ARTAUD (F.E.)

# ACUTE HEPATITIS,

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*Cure Effected by Operation.*

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## Messrs Editors:

By request, I will endeavor to write an account of a case, which has been submitted to my care since December last.

I am not only prompted by the desire of making known such facts relating to the above as will be of interest to the medical world; but chiefly because the case has been styled by several of the eminent professors of the Medical Department, University of Louisiana, as "*a remarkable one.*"

I therefore think I am justifiable in making a report of the case, likewise a few remarks pertaining thereto, and the method of procedure which I adopted to extricate these calculi.

The patient, named M. Bell, a resident of New Orleans, is 56 years of age, of rather slight frame.

Having enquired into his history antecedent to the present disease, found that he was attacked with *rheumatism* in 1861, resulting ultimately in *rheumatoid arthritis;* I also found on his body the presence of an eruption known as eczema arsenica, corroborating his statement, as he had often intimated that he had taken large quantities of arsenic since attacked with rheumatism.

I inquired whether he had any hereditary predisposition or gouty diathesis: and his statements proved conclusively that he had none.

The hygienic influences to which he was exposed varied largely; and as to his constitution and general health, it has been quite good, until about ten years ago; since when he dates a severe pain not continuous in the right hypochondriac region, radiating posteriorly towards the vertebral column.

His positions in bed have never been altered or interfered with in any manner; his bowels have always been loose and has had as many as from ten to twenty evacuations per diem.

*Present Condition.*—When my attention was first summoned to the case (*December 14th*, 1880), he complained of an acute lancinating pain, confined for the most part to the region of the right lobe of the liver and according to his statement, deeply situated.

He experienced some oppression in breathing, which increased the acuteness of the pain, especially when a deep inspiration was taken; probably due to the descent of the diaphragm on the liver. A short dull cough of a hacking nature, accompanied the attack; hiccough occasionally. Upon further inquiries, I ascertained that his digestive apparatus was notably injured and that little or no assimilation was taking place.

*Physical Examination.*—I then resorted to percussion and palpation, and by the former, notable dulness over the whole of right lobe accompanied with a bruit, peculiar and remarkable in its character was revealed.

The latter, namely *palpation*, enabled me to deduce conclusively that the right lobe of the liver was by far larger than normally. Furthermore, anteriorly an elevation resembling the under surface of an ordinary size saucer, was present, exceedingly prominent and easily circumscribed, measuring three inches in diameter, its position was as follows; viz: the upper edge was two inches and a half below the costal cartilage of the seventh rib; whilst the lower, bordered upon the right lumbar region.

Taking into consideration what I had observed and realized by a careful examination which I instituted, again, in order to be more thoroughly convinced, I thought myself justifiable in introducing an exploring nedle in the centre of the above intimated elevation. My first attempt proved to be fruitless; but upon again applying the instrument I drew some pus mixed with a little blood.

I felt satisfied that great engorgement was present. The patient complaining of restlessness, I ordered syr. morph.

*Dec. 14th.*—Dejecta examined and tested for bile, and found totally devoid of it—likewise same examination carried out, Dec. 16th, 17th, 18th and 19th, with the same results; as usual the feces were very liquid, grayish and extremely offensive.

*Dec. 19th.*—At 7, P. M., I was sent for by the patient, and upon my arrival he stated that he experienced excruciating pains in the right hypochondriac region. —I immediately applied cups and spring-lancet; by 8, P. M., he felt much relieved. Urine tested, bile present.

On the morning of 20th inst., I called again and examined his side, detected fluctuation above the surface of the right lobe of the liver; whereupon I made an incision varying from ¼ to ½ an inch in length with a thumb lancet, and allowed the pus to escape into a reservoir, which I had provided, having concluded to test it. Accordingly, the ensuing evening I did so and Conclusively obtained the reaction that bile assumes with nitric acid. Urine again tested, bile still present.

*Dec. 21st.*—Feces again tested, and as heretofore, bile absent. The patient's side was next investigated, and the small opening which I made, explored with the probe in order to ascertain, if possible the nature of the surrounding tissues. To my complete amazement, the instrument sank about an inch or two when it suddenly came in contact with a solid body, firmly imbedded. I made several attempts to liberate this substance, but all my endeavors, thus far, were in vain.

I next deemed it advisable to seek for more such bodies, but in an opposite direction, and as before, my instrument came in contact again with a resistible mass which I succeeded in fracturing; and by means of forceps, obtained some fragments.

*Dec. 22d.*—Operation.—I called determined to make an incision and cut down

to the liver and remove these calculi, knowing that doubtless they acted as foreign bodies in the organ and were the exciting cause upon which the phlegmasia depended and suppuration secondarily. In the meantime I exhibited podophyllin in quarter grain doses every four hours, anticipating hepatic stimulation. Accordingly, with the above determintaion, I ordered the nurse to administer the anæsthetic and when he was thoroughly under its influence, I proceeded to make an incision from left to right, transversely, from two to three inches in length; just ½ an inch above the one I had made with the lancet and four inches from the linea alba; also two inches below the costal cartilage of the seventh rib.

The hemorrage arising therefrom was small and easily controlled. Having divided the several structures; I found that an adhesion had taken place between the hepatic and parietal peritoneum; I introduced my fingers and followed the path which my instrument had pursued, as a matter of course enlarging it.

I at length felt a cluster of calculi firmly imbeded in their cavities, and the contiguous tissue strongly bound down upon them.

By means of a probe-pointed bistoury and forceps, I succeeded in extracting fifteen of these calculi in the space of two hours.

Their size varied from ⅛ to ¼ of an inch in diameter, polygonal in shape, of a brownish yellow color, friable and floating in water.

They were examined by Dr. H. D. Schmidt, Pathologist to the Charity Hospital, and found to contain cholesterin for the most part, glyko and tauro cholate of soda, and those ingredients which usually enter into the composition of biliary or gall stones.

The cavities created by the extraction of these calculi in the liver were thoroughly syringed out with carbolized water, and tents steeped in carbolized oil introduced. In other words, Prof. Lister's antiseptic dressing's were entirely used, and brought forth admirable results.

The patient stated after the operation that he felt much relieved from the uneasiness and pain which he had heretofore experienced, and only complained of the external opening being somewhat sore. Syr. morph. exhibited at night.

*Dec.* 23.—Patient labored under severe pains confined posteriorly to the lumbar regions. I ordered enemata of opium, twice daily, and applied to the wound iodoform pulv., and hydrarg-chlor. mite. *aa* 2 drachms No symptoms of peritonitis present; temperature normal, Pulse likewise.

*Dec.* 24.— Patient feeling well; pains in the back absent. I though it prudent to search for more calculi and shortly extracted five more; the fifth having larger dimensions than those heretofore extricated; wound dressed as before; temperature good; pulse the same; nitro muriatic acid ordered, ten drops twice daily.

*Dec.* 25.—Patient doing well; dejecta tested and traces of bile present; temperature normal; pulse likewise; wound suppurating.

*Dec.* 26.—Patient rapidly improving; wound once more explored and seven more calculi extracted, alike in size to the others. I made sure that none were yet remaining, and continued same dressing. No alteration in either pulse or temperature.

*Dec.* 27.—Patient improving continually; wound again explored, no calculi to be found; feces tested, bile present; no modification in temperature or pulse;

urine tested, only a mere trace of bile

*Dec.* 28.—Patient allowed to leave his room; appetite good, assimilation of food apparently taking place; stools containing a normal quantity of bile.

*Dec.* 29.—Patient doing finely; all functions of the live restored; temperature and pulse good. During the latter part of January, 1881, the wound began to heal by second intention.

Readers will remark that during the whole of this attack and even after the the operation, there was not an elevation of a single degree of temperature, nor alteration in the pulse; and again, I would like to call attention to the fact that jaundice, was never connected with this case.

In February, with Prof. Bemiss' consent, the patient was brought before the medical class and lectured upon in the amphitheatre at the Charity Hospital by the above named gentleman. I would like just here, before concluding, to make a few remarks in regard to the calculi, that I found in the substance of the liver. Doubtless, the majority of medical men will claim that the presence of these concretions in this locality, is probably due to some tortuous fistulary passage, communicating with the bladder, as have occurred in several cases on record. The gall-bladder being the seat of the deposits.

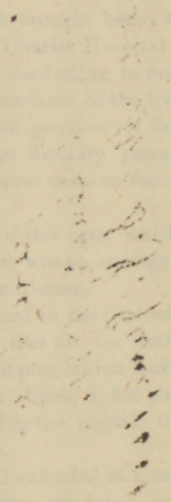
But taking into consideration the symptoms and course of this case, which I have had in close observation, I can safely assume that there was no analogy to those cases in which the gall-bladder has been the seat of the disease.

However, I cannot conceive why calculi could not be formed in the parenchyma of the liver. It is quite evident that all biliary ducts, like all the similar passages, are liable to inflammation of their mucous membranes; which become swollen, and impede, if not arrest entirely, the flow of bile: Such, I am confident has been the case, in my patient, with the trunk, forming the hepatic duct from the right lobe of the liver, judging from the symptoms.

The inflammation having been set up in this biliary canal extended as a natural sequence to the tubuli biliferi, and a stiffening of coats thus produced, eventually, the bile was dammed back upon these tubules, and this likewise occured to the hepatic cells.

Fibrinous exudation, solidified mucous, or insoluble matter precipitated from the bile being natural sequelæ, favored the production of these calculi, constituting a nucleus around which these concretions were deposited.

The morbid effect of the gall-stones was an inflammation which arose from the irritation of their presence, and from their direct pressure or distending force. The result of the phlegmasia was suppuration. Another morbid effect worthy of notice was the obstruction which manifested itself very clearly in this case, as being confined to the hepatic duct; or branches pertaining thereto; the tubuli biliferi being distended as a secondary effect, and finally enlargement of the liver. Furthermore, the size of these calculi would to a certain extent corroborate the above statement, and they would not have been bound down by the contiguous tissue as they were in this case; if a fistulous opening had brought them forth.

Concluding: I cannot conceive that I would be presumptuous at all, in assuming that the concretions which I extracted were formed in the parenchymatous structure of tht right lobe of the liver; since the necessary pathological agents were favorable for their production.

New Orleans, March 25th, 1881.