



Typhoid Fever -

This fever has many synonyms -
Enteric Fever, Gastric Fever,
Abdominal Typhus, Fall Fever,
Pythogenic Fever, Putrid Fever,
Wahlgren's Mesenteric Fever,
Night Soil Fever &c &c

Definition. An Endemic
communicable disease, probably
generated by decomposing sewage
matter; characterized by its
frequently insidious commencement
the Occasionally remittent type of
the fever, associated with an
eruption on the skin, of rose
coloured spots, chiefly on
the abdomen, appearing from
the seventh to the fourteenth day,
& occurring in crops; each
spot remaining visible for
three days. Diarrhoea
of a bright yellow colour &
alkaline reaction.

Swelling in the Right Iliac Fossa
& in most cases tenderness
over the abdomen

Its average duration
is irregular, commonly 21
days, but occasionally
prolonged to 30 days - the greatest
probability being towards the end of

the third week

It was known to the ancients: & prevails in any part of the World; having no difference as regards Sex & Occurrence as freely — if not more commonly among the Rich as the Poor: That being essentially an illness of youth & adolescence, ranging as a rule between 15 & 25 years of age. The most

common season of its occurrence is September or October; frequently after hot & dry Summers. Overcrowding having no effect on its propagation — as it is as bad in the Country as in Towns.

Yet the susceptibility varies greatly with the individual — it being seen that those living in a locality more or less prone to Typhoid — have less risk. than those comparatively strangers to the neighbourhood — depending evidently on some unexplained accommodation to the Fever poison.

Exciting Cause -

It is Endemic due to local causes: or can be transferred from the skin through. The Miasmatic origin is rendered probable by its occurring in places removed far from travel where no cases of the kind have occurred for years - & where there is not the least suspicion of a contagious origin.

The most simple explanation is, that the low organisms that constitute the germs of Typhoid Fever, increase not only in the bodies of patients - but outside them also. It is known to occur "sporadically" in so called "House Epidemics" especially where quantities of Animal Matter are decomposing: & the water of a well thus contaminated communicates the disease throughout a household.

It is considered doubtful if its poison can be swallowed with decomposing meat; yet there are instances on record to show that Milk is believed to be no infrequent medium of its transmission -

Some doubt if it be contagious, yet it is communicable in some degree - the poison

4)
being contained in the
Feces. Most cases
cannot be explained by
contagion, but sewage and
decomposing matter, have
been regarded as a fertile
source. Also Sewage Fases.
Some were content
for Spontaneous Generation.

Worbid Anatomy

The first Worbid Change is
Congestion of the Small Intestine,
at its lower end: which is also
swollen, relaxed, & covered with
mucus & Epithelial masses

Second Change It is located in
the Intestinal Glands (Aggregated
Solitary & Peyer's Patches)

Third Change They enlarge & usually
Coalesce & the Swelling or
tumescence was at one time supposed
to be a deposit from the
Blood - but this is merely
a proliferation of the Cell
Contents - & the enlargement
has the appearance of being
covered with pimples.

Fourth Change The Cell Contents

now begin to break down & to soften & in most cases the contents escape by ulceration of the mucous Membrane covering them; this ulceration may be limited to a mere ulceration & then the contents may escape: but sloughing is most common leaving the characteristic Diphtheric Ulcer - The form of this Ulcer is -

1. Round or oval - variable in size
2. Lies in the long Axis of the gut
3. It is opposite the Mesenteric attachment
4. Its Base is the Muscular coat & this smooth but ragged as in Tubercular Ulcers.
5. In healing the edges fall down & the contraction remains behind: the Glands are not regenerated: but the Mucous Membrane re-forms.

The risk of sloughing is perforation: but the Ulcers may become weak causing stretching of the gut & the result is a tear thro' the base of the Ulcer - not really perforation - but resulting from violence as food etc

The Spleen is also enlarged its substance becoming very soft

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it may suddenly give way
causing death by Hæmorrhage into
the Peritoneum

On the Skin we often find
Pustules & in some cases
Abscesses in the subcutaneous
connective tissues.

Thoracic lesions also occur:
infiltration of the lungs, as
the complication of Pneumonia:
enlargement of Bronchial glands
like those of the Mesentery.

Bronchial Catarrh & Laryngeal
or Bronchial Ulceration
Calcification of the Pulmonary
tissues occurs often in considerable
portions: the great debility of
the typhoid state, seemingly
to favour the occurrence of
Pulmonary collapse.

Symptoms

The attack is insidious
as there is no determining the precise
day by Rigor &c.

The patient complains of general
Chilliness, loss of appetite:

Headache, Thirst, faintness -

Pain in limbs with Sickness or
Diarhoea -

Sometimes
Diarhoea is the first symptom
with pain in the abdomen.

The Pulse is accelerated

Temperature raised Tongue
red & irritable. Restless in
some degree - but still the
patient may go about all
the time

At the end of the first week we find
the Pulse ranging from 90 to 120
becoming more rapid at night,
but falling in the morning.

Temperature at night is 104° - in
the morning 102° -

Stomach dry at night
but moist in the morning.

Lips cracked & dry
Tongue covered by white fur
at tips & edges; which may
come off leaving it all red.

There is epigastric
tenderness. Vomiting; & now
the bowels are relaxed having
4 to 5 motions daily of a
watery yellow consistency &
color like pea soup. Alkaline
in reaction & decomposing
rapidly, and smelling
badly.

Suprapubic
acres. Pain in the Right Iliac
Fossa with fungling - due to
the presence of Air & Fluid.

Headache may continue
also sleeplessness at night. but
the mind is clear
Up to this time the

Symptoms may be obscure: but
now the Eruption comes out: it is
at times extremely difficult
to distinguish Typhoid, until the
Eruption occurs between the 7th & 12th
days.

It consists of isolated spots
small & rosy, varying according
to the hue of the skin; sometimes
preceded a day or two by a
delicate scarlet tint, apt to
be mistaken for Scarlet Fever.

They are round & well
defined, slightly elevated
& convex, hence called
"lentils" — they disappear
on pressure.

The same spots have a duration
of only 3 or 4 days: but fresh crops
keep coming out for a
fortnight.

They occur
most commonly on the chest
& abdomen & rarely on the
face & legs.

They are
not numerous. 20 or 30 for
at a time.

This
eruption is not constant: it is
uncommon in children &
unrecognizable above 35 years of age.

The duration of
the Eruption is 7 to 21 days & as
soon as Convalescence sets in,
it gradually disappears:
if it be continued after it

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is a bad sign, having some
connection with the intestinal lesion.
The amount of Pus
shows on the second week & is
not proportionate to the violence
of the disease.

It has been contended that the
occasional eruption of a few small
very slightly elevated Rose
coloured spots - disappearing
on pressure - each spot remaining
visible for 3 or 4 days only - is
peculiar to & is a reliable diagnostic
of Typhoid fever: but as will
be shown, low temperature is the
only correct diagnostic
guide.

On the commencement of the second week
the Spleen is enlarged - but can
rarely be felt beyond the
margin of the ribs - as it is
horizontal.

Delirium may begin in the
third week this slight: at
times attended with ~~convulsions~~
yet at times the delirium is very
noisy. The Pulse now is
120. Pupils generally dilated,
lips dry & cracked -
teeth covered with sordes.
Tongue dry & brown at base & centre.

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or it may be quite dry, red and fissured. Bloodlets are loose & in bad cases the stools contain blood -

He may die at this period i.e. - end of third week, Asthenia supervening the die of Coma; or he may die of Hemorrhage when the sloughs are separating; or he may sink from perforation.

Should the patient survive the risks of this period - the Convalescence proves very unsatisfactory as granulation commonly remains; & thus we judge the ulcers are healing badly or getting weak & death may occur weeks after -

After Convalescence a relapse may occur by fresh spots showing themselves - Bleeding at the nose is not uncommon in the first week & greatly increases the headache

Special Symptoms

One of the most characteristic symptoms is Temperature -

In the first week of the disease the Thermometer is the most certain means of distinguishing Typhoid Fever from a genuine attack of

Febile Fasting & Intestinal Colic,

So in the second week this the most certain means of deciding whether the disease will be an abortive case of Intense Fever, or not - the other symptoms being far more deceptive - while the use of the thermometer is decisive. If we find that on the 8th or 9th day of the disease the temperature ceases to rise, but gradually falls - & especially if we find decided morning remissions at this time; we may be almost certain that the case is one of abortive Typhoid. The lesions of the Intestine being got rid of without ulceration & by natural elimination.

The Temperature varies much in different cases & no series of cases however well marked gives an average that can be considered typical of all.

When the course of the Temperature is seriously interrupted - it is evidence of severe Complication.

In the first week at night it is 2° higher than that of the morning. It rises for several days at 1° at a time. At the

End of the first week this 104° at night & 92° in the morning. - the following night 105° & so on: the maximum temperature being gained at the end of the first week. After the 9th or 10th days it does not continue to rise - it so - but rise to 105° is a bad sign

Pulse 100 to 120 & having a double beat, due to partial paralysis of the coats of the Arteries

Diarrhea is the rule 4 to 6 stools daily. Sometimes more. At times the stools are constipated even during all the disease - but rare: the slightest aperient may cause severe & lasting diarrhea. There is no relationship between the abdominal mischief & the diarrhea, although abundant diarrhea is a bad sign

Hemorrhage is not uncommon. If occurring during the first week it is due to congestion & thus scary. & generally shows the attack will be severe.

At the 9th or 10th day when the stools are separating - fatal hemorrhage may supervene

Urine first week has a high S.G. Second week is much lower

Delirium is rare

Remots & Subaltes speaking of
 beclothes - rare.
 Conjunctiva is not injected
 Pupils dilated
 Deafness after pressure - but
 of no consequence
 Convulsions - indicate a fatality

Duration From 24 to 28 days:
 if ulceration has begun Convalescence
 will not occur till the 24 day
 In Abortive Typhoid, when
 no ulceration has been, he may
 recover on the 9th day:
 Relapses often occur even
 during advanced Convalescence

Complications

Hypostatic Congestion.
 Pleurisy. Pneumonia.
 It is common for Tubercle
 to deposit at this period, in
 the lungs

Peritonitis is most alarming
 occurring from
 1) Continuity it is thus limited
 2) Proportion - generally small
 for the Right & Left For
 & commonly follows in
 4 or 8 hours

Symptoms Sudden pain.
Great prostration. Abdomen
tender & distended. Knees
drawn up. Vomiting &
Hiccups

Ulcer not Healing. Rupture at
times occurring at a late period
from food &c

Rupture Mesenteric Gland

Rupture of Spleen

If during Pregnancy, abortion &
usually death

Diagnosis - At times
very difficult at first. In the
first week almost imperceptible
unless from Rankan &
Change in Temperature. If
Diagnosis & had be absent
it may not be found out.
Difficult in children &
patients above 30 - from
absence of Rash.

The characteristic &
only true test is the
Temperature; which, as
before stated, is 2° higher at
night than in the morning;
the rise continuing by

1^o at a time for several days.
Not continuing to rise as a rule
after the 9th or 10th day -

This apt to be mistaken for
Acute Tuberculosis. This may
begin in the identical manner
of Typhoid Fever, but the bowels
are constipated & do not
besides no eruption occurs.
This also mistaken for Acute
Meningitis, but here the Headache
is more violent, Sickness is
greater has the usual character-
istics of Head Mischiefs, i.e. -
vomiting with little effort or
pain & no increase or flow
of saliva; the recumbent
posture, checking it so far,
& the Tongue as a rule
being clean - also the absence
of Eruption

It may be mistaken - when
ending as Tubercle Typhoid - for
Ordinary Typhoid

Prognosis

Sex. greater danger - Females than Males
Age. Increasing age does not increase
the danger

Special Dangerous Symptoms

Diarrhea in Excess
Abdominal pain & distension in Excess
Nervousness always unfavorable
General Peritonitis always unfavorable
Remission & Relapse

When morning temperature runs early
& delays falling it is a bad sign:
if it rises above 105° this is bad;
& fatal if it reach 107 or 108
A too rapid fall is a bad sign

Treatment

Goldet disinfest chiefly the
contents of the bowel.

Be careful when examining
to make out frogging, - not to
exercise undue pressure
on the bowel may yield at the
point of ulceration: also
press the Spleen very slightly
or rupture of the Organ
may ensue. - It has
been recommended to
employ Colonic in 5 grain
doses during the first week
to cut the disease short: but
this mode of treatment is very
doubtful. The aim at out
thing is to keep well
& nurse well: be careful

not to soil the proctum
by his excrement as this acid
is very apt to cause bed sores.

Sponge the mouth also the
body with tepid water &
Acetic Acid.

The diet should consist
chiefly of milk & lime water

Quinine has been much
lauded to lessen the fever &
at times is producing much
good especially in the
intermittent type of the disease.

Mineral Acids have also enjoyed
a high reputation for times
and are undoubtedly serviceable.

Seplenon is best Cow bark
with chalk - Herodack by
Cros & Leche

Diarrhoea There are here
many different views as to the
treatment. Some advocate
checking it at once, others
giving Epsom salts to increase it.
The best plan is leave it
alone if the stools do not
exceed 3 or 4 daily.
If the number runs above
the begin with Chalk & Gutta Serena

Catechu + Opium; if a
more severe astringent be demanded
from 20 to 30 grains of Tannin -
Sulphate of Copper + Opium
or Pills of lead + Opium. or
Specimenaria + Opium.

The great Straining or Tenesmus
may be relieved by an Enema
of Starch - say ʒiʒ with ʒiʒ of
Tincture of Opium -

For distended abdomen
Impertine drops, or Impertine
+ Anisida by the Rectum -

In Hemorrhage The Early stage
requires no special treatment;
at later periods as end of
second week it may prove
fatal; thus ʒiʒ of Acid: Sulph:
Oil + xvʒ of Sweet: Opio -
or Finc: Fern Root in ʒx + doses
or Ol: Zev bulb - xvʒ + ʒx + ʒx
may be given every few hours -

Emetica containing Ol: Zev bulb
ʒiʒ + Sol Mon Morph ʒiʒ with a
sufficiency of Starch - will at
times prove effectual

The Extremes of prostration
is also at times very

Washed lymph -
Some perforation occurs
little can be done, we
must trust to Opium & thus
try to check the Peristaltic
Action of the bowels; to see
if Sympth will close it -
but give Opium in large
doses, beginning with
2 grains. repeating 1 grain
every hour. at the same
time using externally
light fomentations

During Convalescence there
is great danger of relapse
& thus much care must be
exercised - attend
specially to the diet.
beginning the patient to unbracket
Stops for some time, then
ventures on Fish. eventually
Chicken - has animal
Food for a fortnight & avoid
all straining of a pressure on
the abdominal walls

Wm A Galey

A B + MRY

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