AN
INAUGURAL DISSERTATION,
on
Hydrops peculiais polyurinei

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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 ever 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 50 of age his
weight was 260 pounds. About this time
his feet began to be edematous,
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 of a
Physician. At this time he was indeed, a human monster, if bulk alone could constitute a human being such. His lower extremities were enormous muscles; 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 and even shoulders. Here was a case of exceedingly chronic dropsy: a case of ascites and unmeasured.

Here we have 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 according by gone into; and first for kidney dropsy, but after trying the urine over and 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 along that the kidneys were certainly sound. So we struck
The kidney, 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 discussion of the urinary organs. But after a most minute, careful and protracted examination into the case, we were clearly of opinion that a rounder liver was never in a man of his age. And we shook 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
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
unable to detect obstruction in the course of any rain or system of rains. It is not hard to see our perplexity at this stage of the diagnosis. There was a most remarkable case of chronic ascites and ankle edema. 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?
This question was answered thus: there must be something peculiar in the pathology of the droopy of fat people. Now to come at this peculiarity, if in truth there was any such, we take the following view of the case. There was a man where at 35th year of age he weighed just 220 pounds; whose heart nature had nicely adapted to his dimensions. But when he was 60 years of age his weight was 440 pounds. Just double in bulk with the same heart now required to carry on a circulation this double 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 secret of 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 60th 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 age, would not serious infiltration be the true 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
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, clearly to make out.
Therefore it appears to us, that in the dropy of these 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 lungs 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 change — the pathologic peculiarity of the dropsy of obese persons. This begins with the increase of the bulk of the body; and the consequent increase of length of the circulatory lion. As the dimensions of the body grow increasing, the heart feels more and more the oppression of the increasing
burden this imposed upon it;—of doing a work, out of all proportion to its strength. The heart cannot this 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 Jod., Pot. & Sign. Pot. in combination—
Bitart, Pot & Fal, and after a while some bitter tonics etc.
the got apparently well in a few months, but had to take some medicines occasionally.

In October 1832 he died suddenly, apparently of apoplectic coma.