

AN

INAUGURAL DISSERTATION,

ON

Hydrops pectoris polysaricae

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My purpose is, to offer a few thoughts upon the pathology of the dropsy of very corpulent people - the dropsy which I regard as peculiar to fat people. It is, with me, a matter of some surprise, that no author so far as my research (though very limited it is true) has gone, has even alluded to this form of dropsy. To the end that I may be well understood as regards the main point in the pathology of such cases, I will offer the following case by way of illustration.

Mr. C - a farmer was 63 years of age; when he arrived at mature manhood his standing weight was 200 pounds: he began to grow

corpulent at about his 35th year;
and when he was 50th ^{year} of age his
weight ^{was} 400 pounds. about this time
his feet began to be oedematous,
which slowly and permanently
increased, so that by the time he
had reached his 60th year the edema
had reached as high as the trunk;
and in a year or two more he
was satisfied ^{that} he had water in
his abdomen. about this time
he first sought medical aid;
and to use his own expression,
he was for two years doctor'd
all sorts of fashion by all sorts of
Steam, Root & Faith doctors!"
this brings us up to his 63rd year
when he was first seen by a

physician. ~~At~~ this time he was
 indeed, a human monster, if
 bulk alone could constitute a
 a human being such. his
 lower extremities, were enormous
 masses; almost black; and below
 the knee nearly as hard as wood.
 His abdomen was so distended
 that he could maintain the
 semi-recumbent posture only for
 a few minutes at a time; - and
 all the parts above the abdomen,
 chest, face, arms, hands & all were
 edematous. There was a case of
 exceedingly chronic dropsy; - a
 case of ascites and anasarca.
 There we had a clear case of dropsy
 before us; - but this was saying

very little. What pathological condition had determined this very gradual effusion of serum into the cellular tissue, and into the cavity, of the peritoneum?— This was the question to be settled before therapeutics could be thought of. The diagnosis was accordingly gone into;— and first for kidney dropsy, but after trying the urine over & over again by the most reliable tests, not the slightest evidence ^{of} Bright's kidney nor any other form of disease of that organ could be made manifest;— and the history of the case showed all a long that the kidneys were certainly sound. So we struck

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the kidneys from the supposed chain of causation, — and went to the liver. Here we were deprived of satisfactory tests; such as is afforded us in the diseases of the urinary organs. But after a most minute, careful & protracted examination into the case, — we were clearly of opinion that a sounder liver was never in a man of his age. And we struck the liver from the supposed chain of causation, — and went to the heart. Here our perplexity began. For true it was, that percussion and auscultation afforded some signs (as we believed) of a

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moderately dilated heart;— and taking all the symptoms together, we had pretty fair evidence of hypertrophy. But when we come to put up all the heart symptoms that we could find, their sum fell short of being commensurate, with the history of the case, and the amount of mischief as we saw it before us. The history of the case failed to show the adequate amount of heart symptoms to cause dropsy prior to, or at the commencement of the effusion of serum into the cellular tissue; and all along, the heart symptoms were only moderate in degree. ~~we~~ were

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unable ^{to} detect obstruction in the
course of any vein or system of
veins. It is not hard to see our
perplexity at this stage of the
diagnosis. There was a most remark-
able case of chronic ascites and
anasarca. It was clear that the
kidneys had nothing to do with
it;— and equally clear that
visceral obstruction was not the
cause. Venous obstruction could
not be detected, the heart symptoms
proper, fell short of being fully
sufficient to account for so much
mischief. In this dilemma the
question was again asked,— what
pathological condition is it that has
determined this effusion of serum?

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This question was answered thus:-
there must be something peculiar in
the pathology of the dropsy of fat
people. Now to come at this
peculiarity, if in truth there was
any such, - we took the following
view of the case. - There was a man
when at 35th year ^{of age} weighed just
200 pounds; whose heart nature
had nicely adapted to his
dimentions. But when he was
50 years of age his weight was
400 pounds. Just double in bulk:-
with the same heart now required
to carry on a circulation thus doubled
in length: - a work, to be fully
done, - demanding the joint labour
of just two such hearts.

why would not this doubling of
the length of the circulation produce
a pressure on the central organ and
the veins in the same ratio, as
if the weight of the body had
stood at the same 200 pounds up to
his 50th year; but the heart by
this time having lost just half
its strength. But to explain
more precisely: - Suppose a man at
35 years of age weighing 200 pounds,
to be perfect in all parts: but
at this time his heart begins to
weaken, and goes on gradually
failing, and when he gets to his
50th year, his heart is just half
as strong as it was at his 35th year,
his weight standing all along up

To this period at the same points would not serious infiltration be the sure consequence of such a disproportion between the power of the heart and the length of the circulation?— they both sat out at 35 years of age with the same heart and the bulk of body. At their 50th year, one had doubled his bulk, his heart remaining the same. the other retained his original bulk, but had lost half of the power of his heart. But this is not all.

The question was asked, — could the central organ maintain its integrity for 15 years under the pressure of a circulation thus

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augmented;— with this vast
amount of additional labour
imposed upon it? we thought not.
this doubly increased, & unnatural
labour thus imposed upon the
central organ of the circulation
for so many years; we thought
to be fully sufficient to
account for all the heart
symptoms that we had been
able, closely to make out.

Therefore it appeared to us, that
in the dropsy of obese persons,
there may be two pathological
conditions; namely— a circulation
~~greatly~~ lengthened; and a heart
weakened in its functions:— which
acting singly or associated are

Sufficient cause of serous effusion. Both these conditions, I think, will nearly always be found to be associated, in the dropsy of fat people.

With the hope of being better understood, I will, in a short way, give what I conceive to be the morbid chain;— the pathological peculiarity of the dropsy of obese persons. This begins with the increase of the bulk of the body; and the consequent increased length of the circulation. ~~As~~ the dimensions of the body grow increasing, the heart feels more and more the oppression of the increasing

burden thus imposed upon it;—
of doing a work, out of all
proportion to its strength.

The heart cannot thus work
and maintain its integrity. The
pressure of this augmented
circulation upon the central
organ, presently determines
dilatation, or hypertrophy, or
both;— and the heart is
crippled in its functions. The
pressure on the veins is
increased and the effusion of
serum begins.

Treatment of Mr. C's case
began in January 1849. He got
liberal doses of Iod^y, Pot^y &
Sigs Pot. in combination—

Bitart. Pot & Sal, and after a
while some bitter Tonics &c.
He got apparently well in a few
months, but had to take
some medicines occasionally.
In October 1832 he died
suddenly; apparently of
apoplectic coma.