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