evidently filled with pus, which was extending down the back of the joint, and would soon find its way into the leg, and as the patient was very anxious to save the limb, it was decided to excise the joint.

Although the patient had the wasted look of phthisis, no physical signs of the disease were detected by the physician. The operation was performed on June 16th. A curved incision was made over the front of the joint, the flap turned up, and the patella dissected out. Nearly a pint of thin pus then gushed out of the joint. The articular ends of the bones were covered with thickened pulpy synovial membrane.

The upper surface of the tibia and the condyles of the femur were removed with Butcher's saw, and a softened patch at the posterior part of the tibia was gouged. One vessel required tying. The limb was then bandaged on McIntyre's splint, as modified by Mr. Price, but it was not finally put up till three hours after the operation. The ends of the bones being very vascular, some time was allowed for the bleeding to cease. The wound was then sponged; six sutures were introduced; the leg was bandaged on to the splint nearly as high as the knee, and the thigh kept firmly on the back splint by means of a padded splint and buckle. In this way the tendency of the lower end of the femur to ride forward was counteracted, and the upper end of the tibia was prevented from falling backwards by means of a pad covered with oiled silk. The whole apparatus was then swung. He dozed, with laudanum, during the night, but had no continuous sleep. He had frequent startings of the knee, and great pain. For some days he went on pretty well, complaining only of extreme weakness, for which quinine and stimulants with good diet were administered. On the 25th, rigor occurred, followed by severe sweating, with great depression, thirst, and restlessness. He went on sinking during the next two days, and died, without any fresh symptoms, on the 27th.

Post mortem examination showed tubercles in the apex of both lungs. There were no secondary deposits.

II. ABSCESS SITUATED WITHIN THE HEAD OF THE RIGHT TIBIA.

Under the Care of R. QUAIN, Esq.

[Reported by F. WINTERBOTTOM, Esq., House-Surgeon.]

Charles Johnston, aged 31, was admitted into the University College Hospital, May 3, 1859, under the care of Mr. Quain. He was a native of London; a painter by trade. His general health had been good. When twelve years of age he met with an accident whereby he severely twisted his right leg, and bruised the skin over the tibia. He was confined to bed for several weeks, and a number of openings made their appearance over the front of the upper end of the tibia, through which matter and pieces of bone were discharged. Four years and a-half afterwards, he fell down and hurt the right knee, causing considerable swelling and much pain in the head of the tibia. This was poulticed; an abscess formed and burst, and he recovered. Two years ago, while jumping over some barrels, he slipped, and again struck the head of the tibia against the rim of one of the barrels. He entered University College Hospital; the leg was poulticed, and he left well in a fortnight. The limb now remained perfectly well till four weeks ago, when he again began to feel pains in the same situation; these have continued to the present time.

Present state (May 8th). When both legs are laid bare, there is a marked difference perceptible between them; this seems to be confined, however, to the upper half of the tibia. The right one is considerably larger than the left, and is arched forwards, so that the upper part of the bone forms a convexity instead of the slight concavity usually present. When the prominent part of the tibia is pressed upon, the patient complains of great pain. He also states that there is a constant aching in it, and a throbbing sensation, which he compares to the feeling of a gathering in the finger. The patient does not sleep. His face expresses suffering; his appetite is bad. He has had distinct and repeated attacks of sweats and shivering, but none since he has been in the hospital.

May 10th. Mr. Quain made a crucial incision over the anterior and inner surface of the tibia, about two inches below the head, applied a trephine, and removed three-fourths of an inch diameter of the bone. A large quantity of pus immediately swelled up from the bone. The wound was plugged with lint, and a poultice was applied.

May 12th. He was already improved, and slept well. He had no pain in the limb, only a feeling of soreness.

June 14th. Since the above, the patient has been progressing most favourably. The wound is all but closed, and his general health is good. He was discharged, to attend as out-patient. Within a fortnight the wound had completely healed, and the man returned to his work.

ERRATUM. In the report of a case of strangulated inguinal hernia, under the care of Mr. Hillman at the Westminster Hospital, in the last number of the JOURNAL (p. 789), an error occurs in the description of the operation. The incision is said to have extended "about equally below and above the internal abdominal ring." This is a misprint for *external*.

Original Communications.

ON SOME OBSCURE CASES IN MEDICINE.

By M. A. ROBINSON, Esq., Charing, President of the East Kent Medical Society.

[Communicated to the Society, May 1859.]

THE most experienced practitioner will frequently meet with cases which present symptoms so extraordinary in themselves, so irregular in succession, or so unusually grouped that he fails to find their correct interpretation. Should a case of this kind terminate fortunately, he gives himself credit for an amount of skill, bearing, probably, too large a proportion to his real knowledge of the disease; while, should the result be otherwise, he waits with no little interest for the scalpel to reveal the value of the conjectures upon which he had founded his treatment. Unquestionably, much of the mystery which surrounds these obscure cases in medicine, proceeds from the natural difficulty attending all inquiries connected with phenomena occurring in the living body. But much also depends on causes within our control, and therefore more or less easily to be avoided. I may mention, for instance, a cursory method of examination which indolence or, less culpably, the hurry of business may lead us to adopt; also, our neglect to renew our fading remembrance of many important points of physiology and pathology, and to extend our acquaintance with discoveries in these and their collateral branches of knowledge, as they are published by their authors; while too often we allow the mind to be led captive by some seductive theory, under whose influence we place a false value on what we see and hear, and not unfrequently, dazzled by imaginary facts, are induced to give to "airy nothing," a name and consideration due only to some grave reality; and last, but not least, I must enumerate amongst the obstacles that beset our way in the toilsome pursuit of truth, a certain evil spirit of self satisfaction and conceit, which often deludes the practitioner into the belief that no one else can comprehend what has baffled his own understanding, and thus shuts him out from the useful light which the experience of another might afford.

This brief review of some of the elements which in many cases, I believe, tend greatly to darken their natural obscurity, is not suggested, as might be imagined, by remorseful meditations on my own mistakes in practice only, but by the recollection of many cases which have occurred in the practice of men of all grades in the profession, and during a very considerable period of time; and it is by a firm conviction that these influences are more prevalent and powerful than we like to own, that I am led to bring before your notice two cases which appear to me to exemplify the necessity of keeping in constant employ those faculties of the mind which are ever required for the elimination of the truth.

I think also that these considerations should lead us, in regarding the errors of our brethren, to cultivate with greater zeal than I fear is our wont, that "most excellent gift of charity," which ought to be as precious to the philosopher as it was to the apostle.

CASE I. The first case I have to mention is one of inflammation, occurring simultaneously, and with inadequate symptoms, in three of the most important serous membranes of the body, and in the lungs.

J. F., aged 32, on March 22nd, 1852, walked to my house, a distance of three miles, and complained of indications, not by any means severe, of influenza, which was then epidemic. He

had slight pleural pain, tightness of breath, and cough, with febrile symptoms. Auscultation and percussion, somewhat hurriedly employed, gave no alarm. Full doses of antimony were given, and he was desired to send should he feel worse. In three days I was informed that he felt better; but that the cough was more troublesome. A slight anodyne was prescribed, and I heard no more until the 31st, when I was hastily summoned, the messenger stating that my patient was in a fit. I found him completely comatose; and in twenty-four hours he died.

I was told by his friends that he had constantly reported himself as improving in health, and that on the morning of the fatal seizure he had risen soon after seven o'clock, taken his breakfast, and then walked out. He soon returned, went up stairs, lay on his bed, and never spoke again.

On inspecting the body, the result of extensive inflammation of the left pleura was found in the firm partial adhesions and fluid effused into the compartments thus formed. The left lung was likewise extensively disorganised, in the form of red and grey softening. The serous covering of the heart was overlaid with a deposit of lymph, and on opening the skull a similar deposit was seen beneath the arachnoid, completely enveloping the brain.

CASE II. A farmer, in opulent circumstances, aged 42, stout, but muscular, strongly built, and having every appearance of robust health, in September 1849, first complained of certain uneasy sensations about the chest and epigastrium. The pulse was natural in every respect, the tongue was slightly furred; none of the bodily functions were impaired; indeed, the symptoms observable were only those of mild dyspepsia. The bowels being torpid, alteratives and aperients were given.

September 27th. The feelings of uneasiness had become actually painful, and were especially troublesome when lying in bed. The description given by the patient of his feelings was very indefinite; but he referred the pain chiefly to the left side of the chest, occasionally encircling the body on a level with the apex of the ensiform cartilage. There was no cough, no difficulty of breathing, and yet he complained occasionally of a feeling of tightness. The lungs were well filled at each respiration; the heart was healthy in its action; auscultation and percussion gave no sign. From the pains showing a disposition to increase at night, it was thought best to treat the symptoms as probably of a rheumatic character, and colchicum with magnesia was given. A certain amount of relief followed the use of these means, and being much occupied in business the patient made light of his ailment.

December 12th. The pains had now returned with increased force. At times he had passed the whole night without sleep; but in the day time he felt quite well, with perhaps an occasional twinge. The chest was again carefully examined; but the only result was a barely perceptible dulness of the left side on percussion. Leeches and stimulating embrocations were applied, and colchicum was given internally.

January 1850 was passed in tolerable comfort; but February 11th again brought a visit from the patient. He said that he had been much relieved by eating brown bread; but the pains were again troublesome, and appeared to be more easily defined as proceeding from a spot opposite the fourth or fifth dorsal vertebra. Auscultation again gave no sign. On the supposition that there might be a congested state of the great vessels, diuretics were prescribed, and some little benefit appeared to result from their use.

About March 10th an eminent London physician was consulted. He thought there was nothing the matter, and prescribed for the digestive organs, advising strict attention to diet. The patient was again relieved, the pains subsided, and so did some amount of mental anxiety which had begun to show itself. My own opinion at this time differed materially from that of the other gentlemen engaged in treating the case. The long persistence of the peculiar pains,—their becoming, though gradually, yet decidedly localised,—the fact of posture affecting them,—the freedom of the heart and lungs from all sign of disease,—appeared to point to the occurrence of some growth within the thorax, though as yet its relative position could not be ascertained. Soon after his visit to London, I again examined his chest, and this time was conscious of the existence of an exceedingly slight murmur; so slight, indeed, that I waited for another opportunity of examination before I ventured to make any deduction from it. Still it served to strengthen the suspicions I had begun to form respecting the nature of the case.

From October 10th, 1850, to May 22nd, 1851, I have no record of his state; but I believe that during that period he was toler-

ably free from any uncomfortable symptoms. At the latter date he again complained of being troubled by some of his old pain; but not in any great degree; and he believed himself to have quite recovered from his original disease.

In July 1851, he had a cough, and was treated with conium and expectorants. The expectoration was at times profuse, and the affection was regarded as bronchitis.

In September, I had the last opportunity of seeing him. He had been seized with violent cough, and sent for assistance in haste. When I arrived at his residence, the attack was over, and he declared himself to be as well as ever he was in his life. Not having seen him for many months, I made a careful exploration of the chest, and now heard distinctly a low deeply seated murmur, synchronous with the pulse, but certainly not proceeding from the heart. It could in my opinion only proceed from something affecting the current of blood through the aorta. The cough was most peculiar in sound, and strongly suggested the idea of some alteration having occurred in the calibre of the tracheal tube. The expectoration was *puriform*, but the lungs and bronchial tubes gave no sign of disease. The cough likewise was paroxysmal; and, judging from the patient's account, convulsive. My suspicions now assumed a more decided character; and I drew the conclusion that a growth of some kind existed in the posterior mediastinum in close relation with the aorta and the trachea; that it pressed on the latter so as considerably to affect its capacity; that suppuration had taken place in it; that a communication had been formed between the suppuratory cavity and the air tube; and that sooner or later the end would be death. I have little doubt that the patient had some notion of the unfavourable tendency of my opinion, as I was from that time carefully excluded from his presence, and saw him no more until, ten months afterwards, I was able at the *post mortem* examination of the body to point out to one of his attendants the precise condition I have named.

By the end of November, the state of the patient was such that the physician before consulted was called from London by telegraph. He pronounced the disease to be tracheal, and prescribed confinement to an apartment of regulated temperature, the local application of nitrate of silver, cod-liver oil to be taken internally, with a long continued course of mercury, opiates to relieve the paroxysms of coughing, and the strict observance of silence, as speaking seemed decidedly injurious. For six months this plan was faithfully carried out; and at the end of this period success apparently crowned the efforts of the physician, and the unwearied attention of a most devoted nurse. The cough gradually became less frequent and alarming; the patient actually grew fat and strong; and, grateful for restoration from so severe an affliction, once more mixed in business with the world. My own opinion, though freely questioned, remained unchanged. I still ventured to assert the inevitable result, and thus it happened.

On Tuesday, July 6th, 1852, he was at market, to all appearance in perfect health. The next day, whilst standing in his own parlour, he suddenly complained of feeling ill, said he was going, and in twenty minutes ceased to live.

I was fortunately permitted to inspect the body. The lungs and heart were sound, as I expected would be the case, some slight adhesion of the left pleura being the only morbid appearance connected with them. Closely united with the spinal column, from the fourth to about the sixth dorsal vertebra, was an aneurism of the descending aorta. Anteriorly, the tumour projected so as to put the trachea on the stretch, and alter the form of its tube to a remarkable degree. The proper coats of the vessel had disappeared, except at the lateral parts of the aneurism, where some strength of material was requisite to control the current of blood passing downwards. The channel for the vital fluid was thus bounded posteriorly by the bare and hollowed out bodies of the vertebrae, anteriorly by the laminated coagula, and laterally, and but for a very small space by the strong coats of the aorta, which, adherent behind to the bone, in front gradually thinned out into an exceedingly delicate membrane which covered the anterior convexity of the coagula. Beneath this membrane and upon the coagula lay a quantity, quite a tablespoonful, of well formed pus, while a small hole formed a communication between the cavity thus discovered, and the trachea, allowing in this manner the matter formed on the aneurism to drop as it were as circumstances might occur, into the respiratory tubes. There was no extravasation of blood, no escape of pus into the wind-pipe, to account for so sudden a death; and the immediate cause of this event is still unknown. The aorta was thickly lined throughout its extent with scales of calcareous deposit,

giving to the finger the sensation of passing over a nutmeg-grater, and its inner membrane was of a most brilliant scarlet hue.

ILLUSTRATION OF AN OBSCURE JOINT-AFFECTION.

By ALFRED FLEISCHMANN, Esq., Gresford Cottage, Wrexham.

JOHN DAVIS, aged 2½ years, a strumous-looking child, delicate from birth, about four months ago, fell off a low wall. The injury he experienced appeared insignificant, and was forgotten in a day or two, till six weeks after the accident, he slightly halted in his walk; the defect increased, until he ceased to put one leg before the other, and progressed by crawling. Following the advice they received, the limb was poulticed; but the child getting worse, I was ultimately called in. He was lying on a bed wailing and listless, evidently ill, and independently, or concomitantly at least with the hip-affection, was suffering from what is so common in children, irritation of the alimentary (mucous) tract, evinced chiefly by a morbidly bright tongue, the papillæ standing out in relief, by constant irritable pricking of the mucous outlets of the body, by a varying appetite, and by remittent evening fever. This may or may not be attended with the presence of intestinal worms, very frequently not; it is easily cured by small doses of dilute nitric acid and an occasional alterative purge.

Proceeding to examine the faulty joint, I was struck with the peculiar attitude, on assuming the erect posture; the leg (the left) was somewhat advanced, but at the same time the *whole* plantar surface of the foot was in contact with the floor. Occasionally, the foot and leg were inverted, the sole of the foot resting high up upon the dorsum of the other. The buttock was flabby and its fold absent. There was tumefaction in the line of the inguinal canal, but no fluctuation or hernia. The left leg was about half an inch longer than the sound one, and I fancied slightly atrophied. There was uneasiness but not pain in abduction; eversion and percussion were borne without much flinching. The child never complained of actual pain, but spoke generally of his "poorly leg".

Was it a case of dislocation, morbus coxarius, or simply muscular and ligamentous debility? Although the crossing of one foot on the dorsum of the other is a prominent feature in a dislocation but not in hip-joint disease, it was clearly not the former; the movements of the limb, and freedom from lameness for some time after the fall, decided that. Was it incipient hip-disease? There was some tumefaction in the neighbourhood of the anterior aspect of the joint, there was slight lengthening of the limb, the gluteal fold was lost, and slight uneasiness was felt in abduction; but the great feature of the disease, actual pain, was wanting; no constant pain; no pain in forcible contact of the femoral head and the cotyloid cavity; no pain in rotation.

If it were morbus coxarius, much depended on taking it in an early stage; but I determined to improve the child's general condition and think over the case, before I condemned the patient to a long duration and the limb to a straight splint. I gave the mother charge to let it rest as much as possible, put it upon the medicine I before indicated, and saw it again in a week; I was much pleased to find the aspect of the child entirely changed; from being dull and listless, it was bright and intelligent; the signs and symptoms were all mitigated, and though it still limped and placed the limb in suspicious postures, he could bear his whole weight on the affected side without uneasiness or reluctance.

He was ordered a morning douche, and the acid was changed for cod-liver oil. He is now perfectly well.

REMARKS. On a superficial examination, one might easily have given an opinion in favour of hip-joint disease. There is no department of surgery requiring more careful study, none where disease or injury is so often obscure or simulated, and none where more mistakes are oftener made, than in the different joint and bone affections. How often has an hysterical girl been leeches and blistered, and burnt and bullied, when a shower-bath would have cured her! How often has a knee been poulticed, when a hip should have been blistered; how often has a hip been blistered, when poultices should have been used; and how often have pulleys been used, when splints were required! As Dr. Druitt wittily says, it is rather an awkward mistake to order a young lady horse-exercise for hysteria, and then to find out that she is suffering from a carious spine.

A Course of Lectures ON URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY,
DURING THE SESSION 1857-58.

BY
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LECTURE IV.

URINE IN DISEASE. *Arrangement of the Subject. Diathesis.*

EXCESS OR DEFICIENCY OF WATER AND THE ORGANIC CONSTITUENTS PRESENT IN HEALTH. *Excess of Water: Diabetes Insipidus: Deficiency of Water: Increased Acidity of Urine: Principles of Treatment: Nitric Acid in the Urine: Ammonia: on Detecting Urea in the Blood or Serum: on Detecting Ammonia in the Breath: Urea; Excess of Urea; Deficiency of Urea: Colouring Matter: Excess of Uric Acid and Urates: Principles of Treatment: Extractive Matters: General Remarks on the Increase of the Organic Constituents, with Analyses: Analyses of Urine in Chorea: Analyses of Urine in Skin-Disease.* EXCESS OR DEFICIENCY OF THE INORGANIC CONSTITUENTS PRESENT IN HEALTH. *Chloride of Sodium; its Diminution in Acute Inflammations: Sulphates; Increase in Cases of Chorea, Rheumatic Fever, etc.: Influence of Remedies: Alkaline Phosphates; Increased Secretion of Alkaline Phosphates in Inflammation of the Brain; Analyses; Earthy Phosphates; Increase in the Urine of Cases of Mollities Ossium; Analyses.*

EXCESS OR DEFICIENCY OF WATER AND THE ORGANIC CONSTITUENTS.

[Continued from page 769.]

Urea. From what has been already said with reference to the variations in the proportion of urea secreted, under different circumstances, in a state of health, it will be inferred that, in disease, the quantity of this constituent varies greatly. The total amount formed in a given time may be much greater or less than in health; and the proportion which this substance bears to the other organic constituents varies greatly in different cases.

Increase of Urea. The term "excess of urea" is not applied to those cases in which the total quantity excreted in the twenty-four hours is much greater than in health; but a specimen of urine which yields crystals of nitrate of urea when an equal bulk of nitric acid is added to it in the cold, without having been previously concentrated, is said to contain "excess of urea". The quantity of urea dissolved in the fluid is so great that a nitrate of urea is formed, and crystallises just as if the urine had been concentrated by evaporation. This result may be brought about in several ways. In cases in which but a small quantity of fluid is taken in proportion to the urea to be removed—when an unusually large amount of water escapes by the skin and other emunctories—and in cases in which an unusual amount of urea is formed in the organism, we shall frequently find excess of urea.

There is, however, another class of cases in which the urine often contains this excess of urea; and it is difficult to offer a satisfactory explanation of the excess. The patient is weak, and grows thin, in spite of taking a considerable quantity of the most nutritious food. He feels languid, and indisposed to take active exercise. In some cases, digestion is impaired; in others, the patient eats well, experiences no pain or uneasiness after food, and perhaps has a good appetite. Sometimes there is lumbar pain. It would seem that much of the albuminous substances in the blood, instead of being applied to the nutrition of the tissues, becomes too rapidly converted into urea, and is excreted. The waste of the tissues is not properly repaired, and the patient gets very thin. To refer these symptoms to the existence of a particular diathesis, appears to me no explanation of the nature of the case. The pathology of these remarkable cases has not yet been satisfactorily investigated. Mineral acids, rest, shower-baths, and good air, often do good; but some of these patients are not in the least benefited by remedies, and they continue for years very thin, passing