

AN
INAUGURAL DISSERTATION

ON

Cholera Infantum

SUBMITTED TO THE

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BY

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Whoever engages in a pursuit which has for its object the development of the true Cause of natural phenomena is at once prepared to admit that he has entered upon a task which is arduous and complicated in its diversified bearings, and one which requires a perfect exemption from the bias of preconceived opinions, or notions which may have a tendency to mislead the mind, in its exposition of facts as they really exist., But it is readily conceded that there are comparatively few who can divest themselves of pre-occupations, and that profound reverence which is entertained for some particular doctrine, or authority exercises a commanding influence over

The mind, in its efforts to develop facts, and often two often indeed the matter is referred only to the doctrines which we find in books, or to what is insinuated in lectures, rather than subjecting to the ordeal of personal and potent observation, or investigation, such an unreasoning course however I shall sedulously endeavor to refrain from in the investigation of the nature and treatment of Cholera Infantum.

It would seem that its principal operative cause is veiled in much obscurity, since so many different ones have successively been adduced and ultimately failed to account for the epidemic prevalence of this terrible form of disease, i.

This malady when it prevails
in the character of an epidemic,
makes its visitations in the summer
months, usually in the hottest
seasons; There seems to be
a perfect coincidence, in the
predisposing causes of Cholera Infantum
and atmospheric heat alone cannot
rationally be regarded as the true
cause of the disease.

And again it might be supposed
from the term infantile that
there existed a radical difference
between Cholera Infantum, and
Cholera Morbus but there appears
not to have been any made
by the great "Sydenham" or the
illustrious Dr. "Huxley."

It is presumable that distinction

is not made in order that the disease may be successfully treated,

Cholera Infantum has been attributed to the operation of a variety of causes, and many have indulged in vague speculations respecting its origination.

The first then which I shall notice in the line of causation is dentition which has been regarded as amply sufficient to produce Cholera Infantum.

It is universally admitted that this disease is measurably restricted to the summer seasons, and if this be true it cannot be fairly inferred that this process which is going on at all seasons of the year should be the cause,

and farther no period of
infantile existence is exempt
from choleric attacks.

It is subject to this disease before
and after dentition, as well as
while this process is going on.
Besides dentition it has been
thought by some authors, that the
irritating effects of worms in
the alimentary canal may produce
the same disease. But notwithstan-
ding the malignant effects which
attend the presence of worms,
and the alarming convulsions
which are frequently occasioned
by them, it would not be
a logical inference to say, that
a disease which is prevalent
at one particular season, ^{was} produced

by a cause which is operating
alike at all seasons, and farther
it is admitted by the ablest advocates
of this theory that in a great many
instances in which this disease
has proved mortal, no worms
have been discharged per anum,
nor have any been discovered
on post mortem examination.
I do not pretend however to
say that worms do not occasionally
produce symptoms which char-
acterise the disease in question
and that they may greatly aggravate
it. For when the stomach and
alimentary canal are already imp-
aired in their physiological
action, by the true cause of the
malady, it is highly probable

That worms may add additional
irritation to the effects of the primary
cause. But as regards the remote
sources to which Cholera Infantum
has been ascribed, there is no one
which has monopolized a greater
share of attention and support
from members of the medical
profession than atmospheric heat,
and again it has been said from
high authority that its frequency
and severity are always in
proportion to the heat of the weather,
Although this has come from one
of the most distinguished men
of his day, it cannot now be
regarded as correct, in as much
as it is in direct opposition to
later observation, and well established

facts, yet it is admitted that atmospheric heat is indispensably necessary to the prevalence of the disease in question.

But by reference to many valuable works it can be satisfactorily demonstrated that heat alone does not give rise to the disease, for we have reports from various portions of the country, where the heat was so intense that vegetation was destroyed, and even the indian corn burned up, "Torgny Co Virginia," "in the summer of 1821," yet it was uncommonly healthy.

From this view of the subject it appears altogether conclusive that heat alone cannot be properly considered as the chief operative cause

in the production of Cholera Infantum.
It must therefore depend mainly
upon the agency of some other, for
its existence and epidemic prevalence,
~~the doctrine~~ for the miasmatic
origin of this disease is contended for
on the ground of its being the most
rational, and most in accordance
with the united experience and
observation of the learned in all
southern section of Country, .
But abundant authority is not
wanting to prove that Cholera
Infantum is produced by the
miasma which is admitted
to be the cause of tertians, and
other varieties of fever, which
frequently assume an epidemic
character, again it has been

remarked that it is a mere variety
of Billious fever of our own
climate, the force of which is turned
upon the intestines "Condé."

Again the same writer remarks
in reference to the origin of the
disease, that a majority of children
fall victims to Cholera Infantum
in the neighborhood of marshes,
or in low wet and otherwise
unhealthy situations.

This harmonises with other writers
who assert that Cholera Infantum
and Tertians depend upon same
circumstances, the combined operation
of heat and moisture, which
will evolve the effluvia alluded to,
and without which epidemics
would have no existence, "Cloghorne."

This accurate observer has shown that the hottest seasons were not the most remarkable for the prevalence of this disease unless it was preceded by heavy rains; The main cause of Cholera Infantum is doubtless a combination of heat and moisture, The impure air of cities alone is not sufficient to produce the disease under consideration. Symptoms.

The attack of Cholera is often preceded for a longer or shorter time, by diarrhoea, but sometimes the vomiting and purging commence simultaneously. In fatal cases of short duration the vomiting usually continues to the end, but when the disease terminates favourably,

or is much protracted, it very often subsides considerably, or ceases altogether, leaving the diarrhea, occasionally. The disease is exceedingly violent, the stomach rejects every thing swallowed even cold water, the intervals are marked by great languor, and distress with more or less spasmodic pain of the stomach, and bowels. If relief is not afforded prostration comes on accompanied by a cool and clammy skin, pallid, and shrunken features half closed eyes insensibility, Coma. and death in three or four days or sometimes even within twenty-four hours. Much more frequently however the attack is attended with febrile

symptoms, and the case protracted
to one two or three weeks or
more. In such instances the
puls is frequent, small and weak
or corded, the mouth is hot. The
tongue somewhat furred, and the
surface of the body irregularly heated.
The head and trunk being often
above the healthy standard of
temperature, while the extremities
are cool. — Writers in general
describe the fever as remittent,
and state that the exacerbation
occurs in the evening. It is
sometimes attended with delirium
or stupor, indicating a morbid
state of state of the brain...
The abdomen though usually flat
or sunken, is sometimes swollen

which occasionally continues unabated to the close, with the symptoms already mentioned, but more frequently it diminishes or ceases, leaving a diarrhoea, which runs on for several weeks, and gradually wears out the patient.

In the progress of the complaint the child emaciates rapidly, the flesh becomes soft and flabby, the skin hangs loosely about the neck, the features shrink.

The eyes becoming sunken and the whole surface pale and either cool and clammy, or harsh and dry, in the more advanced stages various morbid phenomena are presented. The abdomen is tumid or

much sunken, The mouth moist
and apthous, or brownish red and
dry. Pustules occasionally appear
upon the surface of the body, with
a small vesicular eruption on the
breast, The skin sometimes
a dull, dirty hue and the conjun-
ctiva appears blood shot. —
The insensibility is extreme. The
circulation in the lowest state
of languor. The patient is often
exceedingly restless, rolling the head
from side to side and tossing
the body in various directions,
and uttering plaintive cries, at
length coma sets in and the scene
is closed, not unfrequently with
convulsions, or apparent hydrocephalic
symptoms, Throughout the complaint

The child generally sleep with the eyes partially open. There is almost thirst though this symptom is not invariably present, Sometimes the patient desires the usual articles of food, . The discharges are in a high degree various in character. At first they consist of the previous contents of the stomach and bowels, and the matter vomited is always liable to be modified by substances swallowed. being frequently mingled with milk. After the discharge of ingesta and feculent matter, the evacuations are for the most part thin and copious, ~~and~~ sometimes colorless, but usually more or less tinged with green yellow or brown, and not

unfrequently a deep green, Along with
the more liquid parts. The stools
often contain concrete or semiconcrete
matter, At an advanced period
they are often copious and dark
colored or reddish like the washing
of putrifying flesh, when the disease
has degenerated into a lingering diarr-
-hoea it very commonly happens
that more or less appetite remains,
without the power of digestion, and
the ingesta pass from the bowels
little if at changed. —

The duration of the disease varies
from a few hours, to weeks, or
even months, When terminating
in diarrhoea it often runs on for
a long time. The sufferer sometimes
improves under treatment, or

with the diminished temperature of the air, and then again relapsing when the favourable circumstances change, until at length the system is worn out, or the permanent return of cool weather turns the scale in favor of health. — "Treatment,"

The first indication in the treatment of Cholera Infantum is obviously to remove the cause, while this continues to act the most judicious efforts of the practitioner will for the most part be either nugatory, or but partially successful. The patient may be relieved, may even be apparently cured, but the disease will often return under less favourable circumstances of constitution than at first, and though a partial restoration

may be again effected, and this alteration of relief, and relaps may occur several times, yet there is great danger that the powers of vital resistance may be quite broken down before the morbid cause shall cease with the hot seasons. The patient should be removed from the heated, confined and impure atmosphere by which the disease has been generated, to a situation where he may enjoy the advantages of cool air and free ventilation. In general the happiest change in the disease speedily follows this change of atmosphere; and with proper attention to diet and clothing the child will almost always recover,

The infant should be confined to the breast, if weaned, we must correct any errors of diet either as to quantity or quality, and as a general rule substitute a bland milky, or farinaceous diet for any kind of animal food - - -

When the complaint is of longer standing, and the irritation of the bowels has had time to deepen into inflammation. The success of this measure is less striking though even then it will be found the most effectual. . . . It is also highly important to examine the mouth of the infant at once, and if the gums are swollen and painful, to lance them freely, these points being

attended to we shall next speak of
the medicines we should employ
in the treatment of the disease,
And in relation to the medical
treatment the indications appear
to be, to remove all sources
of irritations from the alimentary
canal by laxatives, and antacids,
to promote the hepatic
secretions, and thereby remove
portal congestion, by calomel
or some other mercurial. To
divert excitement externally
by diaphoretics, and by
measures addressed to the surface,
to relieve irritation by anodynes,
to treat excessive evacuations,
in the advanced stages by
astringents, to modify the mercurial

of the affected membrane by
alteratives, and finally to sup-
port the patient with stimulants
when greatly debilitated, under
this treatment we will
generally succeed in the
cure of the disease under
consideration.

James A. Parke