

AN
INAUGURAL DISSERTATION

ON

Scarlatina

SUBMITTED TO THE

PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY

OF THE

University of Nashville,

FOR THE DEGREE OF

DOCTOR OF MEDICINE.

BY

James Philip Fitzgerald

OF

Jonesborough, Ga.

1856

W. T. BERRY & CO.,
BOOKSELLERS AND STATIONERS,
NASHVILLE, TENN.

Scarlatina is a contagious febrile affection, propagated by a specific contagious miasm, self limited in its course, occurs epidemically, & occasionally sporadically. It is treated of by modern writers, under three distinct heads or varieties, namely, Scarlatina Simplex, or the simple variety, next, Scarlatina anginosa, or the anginous or Sore Throated variety, & the third & last, is designated by the epithet Maligna, hence Scarlatina maligna or the malignant or putrid form of the disease. This last variety is of so formidable a character, & runs so rapid & fatal a course, as to render remedial agency but worthless & unavailing, & justly carries stamped on its very brow, & in its well depicted mane, the

import of its fearful character. It has
been truly said of Scarlatina that it
ranges in degree from the mildest
& most torpid of affections, to the
worst & most fatal of maladies.

The same Specific contagious miasm
is capable in itself of producing
each & every form of the disease.

The simple variety may produce
the malignant; the malignant the
simple, either of them may produce
the anginose, or the anginose either
of the other two varieties. Scarlatina
like measles, Small pox, & the
exanthemae in general, recurs but
once during life, as a general rule.
But instances are on record, in
which a second & even a third
attack of the disease has occurred

in the same individual, These statements
we are bound to recognize, because they
are founded on good authority.
(Although they are mere exceptions
to a general rule) This disorder
is not confined to any age or sex,
but persons of every age, sex, & climate,
are more or less liable to the influence
of its morbid contagion. It is
stated on the authority of Eberle,
that nurslings & aged persons
are less liable than those of the
intermediate ^{ages}, while Watson affirms
that it is eminently a disease of
children & Bell & Stokes confirm
this statement by saying that tender
age gives a greater susceptibility
to the system, while old age gives
less. There is a small discrepancy

between them, as to who is right & who
is wrong I am not competent to judge,
practical observation having never
afforded me an idea. All agree
that old age renders the Susceptibility
less. Peil, Richter, & Stegitz, also
state that males are less liable than
females. This disease was not
recognized as a separate & distinct
disorder until about the middle
of the 17th century, at which time
Prosper Martianus an Italian
physician who gave an account
of it as it appeared at Rome,
~~in the year~~ if not the 1st was
one among the earliest writers who
wrote on Scarlatina, but without
a doubt it existed as separate &
distinct at that time & before it as

it ever has lived, or even does at
the present. But from the extreme
likeness to, & difficult diagnosis
from, it was jumbled, & compounded
with Rubella, Purpura, &c. Morton,
Hoffman, Sydenham, & Forster, each
spoke of it under separate &
distinct terms. Morton called it
Morbilli Confluentes, Hoffman called
it Rubella Rosalia, Sydenham
speaks of a Febris Scarlatina, & Dr
Forster described the Cynanche
maligna, of Cullen, as it appeared
in London in the years 1743, & 1748.
& Webersden called that variety which
he described Febris Rubra, but the
final separation, & terminal distinction
between Scarlatina, Rubella, & all
other exanthemata, remained for

Or Withering to accomplish, which he demonstrated to perfection in an essay which he published in the year 1778, a second edition of which, came out in the year 1793. The Stage of incubation, or the breeding Stage, as it is sometimes called, is that period which intervenes between the time of the reception of the disease in the System, & its development in the same, of which there is no certain precise length of time, but varies from a few hours to a few days & even a few weeks, at the close of which time the febrile symptoms begin to make their appearance, if it be the simple variety they are ushering in, most usually after the following manner. At first the patient complains of slight chillings

alternating with transient flashes of
heat, depression, nausea, vomiting,
pains, in the loins, a hot & dry skin,
a frequent full & quick pulse. The eruption
most generally makes its appearance
on the second day of the fever, though
sometimes deferred till the third, & even
later, in irregularly circumscribed patches
of a bright scarlet red colour, in
minute dots or points. It begins on
the face & extends itself to the neck,
trunk & extremities in regular Succession,
& usually on the following day from
the commencement of the eruption
it involves the whole cutaneous surface,
having sometimes extended itself to
the mucous membrane of the mouth,
fauces, nostrils, & even to the eye, the
tongue is coated with a thick white

fur, through which the enlarged, inflamed,
& elongated papillae, may be seen
shining as minute vascular points.
The throat affection is so slight as
scarcely to attract attention, there
being only a slight degree of irritation
present which commences with the
eruption. The efflorescence is most vivid
& clearly to be seen on the flexures
of the joints, loins, buttocks, &c It is
generally most vivid of an evening
gradually becoming paler towards
morning. In ordinary cases the fever
& eruption cease at their acme on the
4th day, usually begins to decline on the
5th, persi. persw. & are entirely gone by
the 7th or 8th; portions of the desquama-
ted skin beginning to fall off on the
8th & continuing until almost the whole

of the skin of the surface of the body
has fallen off. (A whole glove or slipper
coming off at once). The papillae of
the tongue become aggregated, & the white
coat leaves the tongue in a very clean,
& morbidly red condition. Having
extended my treatise on the ^{1st} or simple
form of the affection, now under
consideration, as far as my thought
would lead me, I will forthwith
proceed to a detail of the 2nd or anginous
condition in which we sometimes
find this variegated malady. In the
variety now spoken of together with
the fever & corruption of the former there
exists a high degree of inflammation
in the throat, by which it is chiefly
characterized. Sometimes it appears
previous to the fever, though most

frequently with the accession of the febrile symptoms. Oftentimes it appears with the efflorescence, & sometimes not until the eruption has extended itself throughout its whole course. The febrile symptoms run higher in this than in the simple form, for instance the head ache is more intense, often accompanied with delirium, the temperature & dryness of the skin, greater &c. On the 2nd day of the fever there is a feeling of stiffness & dull pain in the muscles of the neck, under the ears, & about the angles of the jaws. The tonsils, uvula, soft palate, & fauces generally, are very red & swollen, consequent on which hoarseness, dysphagia, impeded respiration, &c. often ensue. When the local inflammation is very great

coagulable Lymph or viscid mucous
is collected on the inflamed Surfaces,
giving rise to the appearance of ulcers
& may be mistaken for them. Frequently
there is Blood effused from the adjacent
parts, & when this is mixed with the
viscid mucous, or coagulable Lymph,
it gives off an appearance very much
resembling that of gangrenous inflamma-
-tion of the fauces, & a fetid breath
which frequently is present but
increases the liability to the mistake.
The continuity of this membrane may
be destroyed by acidulated gargles, &
the true Character of the inflammation
be brought to light. The rash makes its
appearance later in this than in the
simple form, Sometimes may be seen
on the 3rd day, though most frequently

deferred until the 3rd, or even later. It comes out in patches on different parts of the body, more particularly about the flexures of the joints, as the elbow, knee, & wrist.

Do Clark informs us that when the attack is severe the eruption is sooner thrown out than when it is mild. It may vanish entirely & then reappear partially at uncertain intervals, without any seeming influence otherwise than to protract the duration of the disease. About the 5th or 6th day of the disease the fever, inflammation, & eruption, begin to decline & most generally followed by desquamation of the cuticle, as in the simple variety. Though *Scarlatina Anginosa* most frequently terminates in the foregoing way or manner, nevertheless it may pursue a more different course &

terminate with more sad results. Thus
Sometimes there is a thin watery discharge
from the ears, nose, & anus, of an acid
character, irritating the parts with
which it comes in contact, often
producing permanent deafness, &c.
The inflammation sometimes extends
down the mucous membrane lining
the alimentary canal & respiratory
tract. The brain oftentimes becomes
affected during the eruptive stages,
giving rise to deep & fatal coma.
Abdominal inflammation may also
ensue, & death may be the consequence.
The 3rd & last variety now to be
considered, is the malignant, or *Scarlatina*
maligna. The eruption in this form
comes out at an uncertain period from
the 2nd to the 4th day of the fever. It is

usually pale when it ^{1st} makes its appear-
-ance, recurring in instances a deep livid
hue in the course of the disease. It is also
irregular in its duration, often suddenly
disappearing soon after it has come
out, reappearing on some parts of the
body 2 or 3 days afterwards. The symptoms
assume very early a typhoid type. For
the skin & throat affections of the preceding
variety there is added a great cerebral
disorder & often inflammation of the pulmo-
-nary & gastric mucous lining membranes.
In the commencement of this form the
symptoms are sometimes very deceptive.
The pulse may be as favourable as would
be expected in either of the other varieties
full, soft, & frequent, which in very short
time may become small, hard, & frequent,
A low muttering delirium. or in some
cases

The countenance becomes pale & dejected, the cheeks are of a dusky red colour, the tongue coated with a thick brown fur, though sometimes red. The inflammation in the throat surmounts gangrene which extends itself rapidly, seizing upon the uvula, soft palate, &c. & destroying the same. There is an acriminous discharge from the inflamed parts, at first thin & watery, but afterwards becomes thick, & amber coloured, which exornates the angles of the mouth, lips, nostrils, &c. The Sequellae or Secondary affections consequent on Scarlet fever are numerous, & often very dangerous. The most frequent of which are dropsical effusions in the various tissues & organs of the body, Among those Anasarca is by far the most common, Ascites next,

hydrothorax next, & lastly Hydrocephalus,
& really seems as in the order of their
frequency, just so they come in the order
of their fatality, Doojasy has been
remarked to succeed as often the mild
as the more severe forms of the disease,
but has never been known to supervene
in cases of malignant-Scarlatina, &
is almost entirely confined to children, seldom
ever occurring in adults. Doojasy depends on
increased vascular action, & is either acute
or subacute in its character. The treatment
of course should be antipyretic. Otitis,
ophthalmia, glandular enlargements,
deafness, Abscesses of tonsils, Bronchitis,
Suppuration of the cervical glands &c
are likewise sequelae of the disease, but
confined to the Anginose & malignant
varieties. Scarlatina is likely to be

Confounded with Rubella & Erythema, & in the milder forms of the disease the diagnosis is truly difficult, for there are but few if any symptoms absolutely characteristic of Scarlet fever. However; the symptoms by which it may be distinguished from those other affections are as follows. The period at which the efflorescence may be ~~1st~~ observed. In Scarlatina the eruption may be seen usually on the 2nd day. In measles generally on the 4th, Sometimes on the 3rd, Secondly by the peculiar appearance which the eruption presents, being as follows. That of Scarlatina being in minute dots or points, of the same shape & size, diffused in irregular patches of different shapes & sizes, & gives to that portion of the skin on which they are situated a bright scarlet

red colour. In measles the efflorescence comes out in irregular Semilunar or crescent shaped patches, of dots or points of different shapes & sizes, elevated above the surface, so as to give to the skin a very distinct feeling of roughness. The throat affection of Scarlatina is a symptom of great importance in its diagnosis, (more especially in the more severe forms of the disease), seldom ever amounting to more than an irritation, in Rubella. & equally as important is the Catarrhal symptoms of Measles, seldom appearing Scarlatina but always in measles.

In Roseola the efflorescence is of a deep rose colour. The throat affection, contagious influence, & peculiar appearance of the tongue in Scarlatina, are absent.

As the disease varies from the mildest of
affections to the worst of maladies, so
also must the prognosis vary, as the
disease varies. The age of the patient
affected has something to do with the
prognosis of the disease. It usually runs
a more favourable course in children
than in adults, unless when they are
suffering from painful dentition. So
also the season at which it makes its
appearance seems to exert an influence
over the course which it runs, being
milder in Spring & Summer, & more
severe in Autumn & Winter. It often
proves fatal in pregnant & puerperal
women. When the eruption comes out
regularly, at the proper period, & stands
out permanently, a favourable termination
may be expected, & on the contrary when

the eruption is variable. The disease may commence favourably & all at once assume a very dangerous grade of violence, by the super-venition of local inflammation, the prognosis in such a case is extremely difficult. A white streak passing down on each side of the nose is said by Reid to be a fatal symptom. Richter also states that a strong inclination to void the urine, occurring on a sudden with a copious discharge of crude urine is a symptom the danger of which is to be much dreaded. As I have already given the symptoms attending the Anginose & malignant forms, & as I have given some of the prognostic signs, & as that the prognosis of the simple variety when it

runs its course uncomplicated, is
always favourable, I think it will
suffice for the prognosis to say that
the Anguine variety is never free
from danger, & the Malignant is
to be accounted among the most
fatal of maladies. The treatment of
Scarlatina must be merely palliative,
for since the disease is self limited in
its course as already said, it must
be extreme folly for one to flatter
himself for a moment with the vain
idea of arresting it in its course, let
the character of that be what it may.
Although the treatment must be
palliative alone, as such it must
differ to suit the different varieties
of the disease, as they present
themselves. As the Simple variety has

been spoken of in the foregoing
part of this thesis. In the same order
will I give down the treatment, &
as I stated in my outset that
practical observation had never
afforded me an idea, in this too
must I be guided by theory alone.
Scarlatina Simplex rarely ever
demands any treatment otherwise
than to abstain from any article of
food to strong or irritating, to keep
from exposure & in as comfortable
a condition as possible. If the skin
be too hot & dry sponging with
cold water will sometimes dissipate
the excess of heat & leave the patient in
a more cool & comfortable condition
than he otherwise would be. The
bowels should be kept gently lax with

Saline aperients, the Skin as moist &
Soft as possible with mild diaphoretics
&c. As the Anguinoso variety runs a
more rapid & fatal course our
treatment ^{should} be more active or energetic,
not with a view of arresting it in
its wild career but merely to palliate
those symptoms which predom-
inate. In the commencement of this
form emetics may be used beneficially.
Purgatives are likewise recommended
by the most of modern Authors,
nauseating diaphoretics, fresh air,
Sponging with Cold water, & as it
adulterates tepid water, have been
recommended. Dr Bowling also
recommends Brewery yeast with an equal
quantity of water given in Table Spoon
full doses every 2 or 3 hours. When the

tonsils are very much swollen & inflamed
blistering the throat - sometimes gives
great relief. Dr Samuel Jackson
of Northumberland has insisted on
the use of ice held in the mouth, &
the liquid flowing from it to be
swallowed, as a most beneficial
remedy, & in gangrenous inflammation
of the fauces mild Chloride of Soda, In
Scarlatina Maligna Antiphlogistics
should be used before the acute stage
passes over, if at all, such as an
emetic, cathartic, &c, if those measures
fail to give relief, blood-letting should
be resorted to, & when the acute
stage has passed off, & it has assumed
the typhoid type, then a tonic
treatment is necessary.