

AN
INAUGURAL DISSERTATION

ON

Cancer

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BY

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To A H Buchanan M D professor of
Physiology and Pathology in the
University of Nashville, this essay
intended not to elucidate, but to
call the attention of the med-
ical professions more particular
to the disease of Cancer is most
respectfully inscribed by his
pupil through the sincere re-
gard he has for him, on account
of his high professional abil-
ity and the profound respect
he has always shown toward his
pupils in medicine.

The Author

Cancer,

This disease is decidedly loathsome and uncompromising in its character, one from which all medical men shrink, one that has hitherto bid defiance to the learning skill and ingenuity of Physicians of the highest attainments, and by them regarded as incurable and essentially fatal, one upon which Materia Medica has exhausted her unbounded fulness, Still it makes its gigantic strides throughout the length and breadth of the land, unfettered and unchained laying its subtle hand upon whom it will, committing its savages and depredations upon

The human family and none dare
 molest or make it afraid,, Against it
 the medical profession have elevated
 their artillery time and again, but
 as often have they missed their
 aim, it is yet the "Monarch of all
 it surveys,, Not only have the reg-
 ular army of Physicians brought
 their bombs, battering-rams and
 cannon to bear upon this dis-
 ease, but the militia though raw
 and undrilled in the tactics of
 medicines, on seeing the regular ar-
 my hoist their colors, turn their
 backs upon the enemy and de-
 sert the field, they too have mar-
 shaled their forces ambushed them-
 selves concealed their weapons, and
 surprising the enemy from ditch-

es savines and thicket, and now
 and then taking a defenceless Spy
 they cry out victory, victory, victory,
 feeling their inability to combat
 so formidable an enemy ^{so openly} they
 have selected this savage barbarous
 and cowardly mode of warfare;
 yet the monster in bitter spite goes
 heedlessly on laying waste and
 destroying human life and hap-
 piness; and the medical profession
 stands with grounded arms with
 neither shield nor buckles on;
 I would ask if this is the con-
 duct of men and intelligents,
 is such conduct worthy of men
 of science and research, is it the
 conduct of him who has "labour
 vincit, omnia, Nil desperandum,"

or "excelsion," for his motto, no it
 is the conduct of folly and laziness,
 is it possible that the whole
 Medical fraternity have yielded
 to a disease merely because it appears
 incurable, to declare a disease
 incurable and ground arms is
 too humiliating, I had rather be
 found with arms on and ready
 for the conflict, I am opposed
 to any sort of armistice or compromise
 with disease, nothing short
 of complete triumph should ever
 satisfy the true Physicians, and
 I do think if every worthy and
 well qualified Physician being
 "duly and truly prepared," would
 draw his medical sword and
 throw away the scabbard and de-

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clear air everlasting war against
disease, the most obstinate and
reluctant would yield, cures not
excepted, and whilst I abhor the
quack both on account of his im-
pudence and secrecy yet I can but
admit that his perseverance is com-
mendable; It seems remarkable at
the first glance that this disease has
propagated so many Quacks but
when we reflect a moment we
can easily solve the mystery, we
offer then as our reasons why this
disease has been so fruitful of Quacks
is because the regular Physicians has
declared it incurable and after they
have refused to do anything for
patients laboring under this disease,
and when this is the case in any

disease it leaves the case open for experimenters, he who says he cannot conquer and tries not, surely will not conquer but he who says he can and tries may perhaps succeed; To admit that a disease in all its forms and phases is incurable is a doctrine I never expect entertain, but that there are diseases incurable after long standing no sane man will dare to question, an essentially incurable disease and one that has not as yet been cured are two very different things, to say that a disease is incurable in all its stages is to say that of all the elements both mineral and vegetable that God has supplied old mother earth with, there

has nothing yet been created which
will either counteract or destroy
the poisons of cancer, if this is true
the fact is very humiliating, now
if the disease in question were always
so situated that the remedies could
not be applied the cry of incurable
would be more reasonable, but
on the contrary it is very frequently
externally located where there is
no difficulty whatever in making
applications of any and all sorts
of remedies, the failure then lies
in a want of a proper remedy,
that the specific or remedy has yet
been discovered I will not pretend
to say, but to say there can no
remedy be found, is an assertion
unworthy of the exalted science of

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Medicine, There was a time when
simple intermittent fevers slew
its thousands and put its tens
of thousands to flight, when it
destroyed Kings and Monarchs
when it destroyed life upon the right
and left, when it was regarded as
incurable ~~or incurable~~ as colera is
now on the disease under considera-
tion, but finally God in his wis-
dom and mercy directed a poor day
laborer who was afflicted with
this disease to a Stagnant pool
to slake his burning thirst day
after day, and this was the for-
tunate remedy of peruvian bark
discovered, and although the afflic-
ted man was thus lead by the hand
of God to the means of his own

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relief, yet little did he think so
simple a remedy was to make
glad the hearts of millions and
save the lives of thousands;

There was once no Specific against
the Small pox virus, till the all-
searching mind of Jenner discovered
the virus in a milkmaid and traced
it thence to the cow-pox, and after
he had made sufficient experiments
and proved the truth of his discovery
he then made it known, and on
so doing he was thought to be
disgraced forever, and the medical
press refused him space to declare
one of the most renowned discoveries
that now guilds the pages of the
healing record, but regardless of
their frowns and stigmas the in-

domitable Spirit of Jenner neither
 faltered or hesitated, but proceeded
 with energy and perseverance, and
 over the head of all opposition
 brought to light the inestimable
 blessing; Alone from such invin-
 cible Spirits as Jenner who are wil-
 ling to suffer shame and reproach
 for the sake of Truth and Science,
 that we are to expect new and per-
 manent development in the Medical
 Science, To men who prefer reputa-
 tion to Truth we may look in vain
 for progression; Simple diarrhoea
 was once regarded as incurable as
 cancer, but now the veriest quack
 in the land can prevent Small
 pox about intermittent fever and
 cure diarrhoea, and may we not

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reasonably hope that the time will
come and that the day is not far
distant when every old woman
in the land will be able to place
her everlasting hold on cancer,
and say "thus far shalt thou go
and no farther." The remedy will
come yea it must come, great dis-
coveries like moral reforms must
go on, and if the wise and skillful
become sluggish and indifferent
and desert the field of investigation,
the illiterate will be made to confound
the wise. If Jenner was immortal-
ised for discovering a preventative
for small pox what will be the
reward of him who discovers a per-
manent cure for cancer;

There is no disease that deserves a more

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thorough investigation, none about
which we should be now interested
in gaining a remedy for, it is not
only the most obstinate and loath-
some but the most corroding and
fatal. In all cancers there is a
fibrous stroma or basis, yet firm-
er and more condensed in some
than in other varieties, there is also
a fluid and in this there are gran-
ules, cells, pigmentary and fatty
matter, the fibrous portion being
greatly predominant in all these
varieties, according to the books
there are several varieties, their names
being very significant of the nature
and consistence of the disease, or tu-
mor; the best authors give about
five varieties, viz Scirrhus or hard

Enccephaloid or soft, Colloid or gel-
 atinous, Melanotic or black, and
 the Epithelial variety, these general
 divisions are again subdivided, the
 result of which serves only to con-
 found the Student, and to give a
 description of these subdivisions
 would be a task too tedious for
 the present essay, and before I go
 into a description of these general
 varieties I will state a few facts
 relative to the whole family of can-
 cers, Some cancers are hard and
 firm whilst others are soft and
 elastic, Some extremely painful
 others progress with scarcely any
 inconvenience to the patient whatever,
 the intensity of the pain depends in
 some degree on the tissue of the part

affected and partly on the variety
 they originate in small irritating
 pimples, gradually spreading in-
 volving to a greater or less degree the
 surrounding tissue, attaining various
 sizes from a pea to that of an ordi-
 nary pumpkin weighing from
 one dram to twenty five pounds,
 Some are very much subject to hem-
 orrhage, others are nonvascular, some
 progress very rapidly attaining an
 enormous size in a short time, the
 growth of others is so slow that
 it is scarcely perceptible during a
 space of several months, the rapid-
 ity of their growth depends upon the
 vascularity of the tissue and the tem-
 perament of the person, there is scarcely
 a tissue of the body or an organ ex-

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empt from this disease, yet it has favorite localities, the brain, lungs, kidneys, stomach, diaphragm, omentum, liver, bowels, rectum, in fact the entire organization, internal & external are frequently involved, yet the testicles, uterus and mammaries are the favorite localities, all ages and all sexes are the victims, it attacks the foetus in utero as well as the grand parent on the brink of the grave, although it spares neither sex yet like the most of men it is particularly fond of the women, and though no age is exempt yet people under thirty are not so much subject to it as those above that age, one other suggestion I beg leave to make as a matter of my own obser-

vation, I hale from a City in which
 there resides a noted cancer Quack, to
 whom many persons resort with can-
 cers, and chronic ulcers, and it is re-
 marked by all who have paid any
 attention that a large majority of
 patients thus afflicted have light
 or sandy hair, and thin fair and
 slightly freckled skin, I do not
 remember to have seen this in any
 medical work hence I cast it out
 by the way for what it is worth,

We come now to notice the different
 varieties which we have enumerated
 above, though we do not agree to every
 thing that is said in the books respecting
 them, for in many respects they con-
 trast strongly with each other, whilst
 their difference consist more in their

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locality and the tissue involved, than
in chemical or anatomical structure
yet every author seemed ~~to think~~
that he had not done justice to
the subject until he had found a
new name for cancer, it should
not be overlooked however that there are
different varieties in this disease,
but so many nice distinctions
and subdivisions as we find in the
books, are unwarranted by established
facts, and by no means susceptible
of demonstration, and serves to perplex
the mind rather than to edify. My
reasons for objecting to so many sub-
divisions is owing to the fact that
when the chemical test is applied the
same answer is given. Moreover when
one sort is removed, one of another

variety comes in its place, and often you will find as many as three varieties in the same tumor, this is strong evidence that there is great simularity between them,

As to the cause of cancer or its remote cause, the medical fraternity are divided, some believe it to be owing to a morbid state of the nervous system, some say it depends on an impure state of the blood, others say that it is inherited, while a part and by far the most reasonable position confess their ignorance on the subject, whatever may be the remote cause authors generally agree that inflammation is the proximate cause, but what the inflammation is the result of in many

cases is a mooted question, it frequently seems to be hereditary, in other cases it evidently is the result of injuries supervening upon kicks, blows, bruises, corroding cases, in such cases some would contend that the blow only served as an exciting cause, merely arousing a predisposing system, again it arises without any assignable reason, from the statistics it would appear that a peculiar inherent disposition or constitution and a particular organ are predisposing causes yet men of high authority deny that there is any such thing as an inherited cancerous system, In diagnosing this disease, we should remember that the tumor is anatom-

ically composed of fibrous stroma and a peculiar turbid fluid, and in this fluid there are cells of a spherical form: the unaided eye of the skillful Physician will be able often to distinguish the characteristics of the various malignant tumors, and the microscope may be at sometimes unable to detect them still nothing short of this will do to rely on in a difficult case, we should not decide from one or two cells but from a cluster or an aggregate number, *Serri's* - thus tumors do not move freely with the skin but move only with the organ on which it is located, they are more numerous and more easily distinguished

than other varieties, it is most generally found on the mammary and lymphatic glands, hard firm and inelastic, seldoms grow so large or so fast as the other varieties,

The encephaloid is soft and elastic grows very fast and extremely large, the cells are caudate and numerous, this variety is very vascular and malignant, its seat is on the testes in the cavities of the face and on the articulating surfaces of the bone, though it may occur on any part of the system,

The colloid or gelatinous variety usually occurs in the viscera of the three great cavities of the body, hence seldom comes under the observation of the surgeon, it is remarkable for

the semi-transparent gelatinous fluid
 which it emits. The melanotic
 variety is easily distinguished by
 its color it casts off a pigmentary
 matter, it most generally attacks
 serous membranes and is quite
 malignant, resembles the enceph-
 aloid except in the color of the dis-
 charge. The diagnosis of the various
 forms of cancer is not at all times
 a very easy task. Since tedious ul-
 cers of gonorrhoea Syphilis and
 Scrophula often degenerate into some-
 thing similar to cancer. The ep-
 ithelial variety is not so malignant
 we can more reasonably hope for
 success after an operation, it usual-
 ly occurs on the lip, Scrotum or
 anus, Spreads slowly has more the

appearance of a local disease, than
the other varieties,

The prognosis of this disease
is very unfavorable, in fact most
writers have pronounced the dis-
ease incurable, but with all
due deference to many wise
and good men I still beg
leave to differ with them, but
lest I might be regarded pre-
sumptuous I will not venture
an assertion without at the same
time good authority, Crichton
says "caustics are the remedies
that are usually employed by
Empirics who profess to cure
cancers by secret remedies, - and
it may doubtless be the case that
such individuals occasionally

though very rarely, indeed, effect a cure, by exciting so much inflammation in and around the tumor as to lead to its sloughing and consequent elimination,"

Here Mr. Crischoos admits the possibility yea the probability of a cure being effected and he states at the same time the means by which the cure is effected, that is, by high inflammation which he does result in sloughing and elimination. The question here is natural if high inflammation will occasionally cure, is it not reasonable to suppose that if this process were carried far enough would it not frequently cure, guarding

at the same time the life and safety of the patient against the excessive inflammation. We say again that a Cancerous Tumor in some cases may be removed with every expectation of the patient being freed from the disease completely, cannot I think be doubted although it may be that such instances are rare, and if we can happily succeed in removing it during its local condition, there is a good prospect that the patient may be rescued from a return of the affection, here he thinks that a cancerous tumor may be removed completely, and with every hope that it will not return, he also admits it a local origin and

not a constitutional one, and if it is only a local affection at the commencement in many cases, if we can remove it then either with the knife or caustic, I cannot see why it should return. Sir Benjamin Brodie says. "So long ago as 1832 I removed a breast affected with a scirrhous tumor and the lady is still in good health and since the operation she has married and born children," This declaration was made in 1846. He says also last year I was called to see another lady on whom I performed an operation thirteen years ago, and I found she continued free from the disease.

Here Brodie says he operated in one case and a lapse of fourteen years had passed away and still there was no return and also another of thirteen years and no return, It would seem from this that it is at least probable that a cancer may be cured.

Mr Ferguson says, "nevertheless an excision gives the only chance of security - an operation should be resorted to, provided, the knife can be carried beyond the supposed limits of the disease," here we again see this author acknowledges limits to this disease and such as can be transcended by a knife, this is equivalent to admitting it to have a local origin,

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Treatment. It would be the height
of folly and presumption to say
that this disease can be cured, using
the term "cured," in its ordinary sense,
yet the knife seems to be the most
successful method of treating it,
yet it is unsuccessful so often
that it seems almost a heartless
attempt, although it does seldom
effect a permanent cure. Still it
may relieve the patients of much
suffering and perhaps lengthen
their days, and "occasionally effect
a cure," we would suggest the pro-
prietty of following the knife by
caustic lest there might be some
remains of the diseased part, since
it would be a very difficult task
to remove all the diseased tissue.

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without at the same time removing
much that was not diseased, hence
we think the old plan of cauterising
the wound made by the knife so
as to be sure we have removed all
the diseased tissue, was not a bad
idea, or we might substitute in its
stead something in its stead that wo-
uld cause so much inflammation in
the wound as to create sloughing,
and since an ulcer or tumor cured
in this way is not so liable to return
as one removed by cauterization we
would therefore prefer that mode;
when we see there cannot be any
hope of success we may do mu-
ch to gratify the patient by ano-
dines. Such as Opium, Hemlock,
Prussic Acid, and such medicines;

To avoid the necessity of resorting to the Surgeon many remedies have been tried, but none have gained so much confidence as those in which Arsenic is the principle ingredient, and this has received the highest applause from good authority, from time to time, this is the principle ingredient in all Quack remedies it is the *"Linc qua non,"* of Quacks, it is ^{the} main ingredient in the remedy of the noted Quack I referred to above, perhaps it would not be out of place here to give his recipe it consists of beech drops 30grs, of Red puccoon or Sanguinaria 5grs, and one to two grs Arsenic;

I speak what I know and am responsible for the truth of these statements, you will find the same recipe in Gunns domestic medicine almost verbatim he then states that Prush highly recommends it but whose his authority came from for so says I am not able to say, we find the beech drop itself has gained some confidence in the medical profession as a remedy hence it is not strange to find it united with arsenic, and should I get a case of cancer that was not accessible with the knife I would be induce to try the arsenic and beech drops, remembering not to use the

remedy if the patient was of a scrofulous habit, for in such cases Arsenic might do more harm than good, keeping my patient at the same time on a milk diet and good constitutional treatment, and at the same time guard against too much inflammation;

I would not expect to accomplish much in a short time, but would have some hope of success by perseverance; I do not recommend the beech drops upon the authority of Gurne or any Quack, but upon good medical authority. Should I find it necessary to treat a case by cauterization I would precede the caustic by the freezing mixture.