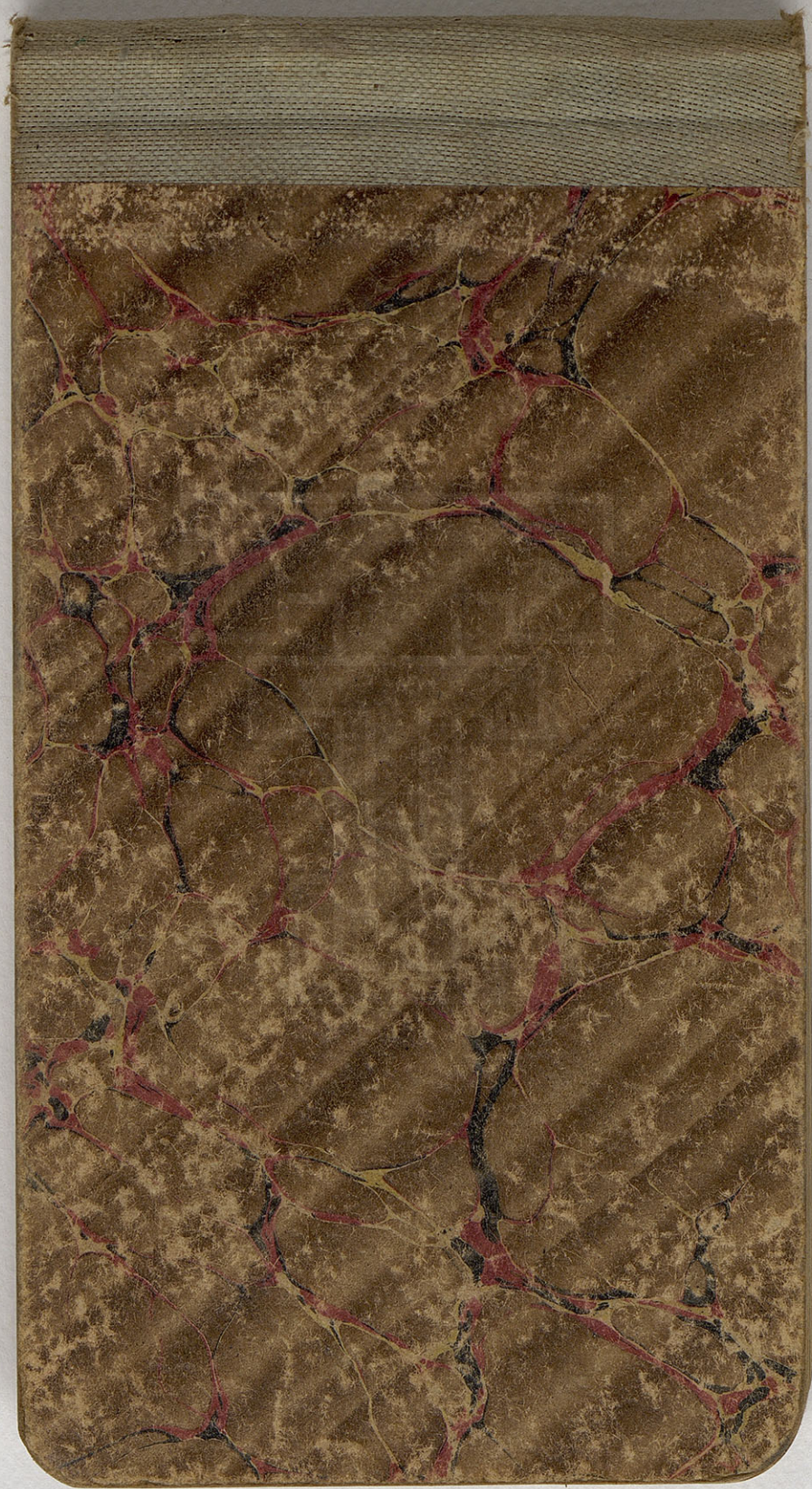




[REDACTED]

1028 Market



Lecture. Oct. 7th 07.
Inflammation & its
surgical aspects,
1st Why do these
processes occur? They
are for purposes of
protection. It is a
complex process &
is brought about by
a nervous process.
Large am. cells
are attracted. They
and the white corp. are
phagocytes. They come
here to repair as well
as to eat up.
Senocytes do not repair.
while the C.T. corpuscles
do.

all these phenomena
may be present & the
tissue returning to
normal = 1. Resolution

If inflam. is long con-
tinued 2. New formation
of tissue is the result.
Most all inflam. ter-
minates in number 2.

Favorable { 1. Resolution
2. New formation
of tissue.

{ 3. Suppuration. (Serious.)
4. Necrosis or gangrene
(very severe)

Unfavorable.

What are the causes of
Inflamm. are

1st predisposing { (A) Local
(B) Constitutional

1st predisposing { (A) Local
(B) Constitutional

2. Exciting

Predisposing Causes.

Local causes.

When we have an inflammatory anemia
inflamm., may result.
Hyperemia may also
cause it.

When the nervous
system is out of
flow the central inflammation
may set in.

Another cause is
where rest is not
sufficient, as after a sprained knee.

Another is where
a part has not been
used for some time.

Where a part has been
inflamed before
old age may cause it,
cardiac troubles may
result. Alcoholics &
great gluttons are
easily affected.
Chronic lead poisoning
ing & convalescents,
from the typhoid,
diabetes, gonorrhea &
boils. Bright disease
& tubercular diathesis.

II Exciting causes,

1. certain mechanism,
excit. causes such as
wounds, fractures, serious
frictions
2. Physical such as heat

excessive cold, & etc.

3. Chemical such as

friction

2. Physical such as heat

excessive cold, & etc.

3. Chemical, such as
those produced by alkalis,
croton oil & others.

4. Chemical effects of
the process of putrefac-
tion, such as ptomaines

Specific Causes.

Such as pus forming
organisms, streptococci
tubercle bac., & other
specific organisms.

In operative work
the last cause is the
most important

Symptoms of Inflamm.

4 Signs of Inflamm.

are 'redness', ² swelling,
³ heat, & ⁴ pain, & ⁵ loss
of function.

Cause of Redness,
Is caused by the ^{in capillaries} ant.
of bld, being in excess.
In a bloodless part
there is no redness, it
depends upon the
part affected.

Swelling, this depends
upon the situation,
slight inflam, in
some places will cause
an enormous swelling.
The swelling depends
upon the physical
condition of part.

It depends upon the
transudation of serum
to the part.

Heat, the part affected
always feels hotter,

but it is not hotter
than the blood in

Heat: The part affected
always feels hotter,

but it is not hotter
than the blood in
the interior of the body.
It feels hotter because
more bld. is passing
thru the part & there
is more radiation.
Color or Pain.

It is rarely absent. It
may be slight, as in
soft tissues of the
eye lid. The gums of a
tooth when inflamed, may
give severe pain.

Inflam. is nature's
way of showing that
the organs are not
working right.

Symptoms of pain
is a very complex

thing. Pain is very
often referred, the
pain in the lower
is often ~~the~~ the
due to hip joint disease
in appendicitis, the
pain may then be
in the right iliac
fossa, 1 1/2 - 4 - 4 1/2 in,
position on Rectum
Pain of motion,
so with motion, do
not always important &
inferred pain,
symptoms that you
can see & feel and
the objective symptoms
under a pain.
Read & pain.

such as swelling &
heat & pain.

Constitutional symptoms
are usually bil-
jective

They are usually those
of fever.

Fever is divided into
two varieties

1st Sthenic & the
2nd asthenic.

Sthenic fever is seen
in forms of pneumonia
in strong people.
The skin is hot & dry
chills may come on
the pulse is strong &
full 110-130.

Slight headiness is also
usually present.

Tongue is furred & moist
great thirst, urine

scanty, some albumen
& urates, does not
end by crisis, this
is often but gradually
passes away.

Arteries usually occurs
in people broken down
person is stupid del-
irium is a low mutter-
ing one, pulse very
feeble & frequent
& often intermittent, temp
varies very much
maybe 100 - 105.
Skin is often warm
& dry.
Sordes form on lips
& teeth.

Heart is very weak &
weak heart

Orbits from eyelids
+ teeth.

Heart is very weak +
may fail.

These symptoms may
occur in the infant,
due to organisms +
those ~~not~~ that are not ductory.

Treatment.

1st Remove the cause
General Points.

1st Protect the tis from
all sources of infection,
irritation + if you fail
to do this, remove the
original irritant as
quickly as possible.
+ if you fail, prevent
the introduction of
fresh causes. Keep the
part clean.

often it is not wise
to irritate the part any
more than possible,
Prevent tension,
must have absolutely
no tension.

Prevention of descomp-
osition.

Use an antiseptic
dressing. Exclude
all specific infection.
2. Promote the healthy
nutrition of tissues.
attend to diet, and
regulate the bowels
and kidneys.

3. Diminish the exudation
by diminishing the bed
pressure, this is done
by position. Local

bleeding is good but
not to be used.

pressure, this is done
by position, local

bleeding is good but
posture is the best,
blisters & cupping may
be good.

Blisters & hot fomenta-
tions open up the
capillaries.

4th Relieve the pain.

5th Treat the febrile
disturbances. Cold
sponging & ice baths
are very good.

Securine 10/15 to 20 gr.
Treat. of febrile condition
avoid all coal tar
remedies except in cases
of emergency. Use cold
baths and cold sponging.

Chronic Inflammation,
The phenomena meet with
are same as those of
acute, but are less
intense, do not get
the same amt. of
dilatation, & increased
flow & migration.
Retrograde changes occur
in a very much slower
manner, they may
accelerate more but
do not get as much
gangrene, a big abscess
causing following chronic
inflammation takes a long
time to form.
Causes, it may result from
an acute, especially

if the tissues contain
some foreign body. It is

Causes: 1. may result from
an acute, especially

if the tissues contain
some foreign body, It is
seen in chronic cases
of appendicitis, Dead
bone is the most com-
mon cause, 2. Obstruct.
to secretion of glands
such as in kidney,

3rd Tuberculosis

4th Syphilis

5th Rheumatism &
joint.

Process: consists in a
destruct. of normal
tis. which is replaced
by gran. tis. there is
a certain amt. of white
bled corpuscles.

Con. tis. cells also come
into the tis.

The formation of gran-
tis. is the essential change
of chronic inflam.

The constitutional symps.
are few, there is very
little fever.

The local symptoms are
the same.

Pain is worse at night.

Redness is very slight &
heat also slight.

Chronic inflam. of

hip joint may be white.

and joint enormously

swollen, but not hot.

In tuberculous trusses

the synovial ~~tissue~~

membr. may be $\frac{1}{2}$ inch
thick. Loss of function

the syngone ~~tubercle~~

membr. may be $\frac{1}{2}$ inch thick. Loss of function results.

A tuberculous tubercle is a good example.

- 1st Inner part, giant cells,
- 2nd layer epithelioid cells,
- 3rd Round cells.

Syphilis is usually similar except we do not get the definite layer, but you get the round cells.

Treat. of Chronic Inflammation
Constitutional Treat. is often of very great importance. In some it is principally hygienic nourishing food & walking

As good for tuberculosis
there is no constitut.

treat for tuberculosis;

Rest is good.

Local heat, letting
warmth & moisture
occasionally cold is used.

friction, rubbing & pressure.

Massage is most import.

ant. Counter irritants

are good such as Iodine,

blister & mustard

plaster & also Cantharides.

The Cautey may be

used. In some instances

free incisions.

Issues may be used

, this is a slough caused

by constant irritation.

A seton is a piece of

, this is a slough caused

by constant irritation.

A seton is a piece of
boasted or wool which
was drawn thru the skin
by a needle, to prod. on issue.
The X rays, and Ultraviolet
rays have an enormous
use.

Pus Formation

Pus is a highly alb.
fluid full of swimmer-
able small corps,
resembling leucocytes.
They often have a
trilobate nucleus.

The fluid is opaque
& creamy & yellowish
white, with a distinct
sweet taste, Sp. Gr.,

1030 - 1033.

The pus corpus, are degene
white bld. corpuscles.

Pus divisions.

1st Pandable Pus,

Is yellow pus,

2nd Serious pus.

Distinctly blood stained.

3rd Laborous pus.

Streptococcic infections.

found thin & watery.

4th Acute pus.

Has thick cheesy flakes
in it, (tubercular)

5. Muco pus.

Is seen in nose attack.

6th Silver pus, Bone pus,

Color chocolate or of tona

to color, there is degen.

ever trace in it,

7. Blue pus.

to color, there is degen.

even tissue in it.

D. Blue pus.

Pycococcus is cause.

Pus itself.

About ~~1000~~ 4000

1 Cu. mm. contains about
4000 pus cells. The most
important test is to
examine it.

If you are going to
aspirate a cavity
do not use strong
carbolic acid for
sterilizing but simply
boil the syringe.

The enormous number
of white bld. corpuscles
in the body are to be
used as an army

but sometimes they
are killed by certain
poisons, & then we
have pus.

Pus = leucocytes dead
+ transuded serum.

Long before the white
cells, corpuscles are dead
they are capable of
activity.

Lecture Oct. 14th 07.

Pus-cells come from leucocytes.

The presence of micro-organisms
is the most pract. determin-
of whether it is pus.

Reasons of the process.

Is the death of leucocytes
caused by the micro-organ.
40000 pus cells indicates present
process, or if 20000 or 15000 combined

with a great number of pus & M. org.
you might have one what is going to be
naggy wiser.

The formation of pus is pur-

40000 pus cells indicates phagocytic
process, or if 20000 or 15000 combined

with a great number of pus cells, you might have ~~or what is going to be~~ phagocytosis.

The formation of pus is pur-
posive, in line of

The irregular shaped cells
are obvoid in shape.

★ are the greatest
eaters. The phagocytic
theory is the most
practical one to accept.

In the tadpole the tail
is eaten away by the
large phagocytic cells.

In the formation of bone
the same process is
gone thru with.

The plowains or poisons
of the micro-organism
may produce pus.

Ag. No. 1 injected into

The tissues will produce
pus. Strong oil of turpen-
tine imbedded in a ro-
bit's leg, after having
been sterilized, and
let the leg to heal, then
break the glass container ^{pus formation} & you get
We very often describe
the phenomenon of forma-
tion of pus in two ways,
1st In depths of tissues,
2nd On the surface,
& Abscess cavity.

Mucous membrane inflamed,
Formation of pus in the
depths may assume
two forms!

a. Either the pus may
be in a circumscribed

Cavity.

b. It may be diffused.

be in a circumscribed

Cavity.

b. It may be diffused without circumscription.

The cause of pus either pyogenic aureus or albus the organ. of pus in the cavities is streptococci.

Def. of Abscess Cavity.

It is a cavity containing pus, the collection being surrounded by a wall

containing granules, How does pus arise?

1st Is introduced of a focus containing microorganisms.

These organisms find their way into the center, & the microorg. are killed

then around this
we have a dense collec-
tion of leucocytes & con-
tin. corpuscles, and these
are gran. tis. If process
is not too acute we have
gran. tis. However if it
is acute we have a diffuse
formation of pus.
In these acute abscess
cavities gran. tis will
form indefinitely unless
the tension is relieved.
When this is done the
fever disappears.



High phagocytes activity
Coagulation necrosis.
Abscess cavities spread

in the direct. of least
resistance, usually if

Abscess Cavities Spread

in the direct. of least
resistance, usually it
is toward the ^{+ surface} skin.
The skin then breaks
& this is known as
pointing. This process
cannot be waited for
always. There is danger
for some of these abscess
cavities to form pockets.
What kind of org. pro-
duce acute abscess
cavities. The *Staphylococcus*
aureus, *pyogenes*, &
Others are formed by
these, about 75%,
about 15% by streptococci,
and the rest by
others. There are quite
a number of others.

Streptococci usually cause diffuse formation.
the colon bacilli cause
a great many abscesses.
the typhoid, *Salmonella*
typhi & *gastroenteritis*
cocci & gonococci.
Tuberc^{bac} in chronic con-
ditions.

Old animal tissues are
not liable to suppuration.
The intensity of action
depends upon the organ-
ism. A great many are
present in animals &
are not in men.
Some people are im-
mune.

2nd Is the virulence
of the organism.
In *Shigella* ^{flexneri} in upper
part of colon for. and

not very virulent
in the lower part

part, colon for all

not very virulent
In the lower part
of aliment, and they
are very virulent
4. Condition of tissues
affected of

organ, that acinus
injected into the blood are
taken care of by the blood
stream. Sometimes
the perineal fluid
is very destructive to organs
at times.

The Liver is the most
important bactericide
organ of the body.

Partial or total immunity
is what it all arrives at
at.

Symptoms of acute
abscess, Redness,
swelling, heat, and pain.

Very often the focus
of inflammation is frequently
hard, and not soft.
This is very well marked
around the urethra.
When near the surface
it has a brawny feeling,
then it begins to soften
in spots & the fluid can
be distinctly felt.
Pitting becomes evident,
the skin cracks.
Edema & pitting
of part is a good
sign of pus.

Pitting is always
present in deep seat-

Sign of pus

Pitting is always present in deep seated abscesses.

If you neglect these signs you may endanger your patient's life. In malignant tumors you may have trouble to distinguish between abscess & carcinoma.

When ever you are in doubt of pus you should use an aspirating needle

Lecture OCT., 17th 07.

In deep seated abscesses
diagnosis is very difficult.
If you will cut down
on the inflamed area
it is often best,
Malignant tumors may
produce the same symp-
toms as the abscess.
When in bone chisel
your way right in,
Treatment.

Often we get these
acute inflammations,
and if patient will
not allow you to make
an incision, then
you apply the ice bag,
or heat applied with
antiseptic substances,

after pus is formed
you should evacuate

be kept applied with
antiseptic substances,

after jaw is formed
you should evacuate
the cavity as soon
as possible. This
should be done in as nice
a manner as possible.
A double edged knife
is the best kind to
use. It should be
narrow bladed &
double edged. Should
be sharp. Euthyl Chlor-
ide may be used.

Occasionally in very
nervous patients you
should use No 2.

Indications of treat.

Open in the most
dependent point when
the patient is in

natural position,
Open as far away from
nerves as possible. Be
sure that
all the recesses are
open & cleaned out.
You may have to break
down the septa,
4th Drain these cavities
exceedingly well.
Gauge will not
drain you. Use rubber
tubing. In cases where
abscesses are very deep
located & in very im-
portant structures,
surround the part
as in the neck you
use Hiltons Method.

Incise the skin
& then the

Use Hiltons Method.

Incise the skin
 & then thrust the
 director (grooved) thru
 the tissues. then run
 a pair of forceps down
 this. Then open & with draw them
 Treatment of the cavity
 In many cases ~~are~~
 strong antiseptics are
 not necessary.

Squeezing out abscess
 is not good because it
 breaks the gran. tis. down
 If we want to remove
 gran. tis. you use pure
 carbolic acid or 40 grs
 In Cl 2 to the ounce.
 If we use phenol
 wash out with
 Iodoform after using

Dress all these cavities with strong antiseptic dressings, & if the gape or crotch you need to take more precautions in an infected wound than in others.

The acute suppuration in an abscess cavity is treated the same as a suppurating wound. In cases of acute suppuration attacking a mucous membrane called catarrh, they are treated by

medication except those of the throat &

they are treated by

medication except
those of urethra &
bladder, which may
go to ~~phys~~ surgeon for treat.
2nd variety of suppuration
is where the pus is
diffused = Diffused
suppuration. Is almost
always due to strepto-
cocci, circumscribed
is due to staphylococci.
Sometimes you have
suppuration in little
lobules, there is no
single cavity contain-
ing pus, when incis-
ions are made dead
portions of fat & for-
eign come away,
= slough.

this Inflamm. is very
serious because the
patient may die of
the absorption of
septic products.
there is no healing
tendency in these infections.

Symptoms:

Locally the disease
may start from a
small scratch
or puncture. Around
the redness soon
appears. Marked
inflamm. of lymphatics
soon appears. Nearest
lymph glands are
somewhat swollen
& tender. The skin

is brown & boggy

& tender. The skin

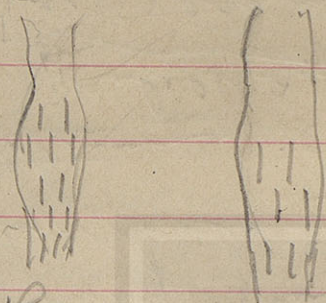
is brown & boggy
& pits on pressure.
Seldom there is
pus at seat of infection.
Whenever there is
loose cellulitis
the process extends
in this direction.
It may open upon
the skin which
dies. The sloughs
are very tenacious.
Muscles may slough out
in large strips. Gang-
rene of moist variety
may occur.
Cork's tetan. symptoms
Rigors are present.
May have a chill &
then fever from 103 to

105. When process is not stopped the patient dies of Septicæmia, after when the patient recovers the scars may be contracted. I treat. In some of these conditions skin is useful give whiskey & strength. Sometimes antipyretics are very useful. First care is to relieve tension, by ~~cutting~~ ^{making} free incisions. The incision must go down to muscle & even thru them, they must not in-

join the health of the skin.

If even there then
they must not in-

jure the health of
the skin, make in-
cisions like this,



Then scrub out with
a caustic; if long use
fine removal then,
then place the fore-
arm in an antiseptic
bath, either bath
or moist antiseptic
dressing should be used.
Moist warm dress-
ings stim, the bld-
flow. In later stages
try to prevent the
adhesions that may

occur.

The Antitoxic serum
should be used,
Chronic form of
suppuration or
abscess.

Tuberculosis & syphilis
are very common causes.
1. ~~1st~~ Tubercular
abscesses are the most
frequent cause,
2. Gunshot & other wounds
may cause them
syphilis may cause
them.

Tuberculosis
The retrograde processes
are very prominent
in tuberculosis.

You may meet
with these abscesses.

in tuberculous,

You may meet
with these abscesses
in joints & bones.

Symptoms, A very
few in chronic tuberc.
abscess.

Usually the gland
is swollen & ^{slightly} tender
the temp. may be
a little higher in the
evening. In large
abscesses there may
be no pain & no fever
to ant. to anything,
no redness. It contains
pyoid material.
When opened & inspect-
ed you get hectic fever
Angloid disease

from prolonged
Secretion of Abscess,
Treatment.

Cut the abscess
entirely out. Where
it is not possible to
cut them out
you should cure
it & the cavity
should be filled with
Iodoform Emulsion
which consists of
1 part Iodoform &
12 parts of Glycerine.
then fill the cavity
up and close the
opening. When they
are about to open
up on the surface

make a small open-
ing & treat it with

up on the subject

make a small opening & treat it with very antiseptic methods. When abscess is due to foreign bodies remove them. When due to syphilis give anti-syphilitic remedies.
Lecture Oct., 2d ^{not} 07.

Sinuses & Fistulae

A sinus is a channel lined by gran. tis. which reaches from v. sf. to a focus of infec.

In many of these sinuses the gran. tis. does not reach to v. sf. but is lined by epith. for some distance down.

These foci may be
a bit of diseased bone,
A Fistula is a chan-
nel which passes ~~thru~~
between or connects,
2 viscuses.

We may have urinary,
biliary, fecal &
fistulae.

We may have a fistula
passing from S to gall
B.

It is very rarely that
these channels are
lined by epithelium.

Mucous fistula is one
extending from one
mucous channel to
another.

Ulceration

Classical

another,

Ulceration

Classification

Ulcers are div. into 3 classes, 1st Non infc., 2nd Infec., 3rd Malignant. Non infc. ulcers are those not due to any particular cause, they may occur from continued rubbing & various warts.

An Infec. ulc. is one due to some infc. cause, such as Tub., Erysip. & Lupus.

Malign. ulcers are those that are breaking down such as carcinoma.

Non infc. ulc.

Pract, almost all

Causes that prod,
a ch. infl. are liable
to cause ch. ulc.
Any engorgement of
int. may cause an
ulcer. The H jumps
the bed, against them
already distended
walls & distends them
more & more.

Another cause is any
condition of at, such
as arteriosclerosis at,
Any thing that presses
from with out may
cause ulc. Undue move-
ment & cold may
produce ulc.
Where scar t's. can-

not contract, a ch.
ulc. may be formed

Where scar t's. can

not contract, a ch.
ulc may be formed.
Sometimes irritations
from & wrong lotion
or ointment may cause
ch. ulc.

Ch. ulc. may be found
in old unclean people.
Occasionally an ordinary
wound may infect &
cause an ulc,
where nerve supply
is cut off. There may
an ulc. formed,
like diabetes, scurvy &
definite venous may
be the cause.
Where mus. is contract-
ing continually it
may not heal,

Ulc. over tendons
may not heal.
Ulc. over bone m. not
heal where the periosteum
is inf. The necrosis
may extend into the
bone.

Occasionally these
leg ulc. do not have
a tendency to stop.
Sometimes in the ch-
ile. the mus. & nerves
may be destroyed.
They are known as
angiotrophic ulc. They
occur in old people
mostly.
As result of ulc. deform-
ities may be well mark-
ed.

Especially in the neck
the treatment is

the may be well mark-
ed.

Especially in the neck
& extremities are
these changes well
marked. These
ulcers may result in
erysipelas & the death
of part. Septic throm.
may result.

Infe. ulc rarely cir-
cumscribed.

Charact. of Healing Ulc.

1st condition of

skin surrounding ulc.

2nd Edges of ulc.

3rd condit. of sp.

4th Condit. of Base of ulc.

5th Nature of discharge.

6th Pain & resulting

lymph.

If surrounding skin

is normal there is
no spreading up of the
ulcer. Where the surround-
ing skin is red it is
liable to be up. The
edge of ulcer ought to
be almost on a level
with the gran. tis.
& a very thin line of
epith. should be grow-
ing over the gran. tis.
& should look purple.
It should be of the
same width on all
sides. If gran. tis.
is elevated way up
it is not as healthy as
it should be.
If ulcer is healthy &

surface is covered

If ulcer is healthy &

surface is covered
with gran. tis.
the gran. tis. may be
covered with lamdable
pus, when you touch
the sf. it is not
sensitive. When base
is hard the gran. tis. is
not healthy. The disch-
arge should consist of
lamdable pus. if there
is any discharge. If it
is scanty the ulcer
may not be healthy.
When the discharge
is bloody & watery it
is not doing well.
An healthy ulcer
should not be pain-
ful. The base is elastic

and
not tender.

~~Also~~

Kind's,

1st Healthy.

2nd Weak or flabby.

see, one in which the
line is very poor,
& gran. tis. may be high.
When touched it gives
there is no growing line
of skin around it,

3rd Indolent or Callous

see. There is no gran.

tis. at all, is most
common in old women.

It may appear as
tho it were painted over
with yellowish red
streaks.

the skin may be
th' about 1/2 in.

with yellowish red
streaks.

the skin may be
thickened & slightly
edematous, the base
consists of indolent
material.

4th Indolent

Intractable & painful.
Nec. & fungus granulations,
present in streaks
& may be exuberant
in places & very tender
in spots, the granulation,
is good in patches &
not in others. They
are very common in
anal region & mouth

5th Inflamed & can
the granulation may disappear
& greyish tissue left

behind + sharp cut
edges. 5.

The surrounding tis
me. be acly infiltrated.
6th Hospitalis ulcer.

Gangrene me. present.
Soft channels may
be of this variety.

May be surrounded
by infiltrated areas
~~surrounded by~~

Process may be so
rapid that gran. tis. is
not formed. 6

7th Eschara.
8th Ulcer

May be indolent & many
things.

9th Hemorrhagic nec

usually is an inflected
ulcer

9th Hemorrhagic ulcer

usually is an infected ulcer.

Treatment, general
pain relief.

Healthy ulcers, only want
cleanliness, rest, & protec-
tion & it will get
better. When large
circumcision can have
to be helped by grafting.
Iodoform & Iodoform
gauze will maintain
the gran. tis. Use ster-
ile gauze & some oint-
ment over the ulc.

Vaseline is very good.
In O may be very
good. Pb CO₃ oint-
is good. Change the
treat. every little time

because it hives better
Weak & flabby ules,
require careful treat,
the gran. tis may be
exuberant, = proud flesh,
this must be destroyed
by touching with caustic
in custody. May take
a pair of curved
scissors and snip it
off. If gran. be more
gran. than exuberant
you may use some
astringent, such as
red wash.

Ju 20 4	gr	XVI
To Lavender	3	II
Aquae	3	VIII

apply the wash to

the sp. of the ule,

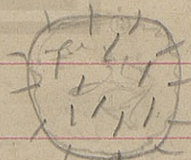
apply the wash to

the ~~ap~~ of the ~~u~~le,
This is good for
proud flesh & in-
dolent ~~u~~le,

In Indolent ule,
we use Ag 23.

The air is so defect-
ive that we have to
excite them in other
ways. May use pres.

such as P.C. oint,
Scarify, base of ~~u~~le
ant clean than the
base.



Where they lie on
bone you puncture
the skin at the edge
& thrust the knife

under the base of the
ulc.

In itable ulc. are
usually best treated by
finding the spot &
incising it.

Lecture Oct. 23rd 07.
Treat. of in itable ulc.
You may find the
painful spot with the
point of a probe.
In deepening this spot
is a new filament.
In anal ulcers you
cut across the spot.
In others you use
a caustic such as
agars.

Inflamed ulc.
treat. Part 1

ag 103-

Inflamed Ula,
treat. Rest, hot appli-
cations, and an ice
bag. May use soothing
lotions.

Rb acetate 3 ss

Tr. opium 3 ss.

Aquae 3 VIII.

you may add a 3
or two of 90% alcohol
or rect. spirit. to this.
Where infl. is very
serious incisions are
necessary.

Ulcerating Necrosis,
These are very serious
may be found in certain
forms of soft chancre.
It may be doing well
if there is a fever.

it will become
covered with a
black slough.

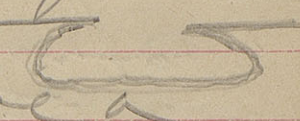
Wasp-like Gang. is a
sloughing form of
ulcer. You must
look after their gen-
eral health. Antisept.
fomentations must
be applied such as
lead water & opium
You may cauterize
the ulc. with red
hot iron. Or use
Carbolic acid. or in
some cases may use
H₂O₂. This prevents
re-infection. The infc. is
specific.
These forms of ulcers

are known as sloughing
phagedenic

specific.
These forms of ulcers

are known as longling
phagedaena.
Ulcers that result from
injc.

The most com. forms
are tub. & syph.
the tub. may be met
with on skin, lips,
nr. nr. & mouth.

They may start as an
abscess & then form
an ulcer. 
they may have a
ring of very tender spots.
The skin surround-
ing the ulcer is
paleish in color, &
edges may be irreg.
The discharge is usual-
ly thin & watery.

It is ch. & shows
very little tendency
to heal up at all.
They are common
in the neck, & is
usually due to glan-
rife, but they do start
from skin finge.
On M. M. & characters
are just the same
You should dry the
tongue when it is on
that organ, & then
look at them.
When they appear
on skin they are
known as Pyrus.
All syphic processes
are infe. infiltrations.

Gummatous ulcer,
the broken s-

are infl. infiltrations

Gummatous Ulcer,
Is a broken down
mass of globular form-
ed gran. tis. When
the gran. tis. is scooped
out, you may have
a circ. cavity, they
are ~~are~~ on the tibia.

Ulceration in malignant
growths is an accident
where there is no transition.
Malignant growths
always grow to an
enormous size.

Epitheliomata may
grow in this form
 and are known
as ulc.

Processes of Repair. Different Methods of Healing.

Healing by 1st, + 2nd +
3rd intention & by bled
clot.

5th Healing under a
scab. This may be
initiated by covering
with collodion, &
altho we speak of
healing by first intent-
ion is really healing
by gran. tis. There is
always gran. tis. present
tho it may be very thin.
Where wound is gaping ^{infection} it is 2nd.
Healing by 3rd intention

Conditions that interfere
with healing by first

Conditions that interfere
with healing by first
intention, etc. Where
you get a wound already
made & then you must
get healing by 1st intention.
You should not use too
much & too strong
aniseys. sol. Do not
handle & move too
freely after wounds.
The sides of a wound
must be brought in
contact. This prevents
the formation of a bed,
also between the
sides.

Symptoms & states which
follow healing or
may accompany them

1st As a result of any wound we have certain immediate effects

I Immediate

2. Traumatic shock
3. Aseptic traumatic fever

II Remote

1. Putrefactive absorption = Sepsis

2. Pyogenic Infection

(a) Septic Intoxication (Septicemia), (local)

(b) Septic Infection

(1) Septicemia

(2) Pyaemia

} Constitutional

3. Special infections, e.g. Erysipelas, tetanus, anthrax, glanders etc.

Shock

It is a disturbance of

Shock

To any disturbance
of the nervous system
that does not interfere
with the centers,

^{yet} & disturbs the heart
we give the name of
shock.

1st Shock with
marked cardiac
inhibition.

2nd Shock with exhaust-
ion of nervous centers
= torpid shock.

3rd Shock with exaust-
ment.

The 2nd is the most
usual.

The 1st is where the patient
falls down & is giddy.

faint, cutting resp.
slow pulse, pale.
then this is followed
by a red face & a throbbing
heart beat.
This is a reflex inhibition
of the heart, if the heart
is very irregular,
a blow in the epigas-
trum may cause
reflex stopping of the
H. Cold rect water
& C.H. Cl 3 may cause
reflex inhibition of heart,
fall dead.

Lecture Oct. 29th 07
Shock with severe
cardiac symp.
Is due to reflexes

Forced shock

Is produced by

Cardiac syncope.
Is due to reflexes

Forced shock
Is produced by
exhaustion of nervous
center. Is the
only true shock

Syncope is met with
after crushes &
bullet wounds of
abd. & other viscera.
At first there is a
little card. inhib.
But later on other
sympt. arise not
due to card. inhib.

We have a very severe
effect on vaso motor.
The card. inhib. effect
is very pronounced.
The main effect is
paralysis of vasomotor

Ante. The constant
contract, or vaso motor
control is destroyed
& the br. dilat. widely
& byne. is lowered
tremendously,
the blood accumulates
in the large veins
of abd. such as the
vena cava, & other
large veins.
We find the syst.
very very weak, if
slight cord. inhi.
may be the only syst.
met with. Later he
is cold.

Sp. of body is cold
& pulse is weak &
fluttering in severe

shock, with time

A heart is weak &
flutters in severe

shock, with time
analysis of vaso-
motor center. The
pulse is weak, fast
& irregular.

The mental depression
is great. Is marked
incoherence of speech
& thought. If body
is cold clammy &
covered with sweat
nausea & present.
Involuntary passage
of urine & feces.

Temp. is low & may
be 90° in axilla.
In fatal cases the resp.
is very shallow & body
cold.

In recovery the body

gets warmer & color
returns to face, pulse
is stronger & more
regular.

Fainting is sign of
reaction. When reac-
tion has been establish-
ed the temp. is elevated
Path: paralysis of
vaso motor center
Very often the shock
of severe injuries is
postponed under
excitement.

Savage tribes feel
shock very little.

East Indians have
very little shock
following surgical
injuries. They are

vegetarians.

Following surgical
injuries they are

vegetarians.

The pain causes the
lowering of pressure
When the above trunks
are anesthetized
we get no shock.

3rd variety of
shock without excite-
ment.

Occurs after burns.
May find pt. sitting
in chair & suffering
very little pain. In a
very short time you
may have a fall
of 60-80 bld. pr. due
to a sudden spasm
of vaso motor
center. may occur
in 1 hr.

Same result may
follow after surgery
he: maybe will
excite more or less.
maybe calm.

This shock is probably
of a nervous nature
& not due to absorption
of toxins

Toxins
When the symptoms come
on in from 12-24 hr
they are probably toxins.

Diagnosis of Shock

Is sometimes rather
different from synago.
In synago we get and
inter. In Japanese
means shock.

You ceased the crying
Shock may be hard

to ding, (ding. shock)

2. 15. 1864

Concealed the, causing
shock may be hard

to diag. (diag. shock)
In both shock & he.
we have a rapid
pulse. In he we have
intense pain which
is receding. In shock
we do not have much
pain until circ is
established.

Air hunger.
Is present in he,
& in shock it is not
present. It is noted
by the sighing of
the patient.
When a great amt. of
bed. is lost, the symptoms
of shock are very
severe.

Treatment of Shock,
1st, prevent it if
possible, Pat. with
visceral dis. have very
little resistive power,
the same with kidney
dis. Do not judge at
first too much before
operation use enema
of saline injections
about 20 min. before
op. inject about $\frac{1}{8}$
gr. morphine
Do not continue
the anesthetic for
too long time.

Keep the pat. very warm.
Prevent all bleeding
Op. as rapidly as you
can compatibly.

with good work. get

Opn as rapidly as you
can compatibly.

with good work. get
ready for severe Op,
to block the nerves,
Inject every nerve
think before cutting
them - blocking.
When pt. is shocked
raise the feet & lower
the head. Put hot
water bottles about
the feet. ^{Inject spine w/ intravenous} bandage
the limbs & abdomen
with rubber bandage.
May use air suit,
Inject strychnin
Orice says it is not
useful in pure shock
Adrenalin, is probably
the best. Use 15 m. of
1-1000 adrenalin.

in 1500 C.C. of normal
salt sol. Back it
it at a temp. of about
100°C. May have to
repeat this injection.
However this may
not do any good.
The unconscious time
may never return.
These points are the
ones to remember.
Resuscitation appar-
ently dead part.
The following are the best,
neck, thorax, &
electrical stim. of
H. may be good.
fresh, breathing if
it may be good.
May make an opening thru the

rib, and thus get to the H.

The diaphragm may be

It may be good.
May make an opening thru the

ribs, and thus get to the H.

The diaphragm may be
opened, + R. massage
Electrical stimulation. Is
not of much use.

Combine these with
artificial resp. Symples,
method. Not often
than 20 times a
min. Also drag the
tongue out with inspir.
After the posture.

Frequently, first
the head down &
feet up & then the
reverse.

In children you hold
them up by the legs
& massage the throat
& pull the tongue
out. Blue bedpice.

is very low you may
use sedation &
this increases the bed
fever. & this makes the
bed work. In fact
that a ^{paralytic} stroke
you must first allow
the bed to escape.
Traumatic delirium
Occurs in persons
with irritative nervous
conditions. Alcoholism
is the most frequent
cause. Overwork
or over strain of
psych. may become
a broken bed, apoplexy
or strangulated hernia
may be the cause.

In a few days the

may be the cause.

In a few days the
pat becomes flitting,
two types. Infl.
type. Mounting pulse
cheeks flushed high
fever & insensible
to pain. It corresponds
to themic fever.
Apply ice bag to head
& open the bowels may
use croton oil. If
but it is depressing
use weak diet such
as butter milk.
May use sedatives
but do not give any
thing that depresses
the H too much.
May use the Br.
but use styck with it.

In inf. type the
goat is murderous,
In time nervous from
the fear. Does not
sleep. Is very imagin-
ative, & flighty, & very
glib & tricky. Sp.
bump & tongue thru
& forward & quivering
of tongue, hands, & every
muscle. He fantasizes
he sees all kinds of
things. When alone
they ^{note they are} are continually
muttering. In practice
you just think up
what do not tie the
splint to the bed,
but leave it free
so that they can

wave it around.

but leave it free
so that they can

wave it round.
In treat, you will
find that you must
give sedatives.

It may be unwise to
with draw alcohol
entirely from them
may make strychn
take place of alcohol.
Give chlorides &
Br, Give nourish-
ing diet. Give milk
either sweet or
buttermilk.
Best to have a ~~female~~
male nurse. If
a female nurse
have a strong man
at hand. Some of
them will die right

27.

Lecture Oct. 31 ²⁵/907.

Acc. injuries of soft parts,

Wounds, Contusions,

Every contusion is a wound
tho there may be no
breach of skin, lig.
aments of fibrous tis. may
be torn across. A con-
tusion is a subcutaneous
injury of soft parts,
most idylt. sympt are
those prod. by extravasa-
tion of bld. One of the
most common is the
black eye. When we have
an extrav. of bld under
the cutaneous tis. we give
different names,

If of size of a pea we

different names, 1

If of size of a pea we
call it a pecthia,
If larger we call it
ecchymosis. Extrav
may occur into the
deeper layers of the
skin, it may separate
dermis from epidermis
+ is known as a bld
blister, ~~epiderm~~
~~derm~~ bld,

Very rarely these ^{extrav. of bld}
are met with in
areolar tis. The amt.
depends upon the vacci-
nation + amt. of tissue
+ size of vessel torn across,
small as in the axilla
+
The symptoms are usually

very interesting.
It almost always
get fever when the
extrav. is of any size.
If large, the fever may
get as high as 101° .
In important organs as
liver & kidney the
extrav. may cause
death. In H. urine
may be poured out
& cellulitis set up.
Usually the termination
is favorable. If the
bleed poured out, it
is absorbed. If it occurs
in a muscle, the blood
~~forms fib. tr.~~ is absorbed
& replaced by fib. tr.

Usually extrav. are
→ interested in cases

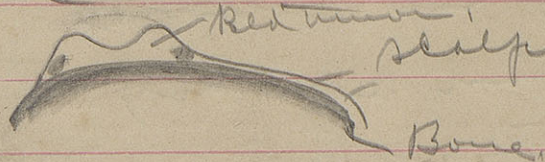
replaced by fib. tr.

Usually extra, are
not infected unless
tapped with dirty
instruments.

When dealing with pus,
it is hard to tell whether
it is due to an abscess,
or to bed. In the extra

you have pain &
fever, with swelling.
Diag. is very difficult
under certain instances.

In connection with
head & scalp, they are
hard to distinguish
from haematomata.
Red tumor
scalp.



Treat: A simple contusion
requires rest & the

application of some
lotion, may use an
ice bag, or may
use alcohol in the
place of H₂O, which ^{evaporates} ^{cools part of}
Sometimes there extrudes
a very large. Do not
open the aspirator &
draw the fluid off &
apply pressure, to pre-
vent re-filling. If it
keeps refilling open it
up and stop the
bleeding with the
If you find that it
like an abscess cavity,
you may pack the
cavity with iodoform
gauze.

Strangulation of soft
part.

ganga.

Strangulation of soft
parts,

So, these soft parts
become quite strangulated.
You may see instances
of this in the finger
where a ring has been
worn too tight.

A string has been
tied around the penis
by young boys to pre-
vent bed wetting.

Gangrene may result.
In some people, the
ring is a superstitious
thing to remove &
they do not want it
removed.

You may wrap a string
around the finger

but very strong pain

Often the he, will
be more severe where
the vessel is partially
divided

Very often there is
more bleeding from
a vein than from
an artery which is
small. Frequently
in the K the bleeding
is bad. Bleeding is
more severe where
the cut is transverse
than where it is longi-
tudinal. We take all
precautions to prevent
infection. Every antiseptic
wound should be clean-
sed. The he, is the
first thing to stop.

you may stop it
while your instru-
ments are being
cleared.

Remove all foreign
bodies. It is better clean-
ed by mild antiseptics
you may use normal
saline sol. If the
wound is very filthy
you must use more
vigorous measures,
then after this has
been done you must
bring the sides to-
gether & prevent this

If wide & large you
must allow for

perfect drainage,
It is best to drain

must allow for

perfect drainage,
It's best to drain
than a separate puncture

Time
5th Maintenance

A complete rest,
6th You must dress
the wound so that if the
discharge is come from
it they cannot penetrate.
If much discharge
dress with an antiseptic
septic dressing.

~~2nd Continued~~

2 + 3. Associated &
Continued.

they be almost always
caused by a blunt
weapon.
The edges of wound

may be preserved &
some of the t's destroyed
the edges may be irregular
& bruised, they
heal by gran. t's.
In some rods a
thin strip will actu-
ally die. If it comes
over patella or
elbow a great deal
of it may slough
away.

A laterated rod
maybe very irreg.
& edges maybe
contused. ✱

You may have
contused wounds
with the skin intact
& the inner t's.

reduced to a perfect

with the skin intact
& the inner tis.

reduced to a perfect
jelly, which can
be removed with
the hand, this
is due to cannon
shot, Tulsion =
where a limb is
torn off, there is so
much disunion of
edges & soft parts
that they don't
heal, until considerable
masses of tis. are
thrown off, as straight
then the wd. heals
by gran tis, or new
flesh intention,
The dangers are from
sepsis,
Another danger

in these wounds is
from secondary he,
It is due to the follow-
ing condition.

Struggling eats out
a bed vessel &
allows he, to take place
next! must have
perfect rest & drain-
age, & dressing with
Iodoform gauze.

In scalp wounds
we never draw the
edges close together,
& cause tension.

It is not wise to
disinfect these wounds
with strong caustic.
You can remove

all this that is dead

You can remove

all this that is dead
or cut down to
this that almost bleeds,
If it is very dirty
you may stamp it
do not use dirty
poultices, About
1-5000 or 1-10000
H₂O₂ may be used.

Nov. 5th 1907.

The most import. point
in continued wounds
is the sloughing, where
it is very serious we
can hardly prevent
putrefaction. In some
of very severe cases
of these wounds ampu-
tation may be necessary.

The following rules for
amputations

1st Where $\vee$ whole limb is
torn off & $\vee$ nerves &
muscles are hanging
loose. You must tie them up.
2nd Where the whole thick-
ness of $\vee$ limb is crushed
& $\vee$ bone is pulverized &
tissues are all crushed
ampt. is necessary
3rd Where soft parts
are stripped away from
 $\vee$ limb, this may occur
and $\vee$ at. still be
intact, then preserve,
seen in $\vee$ leg & arm
where the 2 or 3 at.
are present you may
save it.

The upper limb is much

are present you may
save it.

The upper limb is much
more vital than the lower,
and you may take
chances with it, & the
thumb may be saved
after all the tissue has been
stripped off (skin).
You can graft skin,
into it and thus save it.
4th If the joints are opened
& the neighboring bones are
very much injured
you may have to amputate.
When in the lower
limb. In the upper you
would spare. In the
lower extremity if you
remove too much bone
you will get a false
joint. In and you

may excise if the joint
has perfectly good health
& does not drink.

5th When the joint is
destroyed you may have
to amput. Because if
limb in become con-
genious. Is most often
seen in the popliteal
space from bullet
wounds. If you have
full control of your
knee joint it will
be better than an
artificial one.

When the nerves are
destroyed you may have
to amput - but not at
once, wait to see how
the regeneration progresses.

6th Where you have

once, wait & see how
the regeneration progresses.

6th Where you have
spreading gang. ampt. is
necessary,
Punctured or Stab
Wounds.

The area of Wd. me,
exceedingly large,
which W. skin wd. is
small.

The dangers are, 1st 2nd
danger from the
2nd W. danger from
sepsis, this is seen
where the wd. was
made by a dirty knife,
and you get Pyo Thorax
if in W. Thorax, these
Wds are quite dangerous.
They are immediately
fatal.

Gen. Treat

1st arrest he,

In a small joint,
we will as a rule
arrest he. If a lye vs.
is cut across you will
have to pack. If a
lye vs. like V. I. know
is cut across or even $\frac{3}{4}$
thru we will not
do much good.

In wds of thoracic a. a.
you cannot stop them
from bleeding, wds. of
the extremities can
be gotten at by stopping
the he. A ligature
must be placed on both
the proximal & distal
ends of lye, etc.

Vessels the size of the
brachiocephalic

the proximal + distal
ends of lye, etc.

Vessels the size of the
bronchus can be sutured
even when cut across,
so that they will not leak
& facilitate union.
You should open up
an aperture of entrance
then pass down a small
catheter and irrigate
the clots out. If hbd.
was caused by a dirty knife
leave a small rubber
drainage in it over
night. In stabs of
the thorax such as
hæm. thorax we use a
drain immediately.
In v abd. this is
not be necessary.
You should inspect

draw more pusht,
wds than we do.

2nd Foreign bodies in
joints.

Needles in the feet
and hands.

Where the joint, claims
he has a needle in the
joint or hand. do not
always believe them
& do not hunt for it
until you have located
it, when this is
done you should remove
it. It is better to
take ^{both} a transverse &
a longitudinal view,
Chronics and splinters
of wood should be removed
for they are liable to

Cause tetanus.

Pl

Tet

Of wood should be removed
for they are liable to

Cause tetanus,
Always give tetanus
antitoxin as a prophylactic
where tetanus is
threatened. When
a fish hook is the
cause of a wound, you
cut the eye of the
hook & thrust them
thru, Crochet needles
can be done in the

same way.

Arrow Wds.; The arrow
should be removed.

Sting Ray wds. are
very painful & slough-
ing usually follows it
~~It is~~ barbed & hard
to remove, Cat fish,
fins are similar, but

not so severe.

Prophylactic treat. of
tetanus is best.

Guns shot wounds.

They constitute a variety
of their own,

they are contused &
lacerated & also

amputated &c.

The ext. opening

may be small but

inside there may be

a great deal of injury

to v. tris, you find

to get gunpowder in

in a great many

of them. The nature

of V projectile has a

great deal to do with

the severity of the wd.

Splinters of metal, stone

& wood &c.

Great deal to do with
the severity of the wd.

Splinters of metal, stone
& of wood are simply
terrible.

The Modern Bullet
The effects of any wd
caused by a bullet
depend upon the kind
of projectile & its velocity
they are so very little
harm even tho it
has passed thru a
body, or it may even
pass thru 2 or 3
men. The big bullets
or soft nosed bullets
do a great deal of dam-
age. These bullets
will cause a great
deal of damage &
will knock a man

down & if they
strike a bone will
splinter it from end
to end

Sizes of bullets,
English rifle,
See Martini

Spanish = Mauser

French 8 mm in
diameter,
German,

United States,

the bullet that has a
greater velocity is
not always the best
but it is more humane

Lecture Nov. 7th 07,
the lecture

greater velocity is
not always the best
but it is more humane

Lecture Nov. 7th 07,
the bullets are usually
nickel with a steel
case. It will penetrate
any thing in the human
body. The average diam
is between 7 and 8 mm,
the ave. velocity is
about 650 Meters per. second
In missiles of high
velocity the soft parts
are not damaged
as much as when
they are penetrated
by high power bullets.
However they damage
soft tissues like
L, S, & K,
High velocity bullets are
an at., the old lead

bullets used to find
it alive, & it would
slough out later on,
1-300 to 500 yds. are
the explosive distances,
from 300 - 1800 yds
they will bore right
through tissues, will cut
through bone & will not
damage soft tissues so
much as when closer,
1800 yds and above is the
explosive range again,
Pistol bullets are
always very severe
in their effects.

So, when a man is
struck at explosive
range in head the
whole head is crushed beyond
recognition.

General Sympt.
are Pain Rhinorrhoea

much as ^{the} ^{eyes} ^{are}
range in ^{the} head the
whole head we crushed beyond
recognition

General Sympt.
are. Pain, shock, &
syncope. The pain varies
considerably. may
not feel pain during
the excitement. Occasion-
ally the pain is very
severe. The shock
depends upon the
organ hit. If L. Sy,
spleen, or R. one hit
the shock is severe
Syncope comes on in
some cases. there
is some. a great deal of
this thing. When killed
instantaneously rigor
mortis may come on
immediately, if man
was greatly fatigued.

Local sympt.
He, loss of air from
lgs & where viscera
are perforated.

He, is the most severe
condition of tissues.

So you should know
which is & aperture of
exit and entrance
If wd. is produced by
a high velocity bullet
coming from a distance
of 250 yds, the dif-
ference is very hard
to tell.

Pistol wds.

At close range the
aperture of entrance
is a little smaller

than the bullet, &
no powder stain

aperture of entrance
is a little smaller

than the bullet, &
no powder stains are
present, the edges are
very much bruised
& turned in a little.
the aperture of exit
is a ragged wd, & the
edges are everted & there
is a great deal of
undermining of Es.

If the weapon was at
very close range the
clothes will be powder
covered & times
powd stained.

A Winchester rifle
wd. made at a range
of 300 yds, the wd is
round & very little
undermining of Es.

A wound may have
splintered the bone
& then they may be
carried out to the
surface & wound
exit. All these rules
will not apply to
skull, as a rule
in that part the wd.
of exit is perfectly
humans,
these rules apply
mainly to skin,
so vessels nerves &
joints are cut there
A wd. over V region
of V femur at &
there is no penetration
you may rest assured

that it is injured
& may have a blast

you may rest assured

that it is injured
& may have a clot
formed in it &
when this sloughs
away he may have
complications
most common is

gang. Its onset is
very insidious & this
is why important because
you don't know where
it will occur.

Gang. of the popliteal
does not necessarily
mean that the foot
will die, but there
is danger. When it does
occur it may first
affect the big toe or
one of the others, then

a little will oam
on V heel and
other parts of foot.
later on, Augt.
Treat.

On field of battle
complicated can be
done except a primary
dressing of wound. &
Soldiers carry dressing
with them.

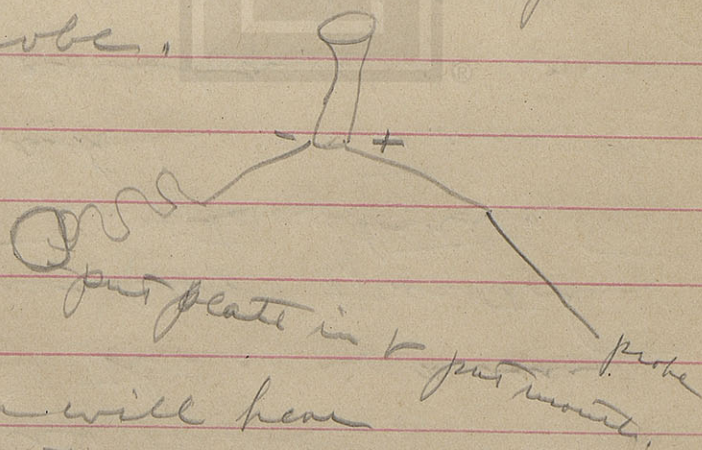
Removal of V bullet
This is not to inst. as
a direct op.

Stop all he. first.
First find the bullet
before you search
for it surgically.
If you can't find it

it by palpation, use
an X-ray. etc. etc.

for not surgically
If you can't find it

is by palpation, use
an X-ray. If this is
not available use
a probe & put it part
in the position in which
he was shot & then
the probe will pass
directly down to it.
^{St. the bullet will drop out}
Probe no hole until
your hands & probes
are clean,
You may make
and use a telephone
probe.



you will hear
the typical crackle when you
touch the metal.

Treat of Hc.

St. this is a very complex operation. It is often better to pack in cotton core. Secondary Hc is very grave, & is usually considered as the beginning of V end.

It is ~~it~~ wiser to amput. right away as the old surgeons did. It shows that the wd. is infected.

St. ligature of ar. is better than amput.

Venous Hc. is not of very much import. It can usually be reduced by pressure.

Treat. of Prostatitis
damaged by prostatitis

very much might. It
can usually be
reduced by pressure.

Treat. of Wounds
caused by gunshot wounds.
It depends upon
the kind of projectile
used. They are
more dangerous
when they open up
eye, joint cavities
like knee & others.
In actual
warfare you are
often forced to amputate
because you can't
get aseptic dressings
& gangrene sets in.
The gunshot wounds of
warfare are very
much better healing
wounds than those caused
by pistols & ordinary

Weapons.

Where the wound is
severe, you should
use ~~antiseptic~~ anti-
tetanus serum.

Wounds caused by insects
and poisonous
reptiles.

These poisons are
intensely irritating
& are ~~not~~ septic.
Such insects are
mosquitoes, bees,
ants, spiders, scorpions
& tarantulas.

The effects depend
upon the amt. of
poison introduced.
The less severe symptoms

are burning pain
& ~~swelling~~ redness

the less severe symptoms

are burning pain
& an area of edema
In many people
edema will pass
away & a severe
inflammation will take
place with a dense
infiltration.

Bleeding when not
removed are worse.
When multiple
things occur and
infiltration occurs,

Lecture. Nov. 12th '07

80. Sympt. of insect
stings are very slight.
In insect. sting
we have collapse
& heart failure.
In spider & tarantula
bites, there are
cramps, heat, as the
feeling of weakness,
& feeling of constriction
around & chest.
Pain in back of
& head.

These sympt usually
last about 12 hrs.
Treat. of stings insect
varies, vary much.
Usually simple rem

— edies are usually
sufficient. Die H. H.

Usually Timpai rem

edies are usually
sufficient. Dil H₂O₃
may allay the irrita-
tion. Often an ice
water poultice
will allay sympt.
We usually treat
sympt. as they arise
may use strychn.

Bites of poisonous
snakes

There are about 27
kinds of poisonous
snakes in U.S.
The Gila monster
is a poisonous reptile.
The cobra is not
present in America
at all. The moccasin,
copperhead

+ rattlesnake, in U.S.,
are common.

In East India
about 12000 people
are killed every
year.

All poisonous snakes
have a definite structure,
+ poison gland. The
gland is situated under
each masseter
muscle, + the poison
is ejected thru
the hollow in V

fang. At time of
striking the masseter
muscle contracts +
forces the poison into
the tooth.

3 poison fangs are
present in snake

forces the poison into
the tooth.

3 poison fangs are
present on each
side. The poison
is a sticky yellowish
fluid. It is an alk-
aloid. If a snake
has been emptied
recently the part
will probably recover,
because less poison
is injected.

Symptoms.

In a ferret or
an hrb. the part
becomes anxious
& is nauseated &
vomits. When only
a little poison was
injected the part does
not get any worse

In worse stages,
the heart is weakened
resp. is shallower.
The part loses the use
of its limbs. If part
lives long enough there
is intense hyperemia
& pinkish color, oedema,
intense burning pain,
diffuse suppuration
& gangrene of skin &
even of bone. When
lge amt. of poison
is injected. In small
snake sympt. are not
so severe.

The time of death
varies from a few
seconds in small

animals to several
hours in man.

seconds in which,

animals to several
hours in man,
A man was bitten
by a rattlesnake &
died within 9 hrs,
A cobra bit another
man & he died in 1 hr,
These bites are always
very serious.

Rules to prevent poison
from getting into
system.

The only way to stop
it is to put a tourniquet
on V limb &
rub V wound, but
the best way is to
incise the wk. to V
bottom & cleanse it.
In some cases it is

best to dissect out
the edematous part
you may inject all
around the place with
1% KMnO₄.
The South Africans
place gun powder in
the wound & set it on
fire, the best way
is to loosen & touch
just for a minute
for a minute & a
half, & then close
it off & let it go
for 15-20 min
& then let the inc
go for about the same
length of time.
You must keep the

part going all the

you must keep it

just going all the
time so that it
will be kept up.
There is an antitox
made by Fraser &
Colmett, This is
obtained from the horse
bleeding serum. This
serum is called
Antivenom. You
must use it immu-
diately or it will
do no good.
Treat of diffuse infl
& sloughing, this is
done by free drainage
& incisions.

Give Strych in $\frac{1}{100}$ gr

asolve is good,
walking me, good.
There is no specific
for these bites. Nk3 is
used in v Brown
snake bite of Austral-
ia. Ammonia is not
a specific.

Hydrophobia

Is a dis. that occurs
in man as v result
of inoculation from
lower animals. It is
usually obtained from
v bite of v dog, but
any animal can
inflict v dis.

For many yrs in
England there has been
strict laws regulating the im-
portation of dogs.

For many yrs in
England there has been
strict laws regulating the im-
portation of dogs.

The regulations are
that V government
will keep V dog
for 6 mon. at your
expense, & V dis. can be
stamped out.

It seems to appear
in epidemics. Heat
has nothing to do with
the dis.

Symptoms in man
& dog & other animals
In dog: A dog that
has been a bright
dog will lose his appe-
tite & move in V corner.
A dog that has been
very particular about

what he eats will
eat very ravenously
even his own feces,
He does not like
people ^{to be near him} when he
is in a street
he goes on in an
aimless way, he
will not bite you
unless you get in
his way. He scratches
at corners of his
mouth. There is
loss of power in
hind legs.

In later stages
he will have fits
& snap at any thing
that goes near him

Dogs never recover

that goes near him

Dogs never recover
from the dis. You
should keep the
dog & determine
whether it was hydro-
phobia or not. If
dog did have it
ship. the post. to
Pastern Institute.
In human

3-3 20 of people
bitten are life.
This is usually due
to the dog biting
them the clothes.
bites from wolves
cause about 60% of
of life. This is
because they bite the
face & hands.

We do not know
the nature of virus
you take & spinse
cord & mix it up
in a mortar & inject
it into an animal
such as a rabbit & the dis. will appear.
There is a period
of incubation
from 147 authentic
cases it did not ex-
ceed 6 wks in most
of them.
13 days to 6 wks is the
time of incub.
symptoms.

Set. from very start
there is sensation
of pain & itching

+ heat all over &
body. Also fever

these is a sensation
of pain + itching

+ heat all over
body. Almost every
authentic case will
have vesicles under
tongue. Usually
+ irritative symptoms
come on as in
tetanus. Usually
there is tightness
+ pain of throat
+ jaws. They complain
of sore throat. There
are reflex spasms
in larynx. Of deglu-
tition. They have a
feeling of constriction
about throat.
Cannot swallow H₂O.
As time passes the
irritability of larynx

2958. is more or
less the noise of
running water will
cause a spasm of
digestion & respiration
then & spasm
goes ^{into} & diaphragm &
the prod. a loud
sneezing with some
think as looking like
a dog. Later on
& spasms appear
nearly all the time
in & body & then
they may disappear
for a while. There
is a mucoid
discharge at
mouth. this is from

Usually in 4 days
the animal

discharge at
mouth this is from

Usually in 4 days
the patient is dead, He
dies from cardiac
failure.

Prognosis: Is always fatal
unless treated by
Pastore's method,
Pain.

Treatment: 1st Preventive
2nd Curative.

Treat the bites about
like you would make
bites, they should be
incised & burnt by
a caustic. Treating
dog bites is accomplished
by dipping
amalgam in nitric
or pure carbolic acid.

and make sure
the acid comes
in contact with
all the surface where
it had been made
by the fungus.

Nov. 19th 1907.

Treatment of hydroph-
obia (continued)

Do not be content
with treating your
case like this but
send to Pasteur Lab.
Pasteur Treat.

Pasteur found that
the virus of hydro. is
always present in the
nervous system.

When these tissues

always present in
nervous system.

When these tissues
are ground up and
inoculated in a
healthy dog, rabies
will result. He used
monkeys also, and
injected them in
succession. He found
that virus was atten-
uated after letting
it run thru several
animals. He found
that monkeys when
thus treated, ^{and injections of their spinal cords} would
prevent rabies in
dogs. He then used
rabbits & found that
the virulence increas-
ed, & caused death of
the rabbit in 7 days.

the dis, was ushered
in by paralysis of
hind quarters. I
He found that by
taking the cords of
these rabbits and
suspending them
and drying. Then
the virulence was
gradually lessened
and in about 14 days
the virulence was
lost. He then made
emulsions of these
attenuated cords &
injected them into
the rats.
these cords were pounded
up in a mortar

with 4 times the
amount of water

these seeds were pounded
up in a mortar

with 4 times the
amt. of K cod before
drying, of veal broth
Then it was injected
3 times daily 1/3 at
each injection, the
treat. lasted for 10 days

1st day

1 st	12	10	8
2 nd	6	4	2
3 rd	0	0	1 (at night)
4 th	8	6	4
5 th	3	2	0
6 th	0	0	1
7 th	0	0	4
8 th	0	0	3
9 th	0	0	2
10 th	0	0	1

In very marked
cases the 1st stage
treat. is repeated.
The mortality was
reduced 1 $\frac{1}{2}$ %.
Is only treat. that can
be relied on.
When the dis. is
developed palliative
treat. is of no avail.
Nearly every one
dies, you may
make them more
comfortable by using
sweat vol. of cocaine
on the fauces, and
other quieting drugs,
you may give K & Al
if convulsions are severe

may perform tracheotomy

if complications are severe

may perform throctomy
Gangrene

Is spoken as molar
death of tissues.
Is same as necrosis of
bone. When occurring in bone
classifications of Gang,
1st Moist.

2nd Dry

The moist gangrene will
occur where the blood
is retained in it, ^(the tissue)
Urinary extravasation
into scrotum will
give rise to gang.

Strangulated hernia
will cause gang. of
the gut. & is a very
marked form of gang.

Dry gang. occurs where
v blood escapes, and
v limb begins to shiver
It results from compres-
sion of a. & v main
gang. where v is
compressed,

Another classif.
1st Spontaneous,
2nd Traumatic,

Spontaneous gang.
occurs where there
is some interference

with circ. { due to weak heart
spontaneous thrombosis & embolism
of v. a. }

Traumatic, is where
there is inflammation
set up such
as ac. inf. or by actual
ly destroying v. circ.

3rd classif.

as ac. & ...
by destroying & etc.

3rd Classif.

1. acute,

2. chronic,

Local signs when
a part dies,

1st part is colder than
normal part,
2nd sensibility is
lost.

3rd The functions
are abolished

Character of minor
gang.

The skin is engorged
with blood & V part
is swollen & skin
is discolored & is

usually clayish or
greenish, the cuticle
separates readily &

most cuts exposed
the color is lost &
+ changes to a dark
brown. When pressed
upon it has an
emphysematous feel
& part cracks
from the formed
gases due to decomposition
in dry gang.

The part does not
contain much
red. the color is
like tollp. The
skin is honey &
semitransparent
and then dies
& is mummy like
+ may be black.

in color

may be black.

in color
sympt. If there
be no sympt.
at all. unless
the part is large &
rupt. a finger
would not give
rise to trouble &
fever may not occur
until the part
begins to separate.
When the part
is large, you get
severe sympt. Weak-
ness, fever.

Causes:

1st exciting or
immediate causes
2d those that act
primarily by causes

of circ. amongst
them, 12th cell.
anest.

① ⁵Signature of at. on
chromatid of at.
or an anabolism
of an at.

② ¹Obstruction
of circ. from within
or from without
exchanges from a
growth of a tumor
or of tight spines,
(C) 3rd Obstruction of return of
venous blood from
part. may first
get extreme edema
(d) 4th Extreme weak
nervous system. a. visceris
(or loss of force from behind)

In exhaustive fevers

(A) ...
nerve) h.t. & visceros
(a loss of force from behind)

In exhaustive fevers
& in malignant
dis. & also in stor-
bations.

(2) Acting directly
on tissues
(a) (Traumatism)
Crushes, bruises,
burns, scalds,
extreme cold,
poor bites & cankers
& strong acids,

(B) Causes prod. of infl.,
(Erysipelas, etc.)

Varieties of Gang
Senile Gang.
Is spontaneous
gang. It is always
associated with a

leg. part. syst.
the me. gran.
K. + hyperth. bend
In these conditions
V. as. m. show other
rooms. this condition
is well marked
in V. leg. at.
the smaller at. are
colicified + brittle
this process goes on
to V. small vessels
but not to V. arteries
+ the tis. are not
properly nourished.
When injuries occur
in people suffering
from this dts. and
a hld clot is formed

and thrombosis
occurs. Thrombosis

a bld clot & formed

and thrombosis
occurs the process
keeps on extending
until it reaches
a place where
collateral circ
is good. This is
the way white gang
occurs.

There is a complaint
of pain & itching
& tingling of the limbs,
the pulsation of the
arteries is not present
there is no known
cause. the big
toe shrivels up
and dries up & drops
off. The toe looks like
the skin of a mule

path. Progressive gang,
and black grape,
treat. If gang is pro-
gressive that dis.

Cannot be stopped.
Brodie recommends
a low angle. If
femur. In cases
that have a tendency
to stop, let it stop
& do not interfere
may slip off the
distal end.

Never angiot. under
a tourniquet, but
pick up each art,
& vessel & tie them
off before cutting them.

Lecture Nov. 21th 1907

Lecture Nov. 21th 1907

Atherosclerosis is probably an
infectious condition of V
media.

Necrosis often may
extend to V joint. In old people
when they have serious
gonorrhea V presentation
of V tubercle at cannot
be felt, & the foot
is cocked & the slightest
injury causes a very
bad condition.

It is not wise
to aspirate in many
cases. ^{but let healing take place & if will} use powder
on it and keep it
dry. You may pump.

dried air onto it,
When using antisept,
be very careful about
carbolic acid, & do
not use it, use
talcum & Salol
on it as a powder.

If condition does not
get better cut off
dead joints. You
should cut well
above the gang, and
do not use tourni-
quet, when a pt,
high up you must
go above the origin
of *V. gastrocnemius*.
This takes in
V lower 3rd of V femur.

Some gang was due to use of tourniquet
where it occurred in the leg.
It is not uncommon

thinks, this takes in
V lower 3rd of V femur,

Some gang was due to use of tourniquet
relief for occurred in legs
It is not uncommon

to find gang, occur
in V flaps
Tried: these feet
do very well with
opium & do better
with it than with-
out it, give opium
pills. may give 4-5
grs per day. 3-5 3
Whiskey. Me. begin
You must relieve pain & keep off
L milk, per day,

Diabetic Gang
was at one time thought
to be quite a separate
from senile gang,
It occurs in feet,
who have atheroma-
tous atherosclerosis. The periph-
ery is calcareous.

The gang in diabetic
cases is moist.

In senile variety it
is dry.

Treat of diabetic gang
is same as that of
senile gang.

Give opiate.

Gang Occurring from
Embolism.

It is a dry gang.
most com. Cause is for
an embolism to

lodge at bifurcation
of the popliteal. Then

it causes embolism
of the tibia etc. &
extremity suffers
gang.

not so slow & chronic gang.

The moment the

of the whole
extremity suffers

going.

not so slow & ch. as will gang.

The moment the
embolism lodges
the part has intense
cramps in the limb
the toes become ^{waxy} &
gangrenous, it
pale & it more

It may go up to knee
& then stop.

Treat: Usually amputation
is necessary. Where
embolism is certain
you should cut down
on V. at, and pick
it up and open it &
take the embolus out
& then sew it up.
The incision must
be longitudinal &
near the bifurcation

Cause of ^{embolism} is usually
a vegetation from
A. or from Aneurysm.

Uses small needles
for sewing art. ^{to very fine}
Gang may result
from a thrombosis
of an art.

It may occur from
some tumor.

Thrombosis of art.

(a) Senile gang.

(b) Syphilis.

When syphilitic gumma
forms it can degenerate
from thrombosis of
vessels. This is called

syphilitic endarteritis.

Another condition of end-
arteritis similar to syphilis

is called Endarteritis

Another condition of end-
arteritis similar to syphilis

is called. Endarteritis
proliferans, described
by Wimmerman,
It blocks up vats
by prolif. of endoth.,
Raynaud's gam, or
~~symmetrical gangrene~~
^{occasionally does not lead to gangrene,}
The Path. of Raynaud's
dis, we do not know any
thing about. Two
varieties of this is,
^{may be seen in people who are cold}
① Mild local asphyxia
② Severe, gangrene,
When you press on it
nails of hand you
can't see that there
is any blood there at all
^{and they are very}
but there is enough
to keep tis. alive,
after awhile the time,

is restored.

Progr: most cases get
better or well,
causes, we do not know.

There was a short
period of local asphyxia
& then ~~you see in~~
Many cases ^{are} clarified
with Regimans etc,
but it was really
due to a febrile state.
It may occur in
the cord, a finger & nose
Regimans ^{severe} ~~gangrene~~
^{and from many precede it or it may have}
^{about a picture of its own.}

Gang, following
obstruction of veins,
is very rare, & does not
occur unless it is the
main vein & other collateral
is very poor; a venous ^{cell}
Gangrene from strang-

is very rare, it does
occur unless it is the
artery & other collateral
is very poor; as seen in ^{all}

Gangrene from strangulation, may be
seen in bobbies &
in ^{injuries} ~~injuries~~ ^{when things are}
when ligatures are tied too tight.

Gan. following
irritation,

This depends upon
certain things,
The effect varies direct-
ly to the strength of
irritant, &
inversely to the
resistance of tissues.
In diabetic people
very trifling injuries
will cause Gan.
From infl. the
conditions involved
are following:

1st Injury to the
tis. directly & the
cells are destroyed
& interference with
walls of blood vessels,
When you get an
injury to the blood vessel
there is a diminution
in the blood flow.
When the intima
is injured the stenosis
is immediate & complete.
The infl. cause
swelling & the vessels
are compressed &
the tis. are strongly
inflamed & gas. necrosis
Phlegmons, abscesses
Phagocytosis, Hyaline
gang. Conk. necrosis.

gas, carbuncle

Phagocytes, ~~leucocytes~~
Phagocytes, ~~leucocytes~~
Concave mirror,

gas, carbuncle
malignant pustule
This form due to swelling
of tip is the most
form. There is mark-
ed septal septum.
Line of Demarcation

^{dead part,}
line. B ~~line~~ A

There is no part change
in A but all the
changes take place in
B. The dead part
acts as an irritant.
The living part proceeds
to eat up the dead
part. There is ^{dis}continuity, whenever
a red line is formed
there is a probability

~~the bones line parts are dissolved~~
~~when this is done it is done easily for a window~~
~~to get up the window in 10 seconds~~

that the gas will
stop. from this time
of denudation there
is a discharge.

this line of denu-
cation shows where
the gas is going to
stop. ^{it also shows the light for the} wait for it before
anything.

ding. as very easy
wait and you will
be able to tell.

Prog. is bad for the
part, but not nec-
essarily for the part
of time of denudation.

from daily, it shows
part has good resistive
power.

has good reserve
power.

Treat 1st constitution
as is being met.
Gen. prin. of treat
1st ^{Keep & have opening give ~~the~~ ^{the} ~~system~~ ^{system}} ~~Remove the cause~~
but you can't always
do this, you must
never bleed the part.
In infl. joints the
died should be careful
noticed. It should
be light but nutritious
give saline purges
& counter the B to act,
2nd support & syst.
for & process are long
continued. Do not
give lge. doses of Fe,
stim are good.

give pure wine, whiskey, & eggs
eggs are excellent,
do not give the
great too much alcohol
3rd lessen irritabil-
ity of V syst, give V
giving juice about
gr every 6 hrs. if
it is good. In certain
cases you may use
other sedatives,
Local treat, keep V
part dry, do not
use flex seed practice
If you must use an
antisept, do not use
carbolic acid ^{have to}
^{do not use hot} ^{formulations} ^{if less you}
use hot ^{formulations}
of Hg Cl₂ 1-10000
to 1-8000 ^{if enough occur}
11. Cut away

the dead parts + do

2 12 8000 if strength occurs
11. Cut away

The dead parts + so
not cut into live
parts, creating
the drawings for a
line of demarcation,
1-5000 Hz etc,
It is hard to lay down
a rule as to when you
should accept

Nov. 26th 1907.
Amyst. It is not
very easy to tell
~~tell~~ when to amyst.
you must first
try to see where
the line of demarca-
tion is to occur.
In many former
and prob. future
mobs. & similar

Now you can't
tell where it will
let you. You
wait for the
denudation
to form usually.
The great respect
claws of glacial or
spreadable trans-
tric gang. you
can't wait for
denudation
to form. It's
character by the
formation of
gases in the
the empty
gang you should
wait early.
In any of these gangues

you should wait early
things up.

gang you should
amput. early
In any of these gangrenes

you should amput. early
things.

In wounds wch.
form a cause
gang, by occlusion
of A. A.

Where it is possible
at it is wounded
you must amput.

In such a manner
that all flows are
supplied by A. A.

^{Sp. rapid operation.}

from above & wch.
The spreading gang,
septic gang. (traumatic)

& ligament of A. A.
^{Causing gang.}

amput. ^{done} early.

In other
forms you may
wait and should
be in no haste.

In slower forms you should
not forget time of demarcation
angst.

When and where to
angst. Is a very
difficult thing to
say.

Infectious Bed Sores

Is really a local
process. Is usually
produced by a part of
body being pressed
on for too long
a time & too severely
so that it dies,
& a limited slough
is produced. This slough
separates in the
usual way. The
dead tissue is thrown
off, & granules form
then healing occurs.

A healthy man may

off, + grow the forms
then healing occurs

A healthy man may
lie in bed for a
year & bed sores
be formed. In
certain conditions
where the circ. is
poor bed sores
are resistent, as in
old people & in
long continued
fevers + in dis. where ^{weak} ^{resists}
3rd point. Spinal
nervation is destroyed
or paralyzed, resistent,
bed sores will resistent
very quickly. We
see this in curles
of spinal
cord.

Bed sores may form
over the heels from
a pressure of bed
clothes. Medication
will not cure it,
But good nursing
will. The Trophics
cases are & worse,
Do not be surprised
if bed sores do form
& most usual place
for them to occur
is over & most prom-
inent part of sac-
rum. They may
cause septicemia
inguis, etc. etc.
It is preventive,
one for & not very

well. Wash the back
in alcohol

one foot just very

well, with the back
^{in alcohol}
1. see that it is dried
powd, with ^{powder} talc
powd. see that V
just, back is not
pressed upon in
places by using a
rubber bed or rub-
ber ring. An air
bed is probably V
best. the ring is probably best.
Bed sores can
undoubtedly be pre-
vented, in fevers
you may wash
piece with gly c.
and alcohol 75%
then take = joints fresh

~~Boils & Abscesses~~
you may use
Potassium & silver
^{old surgeons used Balsam of Peru}
you may use
to go Ag No 3 to the 3
may use Balsam of Peru
in. In a Collision

you may use ^{Iodoform} Iodoform
in a Abscess + Iodoform
and sprinkle with
Iodoform. ^{always look at r}
^{pat. look & do not rely}
^{on Iodoform}

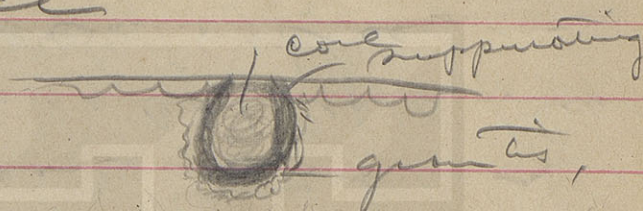
Use the Ag No 3 sol,
when I find it is
becoming red,
Furunculose =
Boil.

Crops of Boils =
Furunculosis,
A Boil is a localized
infl. affecting

skin + subcutaneous,

infl. affecting

skin + subcutaneous,
tis + resulting in
a elongated ^{pus} called
a core around
with supp. Takes
place



Manner of Infc.
It usually occurs
in connection with
a hair follicle.



You never meet
with boils ~~which occur~~
In parts where there
is no hair, but can
-uncles may do so

they m. occur
on all parts
that have hair
V. pyogenes aureus
is the cause, &
V. impl. m. m. m.
whenever V. py.
escapes V. py.
is less severe
As the boil does
not mature or
come to a head,
this is called a blind
abscess, they m.
occur at V. m. m.
up of ~~the~~ an attack
of furunculosis, ^{or beginning}
they appear by
the front first

becoming impled

the fruit just

becoming inflamed
gastrointestinal sensa-
tion at puberty. A
little vesicle
forms, a little red
run ^{collects} the
^{and in this form} the
is, in center app-
ears black

Staphylococcus
pyogenes aureus
at V canal.

They are very com-
mon in young people and
in very old people.
They may occur in
young people at puber-
ty. May occur in
thin and plethoric
people.

they occur, occur
after fevers, and
in diabetic cases,
they are common
in overtrained
athletes. They
are liable to occur
in summer or at the beginning of autumn
in fall, after a long dry hot
the const. sympt.
are not very heavy,
& pain is not
severe in some but
more in others,
light fever & rigors
in some.
When several boils
occur there are,
pyemia, result-
ing and high fever &
weak pulse,

Treat where he

and high fever &
weak pulse,

Treat where he
has had 3 or 4 boils
exam, urine for
sugar, and ^{candy} (Binglar
dis). 2 young men
it may be due
to debilitating
cares of you &
you should exam
the condition of
v house & drains
& drinking water,
v Elixir of I, 2 & S
to food where a ton-
ic is needed
^{course, symptoms must not be overlooked}
~~time~~ In plethoric
conditions cut
v food down and
use rice & milk
diet

~~DIFFERENTIAL~~
at night & acidity in morning
Give ^{saline} purgatives
CaO ^{of which 30% is soluble in water} given
in doses of $\frac{1}{4}$ to $\frac{1}{2}$
gr. It is not a
specific.
Should treat as very
urgent. You must
try to protect their
follicles in imme-
diate neighborhood
You may do so
by pulling & hair
out, and then
touch up the place
with ^{on a bit of fine probe} HgCl_2 or
carbolic acid ^{injected}.
It is a very ^{good} fomen-
tation. You should use
if there is a discharge do not

use fomentations unless they
are antiseptic. fomen-

tumors all good
You should use
if there is a discharge do not

use fomentations, ^{these} means ^{pacant} antisept, fomen-
tations instead
of flaxseed,
One of the best ways
to relieve pain is to
continually bathe
the part with warm
water,

Incising
Some people ^{condemning}
this, they think they
should be allowed
to open themselves,
When the boils are
opened with a
knife they cause
a big scar, you
should not open
in the best & free

Some use a
corn plaster
and wash it
down with
collodion,

rock look like carbuncles
Edge, boils should
be cut, short as
quickly as possible
prevent spreading of virus.

Carbuncle
Def: Is a specific
spreading type of
subcutaneous
abscess, affecting
skin and terminating
in death of affected
tiss.

the dead portion of
tiss. is slough.
It is greyish or ash
colored, It does
(Is hardly ever black)

not start as an

colored, It does
(Is hardly ever black)

most start as an
infe. hair
pollice, the start
ing point is an
enlargement of minor
-organisms, which
causes immediate
death of the
symptoms. All v
symptoms of localized
infe. are over
the skin will be
very rapidly affected
A swelling of the
It is very boggy in
and tender, ^{1/2 inch & there} ^{is a}
softens & feels like
dough. On the
surface little
bubbles form

will look like
blister, the
is is bluish in
color, when the
puscles burst you
will get an aching
very jaws,

The puscles
get four pus from
around & through.



You should not
squeeze ^{when trying to expell & pass} hard, ^{it}
but gently,
the pain is burn-
ing & very excru-
ciating, they are
very common on
back of neck
the openings fuse
together,

You do not get all a slough out at once.
the slough separ-

the openings join
together,

You do not get all a slough out at once.
The slough separates
very ~~sluggishly~~
slowly. The cervical
vertebrae and
muscles exposed
and ST. The
cord is exposed,
V slough may
extend down V
back.

The lateral outline
is the sternum marked
the occipital protuberance
above and the shoulder
(Spine of scapula) below

