AN ACCOUNT
OF
AN UNUSUALLY LARGE BILIARY
CALCULUS,
VOIDED FROM THE RECTUM.

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CASES truly clinical are often best distinguished by their missing symptoms. The Biliary Calculus, large as a full-sized walnut, which I now lay before the Society, on its passage to the bowel, induced jaundice, yet gave *no pain*.

It was voided with fluid fæces from the rectum of a gentleman aged 73, after many days of exhaustion by hiccough and vomiting. The early symptoms in this case were constipation, loss of appetite, and sickness, succeeded by jaundice in the latter days of November of the present year, 1842. In less than a fortnight from the commencement of the attack, the urine and fæces had recovered their natural appearance; the skin was no longer yellow, and the patient began to occupy himself with his

usual pursuits. On the night of December 9th, he was attacked, while in bed, by sudden and profuse bilious vomiting, with a "feeling of soreness" in the lower belly. His moral energies were much depressed, and the bowels again became slow. Shortly after this gush of bile from the stomach, a large quantity of highly foetid, dark-coloured fluid was ejected, likewise by vomiting. This offensive discharge soon became black as "coffee-grounds," and continued at intervals for about thirty hours. Alternating with the fits of sickness, there was intense clammy thirst, with frequent and protracted hiccough. Until this period of the complaint, when, by the removal of obstruction from its excretory ducts, the bile had again found free access to the bowels, there had been no local suffering in any part of the abdomen. The pain, of which the patient now first complained, was at no time severe, and seemed to track the long pent-up bile and putrid fluid in their progress along the intestinal tube. After a short interval of remission, on December 14, all the urgent symptoms returned, with frequent grievous aggravation of the hiccough. Food in the smallest quantity was refused instantly by the stomach, and for two days the case appeared to be fast verging to a fatal termination. On December 17, the bowels, long previously inactive, under large and repeated doses of calomel and other purgatives, began spontaneously to relieve themselves, and soon gave passage to the smooth globular substance, which is now submitted for inspection to the Society. The

shining central radiated portion of this concrete mass is evidently cholesterine. Its brown laminated outer crust, interspersed with particles of crystalline matter, is supposed by Dr. Prout to consist principally of inspissated bile. It was examined by this distinguished physician and chemist, on the request of Dr. Latham, with whom I consulted on the case, at the most critical period of its character. Upon the event of this excretion, all the urgent symptoms gradually and entirely subsided. During their continuance there was no evidence of fever; the tongue was but slightly coated, and the pulse maintained its usual average of from 60 to 65 beats in the minute. The subject of this case, an old gentleman of cheerful temperate habits, resided in the West Indies during the greater part of his early life. For the last five and twenty years he has been much harrassed by a loud, inveterate stomach cough, accompanied by profuse expectoration, and frequent vomiting of a thick tenacious mucus. About ten years ago he voided more than twenty feet of tape worm, after a dose of turpentine, which he took on my prescription.

I have been reminded by this case of another instance of biliary concretion, analogous by its size and extent of pressure, as by the negative character of its symptoms.

On the examination, *post mortem*, of a female patient, aged 47, who died comatose, with jaundice, while under my care in St. George's Hospital, in October 1833, a round calculus, described in a note

of the same date as "enormous and large as a walnut," was found impacted in the ductus communis hepaticus. A smaller concretion of irregular shape was lodged in the duct, where it passes obliquely through the coats of the duodenum. The gall-bladder was small, nearly empty, and contracted to an hour-glass shape by partial adhesion of its inner central surface. It contained a small calculus in the cavity thus formed at its convoluted extremity. The ductus cysticus, the ductus hepaticus, and the bile-ducts generally throughout the liver, were exceedingly dilated by accumulation of their proper fluid behind the obstruction on its current to the bowel. The patient in this case had complained much of weight in the upper abdomen, but never of pain. There is an inference from these cases that may be remembered with advantage in our diagnosis of jaundice and constipation. The progress of gall stones, (even when inordinate in their dimension,) through the ducts, is not disproved by the absence of pain from the epigastrium.

Dr. Bence Jones has since favoured me with the following analysis of the substance in question :

"This calculus was lighter than water, and consisted of two parts, a central white crystalline radiating matter, which cut like wax, and an exter-

nal dark brown substance, which was deposited in irregular layers, which were not crystalline, and which broke in dividing.

“The centre, when heated, melted, took fire, burnt with a clear flame, leaving no ash. It was entirely soluble in hot alcohol, and was deposited on cooling in scales.

“The external part was very slightly soluble in water. When heated it did not melt, but after a time took fire, and burnt with a smoky flame, leaving a white ash. .277 grains of calculus gave .024 grains of ash, that is about 8.6 per cent. This ash consisted chiefly of carbonate of soda, with a little phosphate of lime.

“The external substance dissolved with effervescence in nitric acid, giving off nitric oxide gas. The solution was at first deep red, and became, when heated for some time, yellow. It was dissolved by caustic potash, and the solution in the cold was yellow, and when heated became dark green. Treated with hot alcohol, a very small portion of this external substance was dissolved and crystallized on cooling, in scales.

“Hence the centre of this calculus consists of nearly pure cholesterine, and the external part of inspissated and altered bile, with a little cholesterine or fatty matter. The colouring matter of the external part is identical with the cholepyrrhin of Berzelius, which is the same as the colouring matter of the leaves of plants.

“When burnt, dissolved in pure hydrochloric acid, evaporated to dryness, redissolved in water, and tested with ferropurssiate of potash, no Prussian blue was formed: hence none of the colouring matter of the blood is present in this calculus.”^a