

tained a fracture of the pelvis and rupture of the urethra. He was sent here for rupture of the bladder. When he came into the hospital he was suffering from shock, and bleeding from the meatus. A catheter could not be passed at that time. He was put to bed and bottles of hot water applied, and a short time afterward a catheter was passed. At one time he was able to pass his urine without the catheter. His symptoms of late have not been improving, his urine becoming more and more ammoniacal, and within the last few days there appeared a red, shining tumefaction along the right inguinal region, indicating the extravasation of urine into the tissues. The appearance of blood at the meatus showed that it was a rupture of the urethra and not of the bladder, for in that case the blood would have extravasated into the tissues.

On introducing an instrument into the urethra, it enters a false passage at about the triangular ligament, and deflects to the left. I propose to do the operation of external perineal urethrotomy, opening the urethra in front of the laceration, so that the urine can find exit externally. The laceration seems to be posterior to the deep layer of the superficial fascia. If the urine is not let out of the tissues, sloughing is inevitable. The parts are thoroughly washed and shaved. If I am able to pass a staff of a good size into the bladder it will very much facilitate the operation. I was able yesterday to get in a good-sized instrument.

I think I have now succeeded in introducing the staff into the bladder.

The patient is now placed in the lithotomy position. I make an incision in the median line or raphé, about an inch in length, cutting through the skin, superficial and deep fascia. I find we have our staff in the false passage instead of the bladder. I have now my finger in the bladder, and we will wash it out with warm Thiersch's solution, which is not irritating, as the other antiseptic fluids are. Its formula is as follows:

R. Salicylic acid, ʒss.  
Boracic acid, ʒss.  
Aque, Oviij.

It is hardly necessary to put in the bladder a drainage tube; but we will at any rate, and wash it out every day, so as to keep his bladder drained of the foul-smelling fluid which we have allowed to escape from it. I now incise the tumefaction on the right of the scrotum, and find there has some pus formed already. I now cleanse the parts thoroughly, and apply the antiseptic dressings, allowing the drainage tube to protrude through them.

These wounds are troublesome to deal with. Two years ago, a miner was received in the hospital, and had his urethra ruptured about the same as this man before you. I operated on him the same as in this case, and he remained here for six months. He received his injury by a bank of coal falling on him, while he was working on his knees, and buried one heel in his perineum.

These lacerations of the urethra are liable to result in stricture, especially if they are transverse; the longitudinal incisions that are made in urethrotomy, however, do not.

CREOSOTE FOR INFLUENZA.—Iselin (*Corr.-bl. f. Schw. Aerzte*) recommends creosote in doses of from fifteen to seventy-five minims daily in the treatment of influenza.

## SURGICAL CLINIC, AT THE HARLEM HOSPITAL, NEW YORK.

BY DR. THOMAS H. MANLEY.

[Reported exclusively for THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.]

*Gentlemen:*—You will remember, in the notice of this clinic, it was announced that among other operations which we would proceed with to-day, was one of abdominal section, for the removal of an interstitial fibroid of the womb; an abdominal hysterectomy, so-called. Well, here is the patient before you; and, while we must congratulate her on her escape from the perilous ordeal which was before her, we are sorry to have disappointed you.

But, it seems to me, that the history of this case and the simple means by which she has been rapidly and radically relieved of her infirmity, are by far of more practical value than would be any operation, which would involve the loss of blood and an extensive mutilation. Her history is briefly this: she is 43 years old, free from any organic disease, and had good general health until a little more than three years ago, when simultaneously with a dragging pain in the back and loins, she noticed an unusual fullness over the uterus rather toward the left side. She failed to see her physician concerning it, for nearly two years; when it had so increased in volume as to greatly inconvenience her and aggravate her pains. At this time, and for some time before it, she was having a copious metrorrhagia, between the catamenial epochs, which greatly emaciated and exsanguinated her. Her medical attendant has very patiently and thoroughly employed all the modern remedies, local and constitutional. She derived no benefit from any, except electricity, which, after each séance, greatly eased the pain. However, it made no impression on the neoplasm or her exhausting hæmorrhages. Hence, as her health was steadily giving way, and she was incapacitated from doing any work, she was willing to submit to anything which offered her a promise of cure. And her physician, Dr. Nivison, of this city, a highly skilful practitioner, decided that a hysterectomy was the surest means of effecting a cure; though when he handed the case over to me, he requested me to use my own judgment, and deal with it as I thought best. I shall not say anything about differential diagnosis here, but will ask your attention to the various methods employed, when we treat these uterine myomata, by direct, surgical intervention. They, as you know, are chiefly of two kinds; viz., palliative and radical. Among the former is the removal of the ovaries and ligation of the uterine arteries. The latter, are the removal of the uterus and tumor, by the abdominal or sacral incisions; their total removal by morcellation, as instituted and first extensively practiced by Péan, of Paris; and, thirdly, the removal of the myomatous mass, down through the cervical canal without any serious injury to the uterus, a method first successfully instituted by myself, in America, for the evulsion of very large uterine, neoplastic growths. After having successfully operated last year for the removal of a uterine myoma, taking away womb, ovaries and all, on a careful examination of the specimen, we found that the growth might have been readily removed through the vagina, as was a very large, supposed inoperable tumor, of this description, removed by me, three years ago. Now, the removal of the ovaries is not in itself free from

danger, and they may be so bound down, or dragged under the uterus, as to be beyond our reach. But, what is the worst of all, their removal may in no way influence the growth of the mass. Ligation of the uterine arteries, when the cervix is drawn far up into the pelvic cavity, is impracticable; while, if attainable, the compensating dilatation of the ovarian vessels, will in a short time, make up for the occluded uterine arteries. It is unnecessary to remind you that every sort of operation undertaken, with a view of removing a large adherent uterus and tumor, is attended with great danger to life; and, with the most expert, is full of difficulties, besides many may be even impracticable.

Hence, in this case, before we proceeded to do a hysterectomy, we first essayed to relieve our patient of her tumor by the utero-vaginal passage.

The cervical canal was gradually, but widely opened by the use of tents, when two fingers could be introduced into the uterine cavity. Now, on the left side, the uterine wall was felt compactly occupied by a large granular mass in its center, with an extensive capsule, which by adhesive inflammation was glued to the entire endometrium. It was a homogenous mass and seemed to consist of mixed elements. Little further was done, at the first sitting. After a few days, dilatation, thorough irrigation and drainage, having been kept up, she was again placed on the table, when with the use of the volsellum-forceps, the long scissors and the curette, every remnant was swept away. The result has been, as you see, the uterus which two weeks ago, was as large as a coconut, is now of its normal size. There is no more pain, no more morphine eating, and to-morrow, or the next day, she will leave the hospital.

The next case which I wish to show you, is one of incarcerated, umbilical hernia, in a woman. She is 40 years old, has had four children. She first noticed this shortly after the birth of her last child. She comes to us for relief; because for the past year she can do no work, without having symptoms of strangulation, and is compelled from time to time to take the bed, and apply soothing applications over the inflamed protrusion. You will notice that the hernial mass is large, doughy, and but partly reducible. This species of hernia is the only one, that I am acquainted with, which appears to ever arise as a consequence of the parturient effort in women. Although these extrusions in this situation are commonly designated umbilical, in fact, they rarely are so, as they usually commence to form in the linea alba immediately above or below the ring and after their emergence insinuate themselves under the thin umbilical scar. One anatomical peculiarity about them, well to remember, is, that they have no sac.

In this case, my aim will be to freely expose and detach the displaced viscera. If the omentum is present, in excessive quantity, it will be ligated and cut off. After having returned the hernia, I will secure a complete and entire peritoneal covering in it and then close in the overlying structures by the continuous silk suture. The remaining parts will be closed in with catgut, layer by layer. No drainage will be employed.

The next patient is a man, on whom we will perform an amputation of the thigh. As his case is quite a unique one and conveys many useful lessons, it may repay us for the time consumed, to rehearse part of it. Six days ago, while adjusting a belt on a

pulley, he was caught and dragged up, over a swiftly revolving shaft, and thrown about twenty feet. When our ambulance surgeon, Dr. Arch. Dixon, saw him, he was in a state of collapse and he feared he would not reach the hospital alive. However, he slightly reacted. When I saw him, two hours after the accident, I discovered that he had a dislocation of both knee-joints; the condyles of each femur being driven downward posteriorly and the head of the tibia upward and forward. The crucial and posterior ligaments, with the popliteal muscle, were completely torn through. Besides, he had a compound fracture of the right humerus close to the axillary space, on the same side, fracture of the shafts of five ribs, in their centre.

The luxated bones were easily replaced; but, as their ligamentous connections were destroyed, on the least movement of the limb, they at once slipped out of place again. We found that the best position that we could place the knees in, and which gave the most comfort, was by having them semi-flexed under pillows. The superior fragment of the broken humerus was drawn far inward, by the unopposed pectoralis major muscle; while its sharp-pointed end threatened to pierce the integument. The fractured ribs were not much displaced. Singular to say, that notwithstanding the terrible violence which the body had sustained, he reacted well and the following morning was in a fair condition. Both lower extremities from the patella downward were cool and showed unmistakable evidence of injury to their vascular supply. When we bear in mind that the popliteal artery lies close to the inter-condyloid space; that its sheath is firmly retained in position by a dense fascia, and that it is all the more fixed by the large terminal branches, which it gives off here, we can the better understand how a complete luxation at the articulation is impossible, without seriously compromising the integrity of this vessel.

We now, by the use of hot bottles, hoped to avert the necessity of amputation, by endeavoring to favor collateral circulation. We were partly successful on the right side: but indubitable signs of dissolution in its fellow, appeared on the third day; and we should have amputated sooner had we consent to do so. Now, you will notice that the limb has a pale and shrunk appearance and that there are many patches on the surface of the integument, which resemble so many eschars, from burns. During the past twenty-four hours, gangrene has rapidly advanced towards the body, so that now it has reached the middle of the thigh, hence, no doubt, the best course to pursue, would be to do a hip-joint amputation, but his general condition is so feeble that I fear the immediate consequences; accordingly we will carry the amputating knife through the upper third. You will notice that the opposite limb, though warm, has a bloated and ominous appearance.

Now a word about flaps, in amputation, before we commence. The only safe guide to surgeons in flap-making, is experience. Too much tissue is as bad as too little, for we will have a slough; though it is always best when we select, to cut freely, so that, if there is a redundancy, it can be later trimmed away. It is only in pathological conditions, arising from a constitutional origin, that we can safely apply the classic amputation of the text-books. In traumatism, they may be wholly ignored; for the end which a conscientious surgeon should always have in view,

is not a handsome, but a strong and useful stump.

NOTE.—Patient operated on for hernia is making an excellent recovery. The man on whom the amputation was performed developed septicæmia and died three days subsequently.

## LECTURES ON GENERAL ETIOLOGY.

Delivered at the Chicago Medical College.

BY H. GRADLE, M.D.

### LECTURE V.

*a.* In illustration of secondary diseases produced in a mechanical manner may be quoted the remote pressure effects of new growths, aneurysms or tumefactions of any kind. If the pressure is exerted upon nerves it leads to their atrophy; if it involves tubular organs like the intestines or the ureter it is followed by the consequences of their obliteration. Another mechanical instance of secondary affection is the strangulation of the intestines by peritoneal adhesions. Stenosis of the nasal passage can cause mechanically hypertrophic changes in the naso-pharynx and Eustachian tubes, which often become complicated by subsequent infections. Interference of respiration on account of enlarged pharyngeal or faucial tonsils may lead to deformity of the thorax and possibly even spinal curvature. A secondary disease of mechanical origin is also furnished by the detachment of a clot within the circulatory system and the subsequent embolism of a terminal artery. Under this aspect may also be included fat embolism resulting from crushing or disintegrating disease of the marrow of bones.

*b.* Secondary diseases produced by an influence upon the nervous system comprise the so-called reflex neuroses. It is perhaps difficult in this group of secondary troubles to draw an absolute line of distinction between mere symptom and secondary neurosis, but too fine a distinction is of no practical account. For instance, we would ordinarily speak of cough as a mere symptom of disease of the respiratory passage, but if we encounter a case of distressing spasmodic cough due to a comparatively insignificant lesion like a shrunken tonsil, it is perhaps more practical to consider the coughing spells as a reflex neurosis, inasmuch as the lesion causing the reflex requires a certain combination of circumstances to produce this effect. It is altogether illogical however, to consider a neurosis like asthma a mere symptom of nasal disease, as it consists of an occurrence which results only occasionally from a combination of circumstances.

The clinician uses the term reflex neurosis in too wide a sense. Physiologically we mean by a "reflex" the activity of centrifugal nerves in consequence of the stimulation of sensory nerves. Winking, for instance, is a reflex movement following irritation of the conjunctiva, and accordingly spasm of the lids caused by conjunctival disease may properly be called a reflex neurosis. But a neuralgia dependent on nasal disease is not a reflex at all, although often called so by clinicians. It would be better to limit the term reflex neurosis to motor or secretory activity and vascular changes induced in a reflex manner, and to call sensory disturbances due to peripheral disease, "sensory neuroses of peripheral origin."

Amongst the reflex neuroses, we encounter in the first place instances which are but the morbid exag-

geration of normal reflexes. Thus, optic defects of the eye may cause tonic spasm of the ciliary muscle; conjunctival disease may be followed by blepharospasm. Nasal anomalies may induce sneezing fits and pharyngeal lesions spells of spasmodic cough. In other instances physiological reflexes may be exaggerated in extent as well as in intensity, as for instance when eyestrain or conjunctival disease results in twitching not merely of the lids, but of all facial muscle, amounting to facial chorea, or when pharyngeal irritation induces spasm of the larynx in the form of laryngismus stridulus.

But amongst the reflex neuroses we meet finally with occurrences which have either no physiological prototype at all or represent reflexes exaggerated beyond all resemblance to the normal condition. Types of these morbid reflexes are choreiform movements in consequence of ocular anomalies or naso-pharyngeal disease, asthma as the result of nasal affections and epileptoid convulsions from peripheral irritation, be it in the nose, in sensitive cicatrices or, most frequently of all—in the diseased intestinal tract. Some clinicians have refused to consider these instances as reflex neuroses, but their arguments are based on misconceptions. There is indeed a chorea which has no peripheral origin, but represents a disease of nerve centres. But if we encounter besides, cases of choreiform movements which can be stopped by the relief of morbid conditions in the eye or nose, we must consider those cases at least as of peripheral origin. Similarly, we cannot escape the conclusion that certain epileptiform convulsions, which cannot be distinguished clinically from genuine epilepsy, are of a reflex nature, if the successful treatment of morbid nasal or intestinal conditions puts an end to the occurrence of the spasms. But this observation in no way denies that real epilepsy is a disease of the central nervous system of different character. The same reasoning applies in asthma. Asthmatic attacks occur in bronchial, cardiac and renal diseases, but there are besides numerous instances of asthma which can be cured by the removal of nasal anomalies and which do not return except when the nasal disease relapses.

As other instances of reflex neuroses may be mentioned, vaso-motor disturbances in the skin, facial urticaria, and circumscribed cutaneous œdema in consequence of nasal irritation, the occurrence of exophthalmic goitre with cardiac palpitation likewise due to nasal disease.<sup>1</sup> Cardiac palpitation and other cardiac symptoms may also represent a reflex neurosis of intestinal origin.

Sensory neuroses of peripheral origin are illustrated by headaches due to eye strain and by neuralgia of nasal or dental origin. Periodic attacks of migraine are sometimes kept up by eye strain, sometimes by nasal irritation. Comparable to migraine is the so-called periodical visceral neuralgia of intestinal, ovarian, or Fallopian origin. Vertigo is not a rare secondary neurosis, the cause of which may be found in the eyes, the ears or the intestinal tract.

In all these instances of reflex and of sensory neuroses, the etiology can be considered as definitely proven only when we have succeeded in arresting the attacks by the cure of the peripheral anomaly suspected to be their cause. This, of course, is not

<sup>1</sup> There are six cases on record in which the symptoms of Graves Disease (Morbus Basedowii) were removed by the treatment of nasal anomalies—quoted by Mueschold (Deutsche Medicinische Wochenschrift No. 5, 1892), who reports an instance.