breaks into a number of fragments. If a mass is placed in a shallow vessel it usually flattens and spreads over the vessel, the surface being smooth. When the pure drug is placed between two pieces of warmed glass its appearance corresponds exactly with that given in the *Pharmacographia*. It is best to take a piece of glass, warm it very slightly with a piece of lighted paper, clean it, and then place the drug to be examined upon it; then cover the drug with another piece of glass, and allow both to cool; then by holding the double glass up to the light the characters are readily distinguished. If the drug is spurious, consisting perhaps of strained crude turpentine or Venice turpentine, and so placed between warm glass, it will present the appearance almost of water. If Chian turpentine is adulterated with Canada balsam, on a gentle heat being applied to the glass on which it is applied the Chian turpentine remains in the centre and the balsam flows over the glass, the reason being that the former requires a little stronger heat to liquefy it. If black resin is mixed with Venice turpentine, to make the specimen resemble the impurities of the real article, the compound is of a syrupy consistence only, and on heating the mass sufficiently between two glasses the resin is melted, so that the apparent impurities which it presented disappear, while these remain permanent in the genuine drug. Canada balsam when heated becomes transparent, and perhaps more so if the heating is repeated, and the smell is of a well-marked sickly odour. If the spurious kind consists largely of resin and a piece is put on a spatula and a lighted taper applied to it, the characteristic resinous odour is at at once obtained.

“The taste, odour, and appearance, then, are the chief characteristics of the drug. If it has a bitter taste it is not pure; if it has not much taste, as a mixture of resin and Canada balsam, on burning the mass the peculiar odour will reveal its impurity. If the mass does not dissolve in alcohol, but leave a glutinous residue, then, all other things being equal, it is pure. If it is of

a greyish-white, or black colour even, mixed with impurities, and of a syrupy consistence, it will have a strong smell of turpentine, and is not pure."

I have received direct from Scio a quantity of unstrained or rough Chian turpentine, the external characters are very different to those of the strained gum, and if the differences were not described they might easily lead the uninitiated to condemn the unstrained gum as impure. It is really the most genuine form of the drug, as it has not been subjected to any artificial method of purification. The *Pistacia terebinthus* tree, from which the gum is procured, is a very hardy one, it lives to a great age, and in the island of Scio attains the size of an American elm—between 30 and 40 feet high. In June or July an incision is made into the bark, through which the gum flows and runs down the tree and soon solidifies on exposure to the atmosphere. The sticky nature of the gum causes various matters, such as sand, the fruit of the tree, straw, leaves, &c., to adhere to it. When the gum has ceased to ooze from the incision, it is scraped off the tree with a large dull knife, and this process necessarily brings off portions of the bark, thus constituting an additional impurity. When the rough turpentine is strained, the minute particles of the foreign substances above mentioned cannot be separated from it and form the impurities found in all strained Chian turpentine. The rough Chian turpentine after it has been exposed to the atmosphere is found on importation to be a rough dry substance, of a light brown colour, covered with a dirty white powder, and it appears to be one mass of seeds, bark, sand, &c. On taking a small piece of the mass and rubbing it for a few minutes between the thumb and finger the characteristic odour of the gum is at once strongly perceived. It is almost tasteless; the turpentine is readily dissolved out of the rough mass by ether, or it may be melted and strained. This rough turpentine is admirably suited for making an emulsion, as the whole of the properties of the gum are extracted by the ether without waste, and would probably add to its efficiency. Mr. Whinfield, the dispenser to the Queen's Hospital, informs me that from three pounds of the rough turpentine he obtained one pound and eleven ounces of the real gum, of excellent quality, the rest being impurities.

I have also received a supply of greyish-white Chian turpentine, which has a similar appearance to glazier's putty. It has the characteristic odour on being rubbed between the thumb and finger, and is tasteless. I am informed that it is chewed by the natives, and is washed for this purpose to free it from its impurities. I have not tried it as a medicine, and should imagine that it is not so valuable as the gums above mentioned for medicinal purposes.

The Chian turpentine is administered internally; being useless as a local application. It may be given in the form of pills, or in solution as a mixture or emulsion. The formula for the preparation of the pills is as follows:—Take of Chian turpentine one drachm and a half, flowers of sulphur one drachm, to make thirty pills. The ingredients are perhaps best mixed in a Wedgwood mortar which has been slightly warmed by immersing it in hot water. Magnesia should not be used as an excipient in the preparation of the pills, as it makes them hard and indigestible. The pills should not be coated. On commencing to take the pills, the patient should take two three times a day for about three weeks; then three pills three times daily, in each case about half an hour after taking food. After the pills have been taken for about three months they should be discontinued for three days in every fortnight. The pills may be safely taken to the number of twelve daily under ordinary circumstances. The urine should be tested occasionally for albumen, and if this is present, the pills should be discontinued for a time, although I have not found that the Chian turpentine tends to produce that condition of the urine. It is also necessary to examine the evacuations occasionally, to ascertain if the pills are digested. If the pills appear whole in the evacuations, or do not appear to be thoroughly digested, they may be broken up, or cut into small pieces and taken in milk or gruel.

The Chian turpentine administered in solution, as in a mixture or emulsion, obviates the objection just made in reference to the digestibility of the drug when taken in the form of pills; being in a state of minute division it is believed to be readily assimilated in this form. The essence of Chian turpentine prepared by Messrs. Southall & Co., appears to me to be the best form for administering the drug of any prepara-

tion that I have seen. It is very palatable, readily digested, and does not appear to contain any ether, which proves so objectionable to some patients, and in some conditions of the system. It is prepared without the sulphur, this drug being given in the form of pills, two grains to each pill, one or two with each dose of the essence, and is called *Pil. Sulph. Co.*, to distinguish it from the ordinary Chian turpentine pill. To those who wish to make the essence themselves, the following formula are submitted for the purpose, being those used by Mr. Whinfield, of the Queen's Hospital. It is necessary in the first place to provide an ethereal solution of Chian turpentine. This is made by dissolving half an ounce of Chian turpentine in one ounce of pure ether, *Sp. Gr. 720*. Then take one drachm of powdered gum tragacanth. and one drachm of rectified spirits of wine, rub together and add water gradually to make a mucilage up to nine ounces; then add the solution of Chian turpentine to the mucilage in a bottle, and shake until the whole is properly mixed.

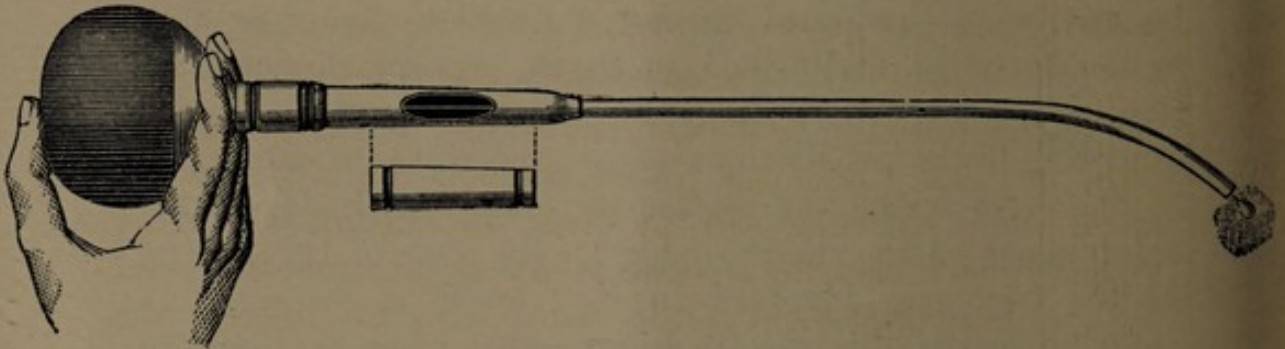
A more elegant but more expensive essence is made by using powdered gum arabic instead of the powdered gum tragacanth. To make a ten ounce mixture, take one ounce and a half of powdered gum arabic, and water to nine ounces to make a mucilage. Then put this into a bottle and add the solution of Chian turpentine, and agitate until the whole is well mixed. One teaspoonful of the essence is equal to one Chian turpentine pill, the dose is therefore two or three teaspoonfuls three times a day; the other directions as to its administration, being similar to those given when speaking of the administration of the Chian turpentine pills. The essence is preferable to the pills where debility or hæmorrhage is present as ergot in solution, or the sulphate of Cinchonidine, or other tonic may be added to the essence if required.

There is now no doubt that Chian turpentine administered internally in the manner above stated does prove very beneficial in most forms and situations of cancer, especially if used early, although apparently it acts upon some forms of cancer more slowly than upon others. In cases of undoubted cancer of the uterus, in which the growth had attained the size of a hen's egg, or even a larger size, and in cancer of the rectum, stomach, and breast, the gradual disappearance of the cancer under the use of Chian turpentine is a convincing

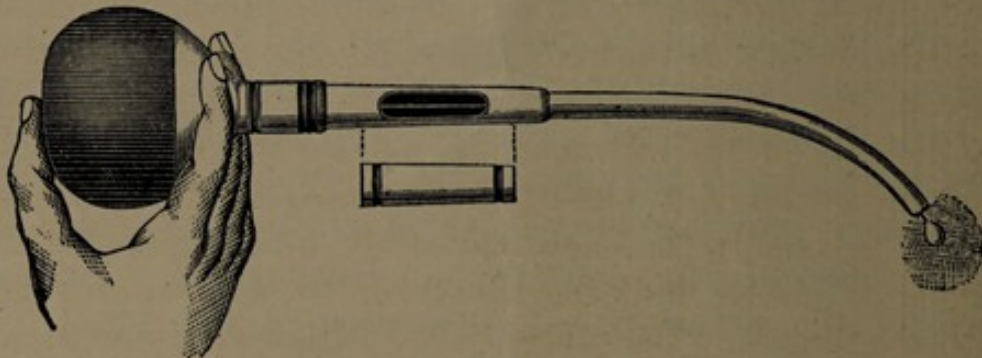
proof that the agent has efficiently produced this desirable result. These evidences of success do not rest upon my personal observation and experience alone, as communications which I have received from numerous medical practitioners can testify. Among these, Professor Esmarch, of Kiel, has kindly informed me that he has had a complete cure in a case of cancer of the bladder in a man, after the patient had taken about one hundred grammes of the Chian turpentine. Two cases of cancer of the liver have been reported to me by two surgeons as cured by the same drug, the life of each patient being previously despaired of. All these facts go to show that the Chian turpentine is antagonistic to the progress of cancer, and like many remedies in the past, suggest that the action of the remedy should be watched and studied so that if necessary the dose may be increased or diminished, or given perhaps in combination with some other drugs to enhance its effects, varied according to the peculiarities of the individual, or alteration in the form which the disease presents. Each day of the continuance of the disease adds to the risk of the general system becoming involved in the cancerous disease. In order to lessen this risk it is advisable, when necessary or where practicable, to supplement the internal administration of the Chian turpentine by external aids, in order to lessen the liability to lymphatic complications, and to prevent the anæmia consequent upon the general system becoming involved in the diseased process. The first effect of the Chian turpentine is to diminish the infiltration surrounding the primary growth. Hence there is an arrest of the growth, relief of pain, and arrest of hæmorrhage. Taking cancer of the uterus as an illustration of the effect of the remedy, it may be stated that after the medicine has been taken for some weeks, the cancer cells surrounding the growth appear to be destroyed; then the blood-vessels become exposed, and hæmorrhage is likely to occur. To guard against this liability to hæmorrhage the treatment mentioned on page 32 should be carried out, and it is advisable to begin the local treatment at the same time that the external treatment is commenced. Experience has proved that both must be employed simultaneously. The local treatment is of little avail alone, and although the

internal treatment would eventually cause the growth to disappear, the removal of the latter is expedited by the local measures advised on page 33. In cancer of the rectum the same mode of treatment is necessary as in cancer of the uterus, and in other forms of cancer where the growth is situated externally, and is in a state of ulceration the use of the powder is indicated. In cancer of the uterus and rectum the powder is applied by means of an insufflator. Messrs. Mappin, of 12, New Street, Birmingham, make several varieties of my insufflators, which are shown in the following woodcuts:—

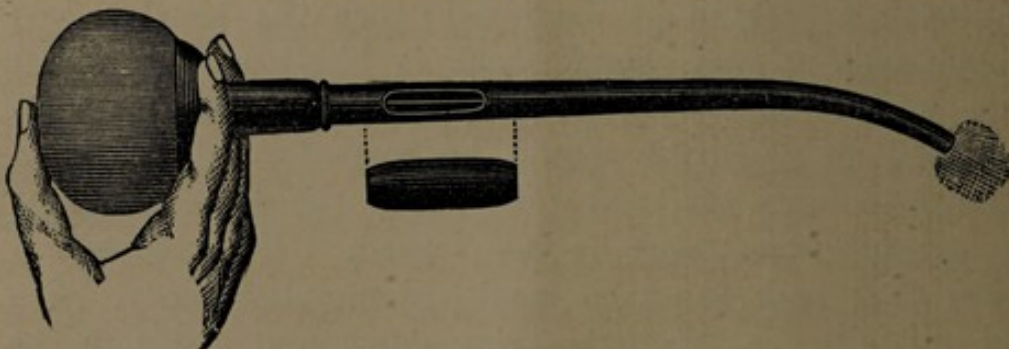
Intra-Uterine Insufflator, in German Silver, Electro-Plated; and in Morocco Case with four Stoppered Bottles.



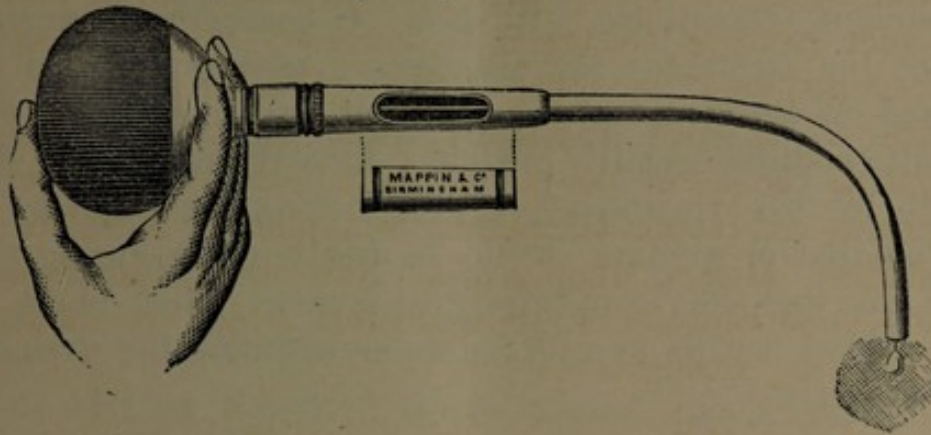
Vaginal Insufflator, German Silver, Electro-Plated.



Vaginal Insufflator, Vulcanite.



*Vaginal and Rectal Insufflator, German Silver, Electro-Plated,
for use by the patients themselves.*



Each time after using an insufflator, the brush supplied with it should be passed through the tube to free it from any secretion which may have been drawn into it during use.

In the vulcanite insufflator, the sliding ferrule should be removed, and the brush passed through the slit and out of the end of the tube. In the silver instruments which are provided with a spring it is necessary to unscrew the solid bulbous head at the end of the wire; also to unscrew the tube at its junction with the instrument near the aperture, when the brush can be readily used. It is advisable to dip the screw of the wire in oil occasionally to prevent the knob becoming fixed. If the knob should become fixed at any time force should not be used to remove it. It will be better to dip the end of the instrument in oil, apply a little warmth to it by means of a piece of lighted paper, and when cool enough to handle, the knob may easily be unscrewed. The powder is ejected from the insufflator by a sharp pressure with the thumb on the rubber ball, a little practice will soon show the amount of force required to expel the powder. The following papers will probably furnish any other information which may be required, in order to properly use the remedies herein suggested for the treatment of cancer. It may be useful however, to emphasise the directions which have been given in the preceding pages, and those which follow, by stating that an endeavour should be made to begin the treatment at an early stage of the disease and before the glandular system has become involved in the cancerous disease. The Chian turpentine should be used and given in that form which is

found by experience to be the most easily assimilated, and should be persevered with for months, even under apparently discouraging conditions. In case of hæmorrhage arising during the treatment the most active measures should be adopted to arrest it, and thus prevent any increase of the anæmic condition usually present. After the removal of the growth by the treatment, or even before, the sulphate of cinchonidine or quinine should be freely given during the same time that the Chian turpentine is given, either alone or in combination with iron to restore or maintain the strength of the system.

With these observations the papers published in the *Lancet* are appended.

JOHN CLAY.

ALLAN HOUSE,

138, STEELHOUSE LANE, BIRMINGHAM,

April 30th, 1882.

ON THE TREATMENT OF CANCER

OF THE

FEMALE GENERATIVE ORGANS BY A

NEW METHOD.

By PROFESSOR JOHN CLAY,

Obstetric Surgeon to Queen's Hospital, Birmingham.

FIRST PAPER.

(From the *Lancet* of March 27th, 1880.)

IN the following observations I intend to confine myself to the consideration of the treatment of carcinomatous affections of the generative organs, by a new method which I believe to possess great advantages, though as the experience of this particular treatment extends over a period of only twelve months, sufficient time perhaps has not elapsed, in some of the cases, to enable me to state positively that a permanent cure has been effected. It will be obvious, however, on reading the clinical facts here submitted, that if this ultimatum has not been attained, an amount of relief has been secured to the patients which has not been afforded by any other plan of treatment.

The researches of modern pathologists have done much to elucidate the nature of cancer, and have at least reduced to their anatomical elements changes of structure so singular and complicate that they seemed at one time to defy description. To define the histology and morbid anatomy of cancer does not come within the scope of this communication. There are certain facts of cancer which are obvious and indisputable—namely, that it is a definite morbid growth, possessing, among other qualities, rapidity of development, never retrogressive, but having an almost certain tendency to invade, step by step, each surrounding texture, without any distinction, extremely prone to recur on removal by operation or caustic agencies; very liable to attack distant organs, and invariably culminating in a fatal issue. This general description applies notably to cancer of the female generative organs, perhaps the most painful and frequent of all the forms of this disease which affect the human system. The patient's sufferings are

aggravated by the knowledge that her disorder is pronounced by the medical adviser to be incurable ; she lingers under the double torment of excruciating physical agony and mental depression, and the utmost that can be done by the medical attendant is to afford her the tenderest sympathy while deadening the anguish of the patient by the judicious use of sedative remedies. Divergence of opinion has existed as regards the curability of true cancer, probably ever since medicine has been studied as a science. On the one hand, those who deem cancer to be incurable urge that the infecting character of the disease, its multiple manifestations, its recurrence, and the cachexia which it induces afford incontestable proof of its incurable nature. The advocates of the theory of the curability of the disease deny the absolute fact of primary cancerous infection, and in support of their view quote other cases which, after treatment, have not suffered relapse. Opinion, while deserving serious examination, does not carry conviction, but facts plainly and truthfully narrated, and corroborated by independent testimony, will always be received by the profession without prejudiced scepticism, and with an earnest determination to test their validity. Impressed with these views, fortified with a consciousness of the importance of the clinical investigation which I have made during a long period as to the curability of cancer, I venture to submit to the profession my most recent experiments, in the hope that suffering humanity may at least be benefitted by their publication.

As the result of an extended trial of a large number of remedies, both general and local, in the endeavour to cure cancer, the conviction forced itself upon my mind that a remedy for this disease must be one to be administered internally, and that it must be of such a nature as not to interfere with the functions of special organs, or otherwise to injuriously affect the nutrition of the body, and that it must also be capable of being administered for a length of time sufficient to effect the removal of the disorder. A large number of remedies for the cure of cancer mentioned by various ancient and modern authorities, as well as some hitherto untried, which suggested themselves to me, were employed empirically, but they failed to produce an appreciable effect in curing or arresting the disease. At length after a careful study of the pathology of cancer, and the effects of certain carbo-hydrates administered internally, it appeared probable that a remedy for cancer might be found amongst them. A list of those apparently most eligible was made, but, after studying their therapeutic properties, it became obvious that most of them were unsuitable for the purpose as possessing commonly known specific properties, as well as exciting a

special action on certain structures and organs of the body. Besides their administration could not be expected to be sustained for a sufficient length of time, even if they were likely to act on the morbid growth. Circumstances, however, led me to think differently of the Chian turpentine, and I determined to try it on the first opportunity. This soon occurred. A woman came to the hospital as an out-patient, aged fifty-two. She was suffering from scirrhus cancer of the cervix and body of the uterus. Hæmorrhage was excessive, pain of the back and abdomen agonising, and cancerous cachexia well marked. The patient evidently had not a long time to live. The uterus was so extensively destroyed by the cancerous ulceration that its cavity readily admitted three fingers. In such a case it appeared to be justifiable to attempt to relieve the sufferings of the patient, even if the remedy should produce unfavourable symptoms, or should prove of no avail. I therefore prescribed Chian turpentine, six grains; flowers of sulphur, four grains; to be made into two pills, to be taken every four hours. No opiates were prescribed or lotion used. No change was to be made in her diet or occupation. On the fourth day after taking the medicine the patient reported herself greatly relieved from pain, and was in better spirits, but she complained of a large amount of discharge. It was feared that she referred to a discharge of a sanguineous nature. On examination, however, the vagina was found to be filled with a dirty-white secretion, so tenacious as to be capable of being pulled out rope-like, and this although she had syringed herself three hours previously. The os was quite contracted and would now scarcely admit the finger, and the surrounding swelling or cancreous infiltration of the cervix was much reduced. On the twelfth day the thick tenacious secretion had almost disappeared, and was succeeded by a somewhat copious serous fluid. The os was not so firmly contracted, but would only admit the finger. The patient's general health was improved and the medicine well tolerated. Sixth week: I ordered her a quinine mixture, in conjunction with the turpentine, but sickness supervened, which ceased on omitting the quinine. Twelfth week: My notes are—the parts feel ragged and uneven, and do not bleed on roughly touching them. The speculum shows several cicatricial spots. The turpentine has been taken regularly during the day for twelve weeks every four hours, during which time she has been almost free from pain and has had no hæmorrhage; no glandular enlargement; general health improved. Walks easily to the hospital, being about a mile distant. As the patient did not come again to the hospital her address was obtained, and it was ascer-

tained that she had left her residence. Being a widow she could not afford to keep her home, and she went to reside with her married daughter in a northern town; but left no address. The case showed that the medicine was one of great power in cancer of the uterus, and it is to be regretted that an opportunity was not offered for fully carrying out the treatment.

Another patient, aged thirty-one, suffering from cancer of the os and cervix uteri, was treated concurrently with the one just mentioned. These parts were enlarged from carcinoma to the size of a hen's egg. The os was dilated, and the cavity of the cervix was filled with epithelial growths, which bled freely on examination. Sacral pain was very severe, and hæmorrhage had been continuous for the previous six weeks. The Chian turpentine and sulphur were given as in the previous case. The patient again attended at the hospital on the seventh day after taking the medicine. She was in excellent spirits, and expressed her gratitude for the relief afforded her. The medicine entirely relieved her pain. She had increased white discharge. On examination the os and cervix were found to be nearly of the normal size. The os was patulous, and its surface was studded with flabby shot-like eminences, which did not bleed on roughly rubbing them. I said to her, "You are better; you must continue the medicine." She answered, "I should think I must, for I could not do without the pills; they have eased me so very much." She continued to improve, and on the fourth week she expressed herself as quite well. I impressed upon her the necessity of continuing the medicine, and told her to see me occasionally. She did not come to the hospital again for four months, when she brought another patient to consult me, believing that she was suffering from cancer. I reproved her for leaving off attendance at the hospital. She answered that she thought it unnecessary, as she had continued quite well. On this visit she submitted to an examination. The os was rough and irregular, but was nearly of the normal size; no signs of cancerous infiltration; the periods were regular, and not profuse, and were unattended with pain; there was slight leucorrhœa. This case was a most remarkable one. The turpentine acted upon the growth with great vigour, literally melting it away in the brief period of four or five weeks.

The third case was one of epithelial cancer of the os, cervix, and body of the uterus, in a woman, aged fifty-two years. The vagina was not involved. The mass was larger than a cricket-ball, almost filling the vagina. The border of the os was three-quarters of an inch in thickness, forming a ring of two and a half inches in

diameter, through which protruded an epithelial growth, principally proceeding from the anterior wall of the uterus, and projecting about two and a half inches into the vagina. The case was sent to the hospital for my opinion by my son, Mr. Langsford Clay, who had attended the patient but a short time. The journey to the hospital fatigued her very much, and she declared that she could not come again, and that she did not wish to remain as an in-patient, believing that she could not live many days. She had repeated hæmorrhages, had much pain, and had the cancerous cachexia well pronounced. My son volunteered to attend her at home, and I agreed to see her occasionally with him. I thought it advisable as an experiment to vary the treatment somewhat, and ordered to be added to the pills one-sixth of a grain of the ammoniated copper, as from the large mass to be acted upon I thought that an astringent should be superadded to the turpentine. The dirty-white tenacious discharge appeared and continued for the first five weeks, but there was no hæmorrhage after the first examination. The swollen os uteri and the cervix beyond were the first to show signs of diminution; this was noted on the fourteenth day. The tumour, however, was rough and shrunk, and did not project so much. Sixth week: The surface of the tumour was at the level of the os uteri, and seemed to consist of a mass of bloodvessels which bled moderately after examination. This condition occasioned me some surprise, as three weeks previously the patient was ordered a lotion made with perchloride of iron, with a view to arrest hæmorrhage, since from her anæmic condition it was feared that the loss of a moderate amount of blood would be followed by serious consequences. I asked her what kind of syringe she used with the lotion. She replied, "I thought the lotion was merely to bathe the external parts." This, as it happened, was very satisfactory information, as it showed that the lotion had no share in the reduction of the mass, which now was scarcely half the original size. She was supplied with a syringe for the purpose of applying the lotion, and after using it three days the mass of vessels had considerably shrunk, and no longer bled on manipulation; but the surface of the growth had the touch and appearance of a gangrenous mass, but there was scarcely any fetor. The patient now complained of gastrodynia, with colicky pains in the bowels, but she had no diarrhoea or vomiting. I believed this to be due to the copper, and it was consequently discontinued. It also occurred to me that the turpentine might not be efficiently digested in the solid form, and that it would be better if the remedy were administered in a state of minute sub-

division, as in the form of an emulsion. An ethereal solution of Chian turpentine was prepared by dissolving one ounce of the turpentine in two ounces of pure sulphuric ether (anæsthetic). The ether dissolved the turpentine instantly. This solution was given to our skilful dispenser, Mr. Whinfield, with a request that he would prepare a pleasant mixture or emulsion from it, and after a few trials he prepared one which is not unplesant to take, according to the following formula:—Solution of Chian turpentine, half an ounce; solution of tragacanth, four ounces; syrup, one ounce; flowers of sulphur, forty grains; water to sixteen ounces: one ounce three times daily. This form of mixture was given to the patient, and was much liked. She has now taken the turpentine for thirteen weeks uninterruptedly. The os uteri is a little more than one inch in diameter, and feels like a ring of cartilage about a quarter of an inch in thickness. The tumour has nearly disappeared, and the finger can be introduced posteriorly into the uterus for more than an inch. The general health has much improved, and she is quite free from pain and looks cheerful, and is becoming stouter. No sedative whatever has been given during the treatment. Fourteenth week: She complained of severe “cramp-like pains” in the back and lower parts of the abdomen, which she attributed to the mixture, and in consequence it was discontinued for a few days, and an opiate given, by which she was greatly relieved. The turpentine was again resumed. Nineteenth week: She is now fairly convalescent. The growth has almost disappeared, and the parts beyond the os uteri are somewhat hypertrophied, yet are almost normal to the touch.

The fourth case was that of a patient aged thirty-two years, who came to the hospital after having been discharged as incurable from the Women's Hospital. She was greatly depressed, and was most desirous to be cured, for the sake of her family of young children. She has had repeated floodings, and suffered greatly from pain during the past five months. Constipation very troublesome, which probably arose from the opiates she has been in the habit of taking. On examination, she was found to be suffering from epithelial cancer of the os and cervix uteri, but not involving the vagina. There was a cancerous mass of the posterior parts of the os and cervix, of the size of a goose-egg. This growth pushed the os uteri towards the pubis, almost preventing that part from being felt. The turpentine mixture was given her three times daily, and from this period a very rapid diminution of the growth took place, so that by the sixteenth day it had almost entirely disappeared. The os uteri was now *in situ*, admitting the finger readily, and there

was the same condition of the vessels as that observed in the preceding case. The lotion with the perchloride of iron was used daily for a few days with excellent effect. In the ninth week the patient suffered from spasmic pains in the back and abdomen, and as this was attributed to the medicine it was discontinued, and iodide of calcium, in five-grain doses, three times daily, was administered. This was taken for about a fortnight, but, not feeling so well, the patient was admitted into the hospital. The condition of the internal organs was now much the same as before, the iodide of calcium was given, but there was some thickening about the cervix, which was fixed to the vagina. The rectum was excessively loaded, and required several days to effectually relieve it. The Chian turpentine was administered simply; but a lotion was prescribed, containing six grains of white arsenic to one pint of water, to be used daily. Under this treatment the woman very rapidly improved, the pains entirely ceased, and the parts became much reduced in size and more movable. The patient was now anxious to leave the hospital for her home, as she felt quite well; but it was deemed advisable to send her to the Sanatorium instead. She is very active, cheerful, and happy, and may be pronounced convalescent.

Other cases are under treatment, both in the hospital and privately, all showing similar effects. The remedy is now being tried in cancer of other organs, and apparently with good results. One of the most interesting, perhaps, is a case of scirrhous of the breast, which has been under observation for some weeks. Among the other cases are cancer of the vulva, stomach, and abdomen, in which very remarkable benefit has been already produced.

From the results obtained by the use of Chian turpentine, it may be confidently said that the remedy does exert a powerful action on cancer of the female generative organs in particular, and it will be of advantage to point out some of the conclusions at which I have arrived respecting the efficacy of the drug and the manner in which it should be employed. The oil of turpentine, if it produces any effect on cancer, is inadmissible on account of the speedy production of its specific effects even when administered in small doses. The same remark applies with less force to the Venice and Strasbourg turpentines; in my hands they have not produced the same beneficial effects on cancerous growths as the Chian turpentine has done. The maximum dose of the last-named drug which can be safely and continuously given is twenty-five grains daily. It is advisable to discontinue the remedy for a few days after ten or twelve weeks' constant administration, and then to resume it as before. The combination with sulphur was given at first, and has

been continued. It is doubtful whether much benefit is derived from the combination, but the effects have been so uniformly good with it, that it was thought advisable to continue its use. There is every reason to believe, from the trials made with other substances in combination with the turpentine, such as carbonate of lime, iodide of calcium, ammoniated copper, quinine, bebeerine, hydrastin, &c., that the turpentine is best administered simply, as the most marked and rapid effects have always been manifested when it has been given alone.

The turpentine appears to act upon the periphery of the growth with great vigour, causing the speedy disappearance of what is usually termed the cancerous infiltration, and thereby arresting the further development of the tumour. It produces equally efficient results on the whole mass, seemingly detroying its vitality, but more slowly. It appears to dissolve all the cancer cells, leaving the vessels to become subsequently atrophied, and the firmer structures to gradually gain a comparatively normal condition.

It is a most efficient anodyne, causing an entire cessation of pain in a few days, and far more effectually than any sedative that I have ever given. In the cases I have described no sedative was employed in any instance, although in some cases where great pain had existed previously to commencing the treatment, large doses had been given. Whether this arrest of pain arises from the death of the tumour, or, as my son suggests, is due to there being no longer irritation of the sentient nerves (in consequence of tension being withdrawn by the removal of the cells), the fact is the same.

If, after the use of the remedy for some weeks, one of these cases were examined by a stranger for the first time, he would probably conclude that it was one of commencing malignant disease, by reason of the irregularities of its surface. The effect of the remedy being first to remove the cellular structures, any loss of tissue produced by the invasion of the disease cannot be restored, and hence the irregular touch and appearance even after cicatrisation. The arrest of the hæmorrhagic discharge and the remarkable freedom from glandular affections, after a lengthened use of the turpentine, are specially important factors in materially aiding the removal of the cachexia and of improving the general condition of the patient.

Without being in a position to affirm that the Chian turpentine is a positive cure for advanced cancer of the female generative organs, yet however the facts here adduced may be interpreted in this respect, two circumstances are indisputable—one, that all the patients after several months' treatment are living, and that the disease has not advanced as is usually the case, but has retrogressed

—in fact, has all but disappeared ; and it may at least be safely asserted that when the remedy is steadily used for some time it arrests the progress of the disease, and relieves the pain incidental to the morbid growth in a manner which cannot be said of any other remedy. It is probable that on an extended experience of its use and by variations of the mode of administration, it may prove an effectual cure for this intractable disorder. Patience and perseverance on the part of patient and medical adviser are absolutely required. We know that in some diseases, as bronchocele and syphilis, a long continuance of well-known remedies is often necessary to effect a cure of the particular disorder, and that the administration of the remedies has to be varied from time to time, according to the therapeutic effects produced by the drugs. In cancer, as far as experience has at present indicated, the same alternating method may perhaps have to be employed. Whatever may be the ultimate results there can be no doubt that Chian turpentine in these disorders is a most valuable medicine. Judging by my experience it is no figurative expression to say that it acts as a direct poison upon the growth, probably causing its ultimate death. In advanced cancer the process of reparation is slow, but if the surrounding structures are not too much involved in the process of destruction, it will seem that a cure may be reasonably expected. It is not that the remedy has failed against the cancer, but that the vital organs are so much destroyed that their complete reconstruction and adjustment of functions are not possible, and life fails in consequence of their mutilated condition. Even under these circumstances, if the cancer does not recur, the efficacy of the medicine is obvious. In the early stages of cancer it may be affirmed that an undoubted cure may take place speedily, and as the contiguous structures are not extensively involved, but little deformity ensues ; and experience justifies the expectation that under such circumstances a recurrence of the disease will not follow.

The history of the local treatment of cancer of the uterus is one of singular interest, and is highly instructive to the practical physician. The contrast between the general and local treatment is the more notable, as nothing can be more injurious to the welfare of the patient than an attempt to destroy the cancer by external agencies. The disease is not to be averted by this means, as the symptoms assume a more intense and threatening character, until the patient rapidly sinks. It may be observed that the internal treatment here recommended when used for a considerable period is borne by the patient with remarkable tolerance. As I have

mentioned, in some of my experiments I determined, in order most thoroughly to test the medicine, to rely upon this alone. Recently the arsenical lotion has been superadded, and, with no injurious consequences—it appears to act as a disinfectant, and it may produce some benefit by promoting the cicatrization of the tissues. Several suggestions offer themselves for enquiry as to aiding locally the detachment of the growth, after its vitality has been destroyed; but this is not of much importance, as there seems to be no fear of the blood becoming affected by the absorption of the decaying tissues, the turpentine probably preventing any such calamitous occurrence.

If the practice now described should prove by future experience to be justified, then it will be incumbent upon the medical adviser to treat cancer of the generative organs at an early stage of its development, and it is reasonable to conclude that this dreaded and most fatal disease will no longer be the scourge it has hitherto proved, and that another benefit will have been conferred upon suffering humanity by the resources of therapeutic art.

SECOND PAPER.

(From the *Lancet* of October 2nd, 1880.)

In the correspondence which has been recently published in the medical journals the efficiency of Chian turpentine in the treatment of cancer has been altogether denied by certain writers. Some have suggested that unsuccessful results may be attributed to the impurity of the drug employed; others have ungenerously questioned the validity of the statements made in my paper, which appeared in the *Lancet* for March 27th, 1880. It consequently seems advisable to offer some further general observations, by way of explanation and elucidation, on the subject.

It is a matter for regret that the supply of the genuine Chian turpentine has been so limited, as this has led to the substitution of factitious drugs, the use of which, as I have previously explained, unfavourably influences the results, besides entailing the further disadvantage of preventing a thorough testing of this method of treating cancer. I believe it is a fact that Chian turpentine, in mass, can scarcely be procured in this country at the present time, and therefore it is obvious that the treatment of the disease must be somewhat in abeyance until a supply of the pure drug arrives from abroad. I hope that the difficulty will soon be overcome, as I have been making special efforts to obtain the

pure turpentine direct from Scio, and have had three excellent samples of the genuine drug sent to me through the post from that island; a supply may therefore be expected shortly, when the purity of the drug at least will be definitely determined. The specimens referred to differ in some particulars from the Chian turpentine which I have previously described, and which had been in stock some years. There are also samples of larch turpentine in the market, which slightly resemble the recently gathered genuine drug. It may be of advantage therefore to the profession to describe each, and to note their differences.

Specimen No. 1 is of a pale, amber colour, and almost entirely free from impurities. It has the fragrant odour peculiar to Chian turpentine well-marked, which is readily perceptible after rubbing a small portion between the thumb and finger. It has a mild terebinthinate taste, which rapidly disappears. On placing a small portion of the drug on a piece of glass, and exposing it to the atmosphere, it considerably thickens after a few days' exposure.

Specimen No. 2. This, obtained last year, is the drug as collected. It contains a large quantity of foreign matter, such as pieces of bark, sand, &c., all of which give it a darker colour than the last-mentioned specimen. Two ounces of this crude product yielded, after straining, upwards of half an ounce of impurities. The strained portion contained still a quantity of minute particles of foreign substances. The taste and odour are the same as in the Specimen No. 1.

Specimen No. 3 resembles soft glazier's putty, but is somewhat whiter, and is of the same consistence. It is Chian turpentine that has been well washed in water, to free it from impurities. It has a mild taste of turpentine, and the peculiar odour is well-marked. If a portion is subjected to pressure between two pieces of glass, water can be readily forced out of the mass.

Three specimens have been submitted to me as genuine Chian which were purely larch turpentine. They may, as alleged, have been gathered in Cyprus. They have a strong odour of pine wood, and are of a browner appearance than the recent specimens just described. On tasting a portion, it appears tasteless for the first minute, after which a strong, bitter, nauseous flavour became manifest, eventually leaving a strong, sickening sensation at the back of the throat, which is slow to disappear. A portion placed on glass, and exposed to the atmosphere for four weeks, showed no signs of thickening, and readily adhered to the fingers.

The degree of solubility of the two kinds of turpentine, in ether and alcohol, is not materially different from that described in a former paper. The mild terebinthinate taste of the pure drug, its peculiar odour, with its power to solidify on exposure to the atmosphere, are characters sufficient to distinguish it from any other turpentine resin.

The results of the treatment of various forms of cancer, in the hands of certain medical practitioners, are alleged to be so different from those obtained by myself, that these gentlemen have thought fit to question the validity of my experiments. Certain results obtained by the use of a remedy, almost forgotten by the therapist, were placed by me unreservedly before the profession; and for the benefit of suffering humanity at least a fair trial of the remedy ought to be given before condemning it. In testing the efficacy of the drug, it is doubtless all important that the true one should be used. It would appear to be not an easy matter to decide the question of purity, for upwards of three hundred specimens have been sent to me for examination by English and foreign medical men, most of them being guaranteed by the druggists supplying them, and it was a surprise to me to find so few examples of the genuine article amongst them. It will be as necessary now as before to use extreme vigilance in this respect in expectation of the new supply. In a large percentage of cases the factitious turpentine only has been used in the treatment of cancer. In one institution this was particularly so; and after the genuine drug had been tried for about three weeks the results of the two were combined, and a letter forthwith appeared in *The Times*, alleging that the remedy was useless. A similar instance occurred in an institution in this town, where the impure drug was first used, and then after a trial with the pure drug for about three weeks, letters appeared in a medical journal declaring that the remedy was of no benefit in the treatment of cancer. It is plain that sufficient time has not been allowed to elapse for the full effects of the remedy to be manifested, as in these instances of condemnation it has almost invariably been declared inoperative after a few weeks' trial only. Besides the unsatisfactory results which have accrued from the use of the impure drug, the full effects of the pure turpentine have not been gained in some instances from the drug not having been entirely digested. This has arisen occasionally from its incomplete preparation for administration. In compounding the mixture, freshly-prepared mucilage of tragacanth, B. P., has not been used, and then it rapidly decomposes; or sufficient of the mucilage has not been employed, which causes the resin to separate, and the doses of the medicine, there-

fore, have been irregular and insufficient. It has been shown in the *Pharmaceutical Journal* that acacia powder might be advantageously substituted for tragacanth. It is necessary, therefore, to provide that a sufficient quantity of either gum shall be used in the preparation of the Chio turpentine mixture. Where the digestive powers are impaired, an addition of twenty minims of the compound tincture of cinchona to each dose has occasionally proved beneficial. The discontinuance of the sulphur has been advised, in order to make the mixture more elegant and miscible. I believe, however, that the mixture is more efficient, when it is well tolerated, if prepared with the sulphur.

In reference to the pills, if they are not properly prepared they are not always digested. If this is discovered on examining the evacuations, the use of the mixture in conjunction with the pills is indicated; that is, a dose of the mixture should be taken by the patient night and morning, and two pills in the middle of the day, in each case after food. It is advisable, when commencing the treatment, to give only half dose of the turpentine for the first week. Magnesia should not be used as an excipient in the preparation of the pills, but whether this exception ought to apply to the recently collected drug future experiment will have to decide. Pills prepared with magnesia are almost insoluble, and the same remark applies to some coated ones. The pills may be prepared sometimes with ether, to soften the turpentine, or it may be made soft by immersing the mortar in a hot-water bath, the sulphur being added to the mass in its softened state. The latter mode appears preferable, if only to facilitate the digestion of the pills, as if any difficulty is met with in this way they may be roughly powdered and taken in milk or some bland liquid, and then they are generally digested.

The statements made in my original paper as to the efficacy of Chian turpentine in cancer appear to me to be fully confirmed by the additional experience gained in the use of the remedy. In the cases previously reported the cancer has disappeared, and there are no signs of its return. This fact must be considered at least as a complete refutation of the statements, recently and boldly made, that Chian turpentine in the treatment of cancer is useless. The cases just referred to are unique of their kind, for, so far as I know, they are the only instances on record of cancer being cured solely by the administration of an internal remedy. I feel justified, therefore, in stating that uterine cancer at least may be removed by the use of Chian turpentine.

It is a fact which might be expected that most of the cases of cancer which have presented themselves are in an advanced stage of the disease; and more especially is this the case of cancers of in the uterus. Yet the treatment continues to be very efficient. My experience does not stand alone in this respect, for several gentlemen have given independent testimony of the good effects produced by the turpentine treatment in cancer of various organs. In my original experiments the turpentine alone was used in order to thoroughly test its efficacy, but it now appears that the use of certain local and general measures undoubtedly promotes the convalescence of the patient. It is possible, therefore, to formulate a line of treatment which shall be successful in cancers of the uterus. Hence, given a case of cancer limited to that organ, and a steady use of the remedy for six or eight months, continued with certain general and local remedies if necessary, and a disappearance of the cancer may be reasonably expected. Eleven cases of uterine cancer under this treatment at the Queen's Hospital, besides a number of others in private practice, so far justify the preceding statements. Some very interesting facts have been observed during their treatment, which I hope to detail on a future occasion.

It is advisable not to be too precipitate in rejecting a case of uterine cancer on the ground of its being too far advanced for treatment. The following case, amongst others, is to the point. Mary B—— took her discharge from the Middlesex Hospital, London, about four months ago, and, according to report, was informed that her case was incurable, and that she had not long to live. She had heard of the turpentine treatment, and was very anxious to be under my care at the Queen's Hospital, but I advised her not to undertake the journey, as I believed the case, from what I heard of it, was too far advanced for treatment. This advice, however, she disregarded, and became an in-patient at the Queen's Hospital. Here she was placed under the Chian turpentine treatment, and improved so much in nine weeks that she is about to return to London with every prospect of soon being cured.

In cancer of the uterus the conclusion expressed in a former paper, that the remedy destroys the cancer cells and causes the death of the growth, is strengthened by experience, and, as a consequence, there is cessation of pain and hæmorrhage in the first instance. But the turpentine at first does not destroy the blood-vessels of the part. As the dead tissue escapes, these become denuded, and give rise to hæmorrhage, especially at the menstrual

period. In patients who have passed the climacteric period this has not been observed. Ergot has been found of no benefit in arresting the hæmorrhage. Insufflation with three grains each of sulphate of zinc and powdered charcoal, once or twice a day, after syringing the vagina, has proved effectual, and appears to promote the obliteration and atrophy of the vessels. The same end may be attained by using a weak solution of perchloride of iron and glycerine. I have ordered some patients to syringe the vagina daily with equal parts of common vinegar and water, with good effect. When the anterior walls of the vagina are involved, either primarily or from extension, the case is not so suitable for treatment with the turpentine. A vesico-vaginal fistula is soon generally formed, but if this do not happen, cystitis supervenes, and the patient succumbs to the uræmic symptoms, which are rapidly developed. Moreover, the turpentine is not well tolerated, but when a fistula forms, it is better borne, and uræmia does not arise.

Excision of the cervix uteri is not advisable, as the disease readily extends to the anterior wall of the vagina subsequently; and then the bladder complications, above described, arise with increased force. The use of the curette is not so objectionable if it is employed to remove only the sloughing mass after some weeks' use of the Chian turpentine, but it has not been deemed necessary to use the instrument, it being all important to preserve as much normal tissue as possible.

The mode in which Chian turpentine effects the removal of cancer was well illustrated in a case of epithelioma of the vulva. The patient, aged sixty, had been operated on for cancer of the clitoris or vulva. The case was reported in *The Lancet* at the time. The patient thoroughly recovered from the operation. About a year afterwards cancer reappeared in the lower part of the vulva and vagina. The growth was again excised, and she made a good recovery this time. About eight months afterwards a cancer appeared on the right labium, and when it was there seen for the first time it was the size of half-a-crown. It was determined to give the Chian turpentine, and the drug was given in full doses three times daily. At the end of the first week there was no alteration, excepting that the cancer was thought to be somewhat paler on its surface, and the surrounding swelling less. Second week: The growth was coated with a secretion of a greyish colour, which appeared to be firmly adherent. Fourth week: The growth was only half its former size. Its surface was somewhat convex; and was considerably thicker than previously, and was surrounded by a ring of a bright crimson colour. One of the resident surgeons

of the hospital who saw it remarked that it looked like a small mushroom springing from the vulva. Sixth week : The growth was now diminished to the size of a fourpenny piece, and was still surrounded by the bright coloured ring, but was free from the secretion. The surface did not bleed on being touched. Eighth week : The coloured ring had disappeared. The growth was much smaller, and it had the appearance of a large "seedy" wart, such as is sometimes seen on the hands. Tenth week : The growth remained about the same. Twelfth week : The growth had all but disappeared, and the patient went into the country for a short time, but promised to report herself when she returned.

In private practice three cases of cancer of the rectum are under treatment, two of which are much improved ; and one has not been seen again, but a favourable report is given after seven weeks' trial. Three cases of cancer of the stomach are under treatment ; one has discharged herself, but the other two have remarkably improved, as regards freedom from pain and capacity of retaining nourishment, though continual sickness existed previously. So far as the treatment has extended, these cases seem to prove that the turpentine is equally, if not more, efficient in cancer of the stomach than of any other organ. In one case the glands of the neck were much enlarged : but these swellings entirely disappeared after the use of the remedy. Four cases of cancer of the tongue have been under observation. In one case the growth was as large as a cherry, and in four weeks it was reduced to a level with the mucous membrane, and it appears now to be cicatrising.

Several cases of cancer in the face have been very much benefited. In two cases of endothelial cancer of the abdomen and one of cancer of the liver, no benefit seemed to be derived, excepting that in one case there was some alleviation of pain, and an improvement of general health for a time.

In all forms of cancer, where the turpentine has been taken for six or eight weeks, I have found the administration of a tonic to be of advantage, as it promotes the convalescence of the patient, and if the disease affects the uterus or rectum it seems to facilitate the escape of the débris from the destroyed mass, and to promote cicatrization. Four minims of the tincture of perchloride of iron, and three minims of liquor strychniæ, taken three times daily, are recommended ; and if there be any pain, which often happens after six months' use of the remedy, six drops of tincture of belladonna are added. A generous diet is allowed. Morphia is not advised. The bowels should be kept daily moved, when necessary by a mild aperient. After the turpentine has been regularly taken for three

or four months, I now recommend it to be discontinued for three or four days in the fortnight. It is probable that future experience will show that, after it has been taken for the above-named period, it will be no longer necessary in the majority of cases, but as a precautionary measure it has been generally continued in the manner just described.

There are sixteen cases of cancer of the breast under treatment in the hospital, and a large number are under observation privately. The effects of the remedy in the first few weeks are, the relief of pain, and a diminution in the size of the breast, which is generally more movable, even when apparently fixed to the walls of the chest; this probably arises from a diminution of the surrounding cancerous infiltration. Time has not been sufficient, however, to speak with definiteness as to the ultimate results. The clinical facts brought out in this class of cases are very interesting and instructive. There is a great probability that the disease is arrested, as after four months' trial of the remedy the morbid growth has not increased in size. As far as can be stated at present, for therapeutical purposes the cases appear to be divisible into three classes:—1. The ordinary scirrhous of the breast, with or without surrounding infiltration. 2. Epithelial cancer. 3. Cases of ulceration after previous operation.

In the *first* class of cases great interest attaches to the experiments, as indicating how the solid mass is removed. It appears at present to deport itself as if it were a foreign body, and seems disposed to make its way rapidly to the surface; but in the cases where this has occurred the growth is not of an active character, for as the mass comes to the surface a crust forms upon it. This disappears in time, and another forms, while the whole bulk of the mass gradually diminishes in size. It may prove eventually that this is one mode of the removal of the disease. In these cases the growth does not increase in size, but on the contrary, gradually diminishes.

In the *second* class—i.e., epithelial cancers—the surface of the growth becomes paler at first, then smoother, as if it had been levelled by friction, sometimes some of the modules slough away. Then a process of cicatrisation takes place. There are two cases in which the new tissue around the growth is quite half an inch in breadth. Two others, about one a half and two inches respectively in diameter, have entirely healed over.

In the *third* class of cases the results are so far favourable that the ulceration has not increased in size, but they have not progressed so favourably as the other cases. In several instances the glands

of the axilia have been enlarged, but the enlargement has generally disappeared under a steady use of the turpentine.

The importance of these imperfect notes to the profession, and the influence they may have in aiding the treatment of cancer will, I hope, be a sufficient apology for reverting to the subject. At least I trust I have shown that the remedy is not useless. I may, in conclusion, state that in the treatment of these diseases patience and perseverance for a few months are absolutely necessary. In some diseases which affect the human race, a continued treatment for twelve or eighteen months is often thought requisite. It has, I believe, been here shown that the remedy does produce some influence on the progress of cancer; and it is but reasonable to require that a similar indulgence be extended to the treatment of cancer by this method, as in the chronic diseases just referred to. As the remedy can be taken with impunity for a long period, and if time be granted for the trial of it, I feel that I am justified in stating that its steady use promises excellent future results.

THIRD PAPER.

(From the *Lancet*, December 17th, 1881.)

MORE than two years have elapsed since I commenced treating cancer of the female generative organs with Chian turpentine. By the courtesy of the conductors of *The Lancet* the results of my first experiments were published in the number for March 27th, 1880. The paper attracted considerable attention, both professional and general, and provoked much adverse criticism; indeed, in certain quarters this plan of treating cancer of the uterus in particular was declared useless. An enlarged experience, however, has confirmed the statements made in my original paper, and I have now the satisfaction of being able to declare that I have nothing to withdraw or to qualify as regards the statements I then made, as the result of observation, as to the effects of Chian turpentine in uterine cancer. I should be glad to confirm these conclusions by now publishing a number of illustrative cases showing the treatment pursued in different forms of uterine cancer; but consideration of the space at my disposal obliges me to be content with describing briefly the conditions under which a measure of success may be obtained, and the opprobrium of the alleged uselessness of the remedy may thus be removed, to the ultimate benefit of suffering humanity. It

appears therefore necessary to determine whether Chian turpentine does actually alleviate the distress of cancer, or has any controlling influence upon the progress of the disease, or any pretensions to effect its cure. It is obvious that if either or all of these results can be secured by the use of the drug, in any form or situation of cancer, the remedy cannot be deemed useless. Now, the facts within my own knowledge, derived from my own professional experience, may be summed up as follows. Nine cases of cancer confined to the uterus, which have been under treatment for about twelve months, are so far convalescent that they are no longer under observation. The cancerous growths have disappeared, there is no bleeding on manipulation, and the parts are smooth to the touch, and appear to be covered with mucous membrane. In most of the cases the cervix uteri is shortened from the contraction consequent on the removal of the growth. A number of cases of uterine cancer in private and hospital practice are under treatment in which freedom from pain, diminution of hæmorrhage, and sloughing of the growth, with improvement of the general health, are prominent features. A number of advanced cases of uterine cancer have been treated for a short time, and the patients have died, but an amelioration of the more severe symptoms took place, although the patients succumbed to the anæmia produced by the previous exhausting discharges. The disappearance of the cancerous growth was verified in three cases where an examination was made after death. One case was complicated with cystic disease of each ovary, one died from dysentery, and in the other the glands in the pelvis and abdomen were extensively diseased. In neither of the fatal cases where the remedy had been exhibited for some time were there any fistulous communications with the rectum or bladder. If we bear in mind the progressive and generally rapid advance of the disease when left alone—as it rarely disappears spontaneously—or when it is treated by palliatives, and compare this with the treatment by Chian turpentine, we find in the latter method a gradual subsidence of the disease, varying as to length of time in proportion to the more solid consistence of the growth, a marked diminution of pain, a lessening of the hæmorrhage, with an increase of the muco purulent discharge. There is usually an improvement in the general health, but an increased tendency to anæmia is sometimes noticed. From a review of all the cases I have observed, it may be safely asserted that the effects of Chian turpentine in cancer of the uterus are tolerably uniform, and it is more than probable that the remedy effectually removes the cancerous infiltration surrounding the original growth, thereby preventing the extension of the disease. In some instances

the treatment has removed glandular complications, and in others it is presumable that these have been averted. It is this controlling action of the drug which probably causes the abatement of the pain and hæmorrhage. The growth gradually diminishes in size, becoming loose and shrivelled, and losing its firm and succulent condition. Whatever may be the termination of the case, the treatment manifestly affords to the patient such comfort as is not obtainable by any other therapeutical measure.

The earlier the cancerous disease comes under treatment, the greater is the prospect of ultimate relief. The success obtained in recent cases is probably owing to the patients coming under observation before any apparent extension of the disease, or before vital organs are involved. Where the vagina is affected with the disease primarily or secondarily, particularly the latter, the prospects of relief are materially reduced. The treatment should be prosecuted vigorously and persistently, especially at the outset, so as to minimise the constitutional effects of the disease, as it is difficult to decide in what stage these are developed, and perseverance with the treatment should be strenuously encouraged by the medical attendant, as otherwise the patient may be left to die unaided by the only drug that has been found by its internal administration to have any pretensions to resolve a cancerous growth.

In treating a case of cancer of the uterus or rectum, the following procedure is recommended for adoption. It may be premised that it is essential that the genuine drug only should be administered. It is a humiliating statement to make that even now some houses are supplying and dispensing other turpentine for Chian turpentine, and are even guaranteeing the genuineness of the article they supply. It is also necessary that the drug should be given in the form which is most convenient for assimilation. The essence of the Chian turpentine, prepared by Messrs. Southall and Barclay, of Birmingham, appears to me to be the most suitable preparation. This is prepared without the sulphur, and evidently does not contain any ether. The drug is in a state of minute subdivision, is easily digestible, suitable for all forms and situations of cancer, and is very palatable. One teaspoonful of the essence contains three grains of the turpentine. In place of the sulphur in the essence, Messrs. Southall prepare pills which contain sulphur, sulphate of copper, &c., and which they style, "*pil. sulph. comp.*," to distinguish them from the Chian turpentine pills. Two teaspoonfuls of the essence, with one or two of the compound sulphur pills, should be given three or four times a day, and after

the medicine has been taken for about three months it should be omitted for about three days in every fortnight. The pills or mixture, prepared according to the original formula, may be given instead of the essence and sulphur pills.

The vagina and rectum, even from the first, should be syringed daily with equal parts of vinegar and water. After allowing time for this to drain from the parts, it is advisable to insufflate into the vagina or rectum about ten grains of the following powder:—Tannic acid half an ounce, powdered charcoal two drachms, and powdered sulphate of copper ten grains. Messrs. Mappin and Co., of New Street, Birmingham, make a vaginal insufflator by which the powder may be introduced into the rectum or vagina very efficiently. An insufflator may be improvised out of a vulcanite tube and a two-ounce india-rubber bottle connected with elastic tubing, but such an instrument is apt to become moistened by the secretions, and thus prevent the powder from becoming properly placed. The propriety of excising the os uteri in epithelioma of this part, as a preliminary procedure to the use of the Chian turpentine, may be questioned on reasonable grounds. The cancerous growth as it disappears under the Chian turpentine treatment leaves a shortening of the os uteri which brings the external rim of the os uteri into close proximity with the bladder and rectum, so that if the vaginal portion of the uterus has been removed the subsequent contraction of the lower portion of the uterus drags on the rectum and bladder, causing great pain, with rectal and especially vesical troubles. In large pedunculated epithelioma of the os uteri the larger portion of it is perhaps best removed, taking care to leave the normal uterine tissue intact. In cases where the turpentine has been taken for some months, the dull curette may be used to remove the sloughing mass with advantage. When pain in the sacral or hypogastric regions comes on after the treatment has been pursued for two or three months, the use of morphia suppositories is indicated. To avoid the habitual use of opium, the tincture of Jamaica dogwood (Christy's), in one-drachm doses once or twice during the evening, may be prescribed. Hæmorrhage at the monthly periods is best met by giving the liquid extract of ergot in ten-or fifteen-minim doses (which may be added to the essence of the Chian turpentine), and to use locally the perchloride of iron in solution, or the dried persulphate of iron by means of insufflation. Diarrhoea and dysentery sometimes supervene during the treatment, for which the oil of eucalyptus globulus (in five-minim doses three times daily for a few days only) is a good remedy. This drug may be added to the essence of Chian turpentine. Anæmia consequent upon the occa-

sional hæmorrhage and serous discharges is a serious complication ; much of the local treatment here recommended has been suggested to anticipate or prevent the anæmia. To combat this condition, Fellows' syrup of the hypophosphites, in one-drachm doses, may be given during meals, from the commencement of the treatment, in connexion with the Chian turpentine treatment.

In cancer of the vulva Chian turpentine acts slowly, and as the disease frequently extends rapidly, an early excision of the growth, if possible, is necessary, the remedy being given for some time afterwards with a view to prevent a recurrence of the disease.

The use of Chian turpentine in a large number of cases of cancer of the breast shows that it is a remedy of considerable power in relieving pain, of diminishing the size of the growth by causing the removal of the cancerous infiltration, leaving the more permanent fibrous stroma to be subsequently dealt with. In many instances the growth, although at first it was firm, and seemingly adherent to the chest walls, has become loose and easily movable from side to side, as if it were merely a foreign body, so that if an incision had been made in the skin it could have been pushed out. Several cases of primary scirrhous of the breast have been noticed in which, after the administration of the Chian turpentine for some months, the whole of the cancerous mass has sloughed away appearing as a black gangrenous mass, leaving a cavity of considerable dimensions, the walls of which were composed of healthy tissue, and the wound healed with comparative rapidity by granulation. This process however, is a slow and painful one, and suggests the propriety of anticipating the sloughing process by removing the growth with the knife after it has become sufficiently detached from the surrounding structures by the treatment. Several cases treated by this method have done well, the operation has been materially simplified, and, if the remedy is administered for some time after the operation, the experience gained shows that there is not so much likelihood of a recurrence of the disease. In recurrent cancer of the breast the remedy is often found to be of great benefit, and after it has been given for some weeks the application of the crystals of resorcin to the growth facilitates the disintegration of the mass. Resorcin is a powerful and at first a painless application. When its use is attended by much pain it may be mixed with equal portions of tannic acid and charcoal with good effect. Vaseline or chrisma dressing is all that is required after the application of the powder.

In epithelioma of the face and other parts of the cutaneous surface the use of the Chian turpentine internally in conjunction with the

powder previously advised (when stating the local treatment of cancer of the uterus), to which three drachms of resorcin have been added, very good results have been obtained. In two cases of cancer of the stomach very beneficial results have accrued from the special treatment. In cancer of the mouth and tongue the results have not been so good, in consequence of the rapidity with which the neighbouring glands became involved in the cancerous disease.

I leave these necessarily incomplete observations to the impartial critical judgment of the profession. Enough, I trust, has been stated to show that the Chian turpentine treatment has some ameliorating influence on cancerous disease—how much the future must determine,—and therefore I am enabled to claim that the remedy is far from being useless. The facts stated may be considered at least as a distinct addition to our existing stock of knowledge in the treatment of cancer, and I look forward as the almost certain result to their being confirmed, and to candid inquiry leading to further improvements in the same direction.

