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A COURSE OF LECTURES ON SURGERY,

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MEDICAL SCHOOL OF CAMBRIDGE.

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LECTURE XV

SCROFULA CONTINUED.

Scrofulous disease of the absorbent glands; changes that take place in them; diagnosis generally easy; occasional difficulties; treatment.—Scrofulous disease of the skin; ulcers; ulcers preceded and accompanied by tuberculous deposits of lymph.—Disease of cellular tissue occasioned by deposit of scrofulous lymph in it, diffused or circumscribed: treatment.—Abscesses in skin and cellular tissue: treatment.—Scrofulous disease of the bones; deposit of lymph into them, which softens or becomes calcareous; ulceration: treatment.—The bone is not generally the part first affected in scrofulous disease of a joint.

The parts most liable to be affected with scrofulous inflammation are the absorbent glands, the skin, and subcutaneous cellular tissue, the mucous and synovial membranes, and the bones. It is to be observed that the disease is in individual cases frequently confined to one of these structures. A patient suffers under enlargement of the absorbent glands in the neck, the axilla, and the thorax, but has no vestige of scrofula in any other part; another has numerous ulcers on the skin, but not one diseased gland. In a third the bony fabric is inflamed and ulcerated at many points, without being accompanied by any ulceration of skin, or enlargement of glands. So far as I know, patients of all ages and temperaments, within the scrofulous range, are equally liable to disease of either of these tissues. I am not aware that any particular medicine or plan of treatment deserves to be recommended in one set of cases more than in the others. The general rules which I laid down in the last lecture are alike applicable, or nearly so, in whatever form or structure the disease makes its appearance.

The disease of the absorbent glands is the most common of scrofulous affections. It appears most frequently in the cervical glands beneath the jaw, behind the sterno-mastoid muscle, and along the course

of the carotid and subclavian vessels. It is not uncommon in the axilla, and at the inside of the bend of the elbow. In the lower extremity the glands are not often diseased, but the bronchial and mesenteric glands, particularly in children, are very liable to scrofula.

It is not very clear why the absorbent glands, which are seldom the primary seat of disease under other circumstances, should be so pre-eminently the victims of scrofula. It has been supposed that some of the superfluous quantity of imperfectly assimilated fibrin and albumen is detained in these organs, and gives rise to their enlargement, suppuration, &c. This, however, is little more than conjecture. You will remark it to be rather a singular circumstance that the inguinal glands, which are more often than any others attacked with simple inflammation (I mean inflammation having no dependence either upon syphilis, a scrofulous habit of body, or other particular exciting cause,) are less frequently affected with scrofula. I can give no explanation of this. Perhaps all the tissues of the neck and upper extremities are of finer and more delicate construction than those of the lower limbs, and therefore somewhat more liable to scrofula, but this difference is not sufficient to account for the great comparative susceptibility of the absorbent glands in the upper regions of the body.

This affection of the glands, like other scrofulous inflammations, is sometimes attributed to a cold, disorder of the general health, an attack of measles, or other exciting cause, but very often begins spontaneously. A small lump—a kernel as it is called—is observed in the neck. It is moveable, not painful, and attracts but little attention; others appear, and these uniting with the first and enlarging, form considerable masses, whose doughy lobulated feel, together with their situation, the mode of their appearance, and the absence of much pain or tenderness, are so characteristic, that we have very little difficulty in recognising them.

If you examine a gland in this state you will find it somewhat vascular, as well as swollen, with yellowish spots or masses diffused through it in greater or less number. These masses consist of that ill-organised lymph called scrofulous matter, about which I have already spoken. They are often separated by a well-defined line from the rest of the structure of the gland, and are of various consistency. Sometimes they look very much like the common tubercles which are met with in the lungs and other parts. They increase in

size, so as to occupy the entire substance of the gland taking the place of its natural structure, filling up and distending its capsule. As the disease goes on these masses soften into a thick curdy fluid. This softening process is generally attended with suppuration, a few pus globules are intermixed with the fluid, and a scrofulous abscess is thus formed. About the time when softening commences these glands become rather more tender and less moveable, in consequence of the inflammation affecting the cellular tissue on their exterior, and agglutinating the parts by effusion of lymph. The advance of the abscess to the surface is slow, not attended with much pain, the integuments after a time become red, and a good deal undermined, and at last give way; troublesome sinuses generally remain; perhaps the skin ulcerates over a considerable surface, and it is long before a complete cure is effected, the time being of course greatly lengthened when several glands are affected, suppurating and bursting in succession.

Now and then it happens that an abscess of this kind formed in a scrofulous gland subsides spontaneously; the fluid contents, under such circumstances, becoming absorbed, the remainder dry up, and perhaps are ultimately the seat of calcareous infiltration. Here are glands from the mesentery and the neighbourhood of the bronchi which have undergone this change.

I have said that the diagnosis of these enlarged scrofulous glands is generally easy, and we are much assisted in it by the number of them existing at the same time. It now and then happens, however, that in persons who have not the scrofulous diathesis strongly marked, one or two glands only are diseased and enlarge very slowly so as to form hard round swellings, which are not easily distinguished from fibrous and other tumours. They have not unfrequently been removed under that impression. These solitary swellings may suppurate slowly, forming abscesses with thick walls, which undergo very little change from month to month. Three or four years ago a man presented himself with one of these abscesses in the neck, which was of very long standing. It was round and very firm, and the nature of the swelling was doubtful, till a drop of thin yellowish purulent fluid passed along the groove of a needle thrust into it. I laid the cavity freely open; it had very thick tough walls which I divided unsparingly, but the wound healed nearly up, leaving the sac almost as before, with a small orifice through which some discharge has continued to escape ever since. It is of no great inconvenience and I have thought it better not to take any further steps to expedite the cure.

Swollen and indurated absorbent glands lying in the neighbourhood of the thyroid substance are sometimes mistaken for enlargement or tumours of that body. When situated over the course of the carotid artery they simulate aneurism so closely as to render the diagnosis occasionally very difficult. Many of you remember how much we were all puzzled by a case of this sort not long ago in a lad, who came into the hospital with a painful pulsating tumour situate just above the left sterno-clavicular articulation. There was a distinctly audible bruit over and near it. We

were for some time doubtful whether it was an aneurism or not, but careful examination showed that when the tumour was pulled forwards, the muscles of the neck being relaxed, the pulsation and bruit could be less distinctly felt and heard. It rose and fell during deglutition, and the enlargement of some other glands in the neighbourhood at length proved the real nature of the swelling.

You will see almost every day in the out-patient room cases where a considerable number of the cervical or axillary absorbent glands, or both, have enlarged slowly, without pain, and have formed great, firm, nodulated masses, adherent to the surrounding parts, and, it may be, interfering with the movements of the head and neck, or perhaps even displacing the lower jaw, and causing difficulty of breathing and swallowing. They do not often attain to this severity, but they are unsightly, productive of a good deal of inconvenience, and excite the apprehensions of the patient and his friends. These hard, fixed, slowly-forming masses, are found in persons not decidedly scrofulous; they do not generally suppurate, but in course of time waste away gradually. I have found their departure hastened by small doses of mercury, given perhaps in the form of the bichloride, by the iodide of potassium, and sometimes by the cod-liver oil, the effect of these medicines being aided by slight stimulating applications to the skin, such as the iodine ointment, diluted three or four times with cerate. Now and then I have seen decided benefit from the employment of nitrate of silver, so as to occasion scaling or vesication of the cuticle, or from a succession of small blisters over the swelling when the skin has been sound.

We are in the habit of employing these mild stimulating applications to the skin with occasional advantage in the ordinary scrofulous enlargement of glands, at the same time that attention is directed to the general health in the manner described in the last lecture, and suppuration may often by these means be prevented. When suppuration has taken place, and the skin begins to be reddened, so that there is little probability of the absorption of the fluid being effected, I think it is well to make a small opening into the abscess, for if this be done early the undermining of the integuments is prevented, the sinuses are less likely to be troublesome, and the cicatrix is less ugly. Nevertheless we are often disappointed with the result of these incisions, for abscesses which are allowed to burst, sometimes do as well and heal as quickly as those which are opened in the same patient. I do not, therefore, press the use of the knife in these cases, when it is much objected to, because I have no strong feeling in its favour.

The *skin* is subject to a variety of affections in scrofulous persons, which is no wonder when we reflect that the great delicacy of its structure forms one of the most obvious features of this constitution. It is easily sunburnt, freckled, and blistered in the summer, and cracked or chapped in the winter, and inflammation is excited in it by very slight causes. Scrofulous children are frequently covered over with eczema, psoriasis, and a variety of cutaneous eruptions, which are subdued

with difficulty, and are very likely to recur. Any slight irritation, a mild stimulating liniment, and particularly the application of a blister, will in these subjects produce a very troublesome humour, if not an ulcer. Often the skin is the seat of ulcers commencing spontaneously, affecting it superficially, and spreading for a considerable distance over its surface. These ulcers are pale, with flabby, languid, glazed granulations, their discharge is thin, and the skin around is red and irritable, or of a blue leaden colour, and undermined. The integuments under the chin, and on the fore-parts of the neck and chest, are affected in this manner more frequently than in any other region of the body. Mild astringent lotions, or the ointments of the iodide of lead and nitrate of mercury, are useful applications to these ulcers after due attention has been paid to the general health. Sometimes they heal up all at once, but the cure is probably not sound, the cicatrices are delicate and irritable, marked with fine arborescent vessels, and ready to break out again upon the slightest provocation.

The scrofulous ulcers of the skin frequently commence with small lumps like tubercles, consisting of the ill-organized lymph described above, which is deposited in little masses in the deeper layers of the cutis, and in the immediately subjacent cellular tissue; these soften, and the skin gives way over the centre of each, disclosing a greyish mass, like a slough, which comes out piecemeal, and leaves a small round excavated ulcer, with bluish undermined edges. Other lumps of a similar kind form in the skin near by, and running the same course leave several ulcers, which probably spread into one another, so as to form one large irregular surface; the integuments forming the borders of this are undermined or rest upon a stratum of the soft grey substance, so that a probe may without difficulty be passed some distance beneath them. Now these ulcers have often a more or less circular shape, and may continue to spread at the circumference while cicatrization proceeds from undestroyed fragments remaining in the middle, so that the sore by degrees assumes a ring or horse-shoe shape, and the ulceration goes on in the concavity, while the cicatrization proceeds on the convexity of the crescent. Here is a drawing of one of these ring-shaped scrofulous sores, composed of numerous small spreading ulcers, which surround a central shining cicatrix, and you see the latter is represented as having a healing edge.

The particular shape and appearance of these ulcers, added to the time of life when they generally appear, which is from twenty to thirty-five, and the disposition to heal at one part while they are spreading at others, have caused them to be very often mistaken for the phagedenic ulcers occurring in the tertiary stages of syphilis. They resemble them so closely that it is often by no means easy to distinguish the one from the other, and it is still more difficult to do so if the palate, throat, and bones be likewise the seat of disease, though fortunately this combination of affections of the skin, mucous membranes, and bones, is not usual in scrofula. The general appearance of the patient, and his character—moral as well as constitutional—will be

of some assistance. It is also to be observed, that the syphilitic sore, though it *commences* at many points, mostly *continues to spread* from one centre, and does not increase like the scrofulous by the formation in its circumference, of other small ulcers, which become confluent with it and with one another; moreover, the tertiary ulcer of syphilis is not preceded and surrounded by the formation of those tuberculous deposits of ill-organised lymph in the texture of the skin, which form one of the peculiar features of the scrofulous sore.

This disease of the skin has not, I think, attracted much attention, and to impress its characters more strongly upon you, I will describe a case which is fresh in the recollection of some of you. A delicate, light complexioned, strumous looking woman, first became a patient in February, 1848, on account of a ring of superficial ulceration, two inches and a half in diameter, situate upon the left shoulder; it was composed of a number of small irregular ulcers, some of which had become confluent into larger ones, and it surrounded an uneven, unhealthy-looking cicatrix, in which were some spots of recommencing ulceration. On the exterior of the ring, as well as between the ulcers that formed it, were numerous small tubercular elevations of the skin, and small apertures on the summits of some of these showed them to be occasioned by a deposit of soft greyish substance in the tissue of the cutis. The disease had commenced ten months previously, in the formation of a lump upon the shoulder, which burst; the ulcer so caused healed, and the present disease began around the cicatrix. In addition to this she suffered under inflammation of the gums and of the larynx; her voice was weak and hoarse, inspiration attended with a wheezing noise, the breath fetid, and there was tenderness about the larynx. For a time the circle of disease upon the shoulder widened, by the formation of fresh tubercles, proceeding to ulceration in the circumference, while the central cicatrix continued to increase in size almost *pari passu*. In course of time, however, her general health improved, the tubercles became less frequent, while the cicatrix went on enlarging, and the small ulcers closed, so that in June of this year the whole surface was healed up, soundly to all appearance, and the condition of the mouth and throat were greatly improved. A variety of medicines were given in this case, including quina, iodide of iron, and cod-liver oil, but none was productive of such decided benefit as small doses of the dilute nitric acid in the decoction of sarsaparilla. We have other cases of the same kind now under the treatment, but I cannot say that the same remedy is always equally efficacious.

I have seen these ulcers upon almost every part of the body, perhaps on the face and upper extremities rather more frequently than upon the lower limbs. They are difficult to cure, but yield in the long run to the general and local treatment which we employ in other scrofulous affections, and do not require mercurial treatment, though the patient is often subjected to it from their being supposed of syphilitic nature.

There is a disease of the *cellular tissue* closely allied

in appearance and progress to that just described in the skin, and depending upon the same cause, viz., the deposit into it of ill-conditioned fibrin or lymph which softens into a greyish, sodden, sloughy substance, and causes ulceration of the skin over it. This disease affects sometimes an extensive stratum of the cellular tissue, and the skin giving way over it at several points, irregular ulcers are formed much like those last described except that they are deeper. When the skin is destroyed, you see the sodden ashy stratum of tissue, through which you may without difficulty pass a probe for a considerable distance, and the parts around give to the finger a sensation of their being boggy and unsound. This disease is most common in the lower extremities, and frequently extends from the knee to the ankle; not that the skin is destroyed in all this extent, but it is reddish or livid and shiny, ulcerated at many places, and the cellular tissue beneath is more or less altered. We are sometimes surprised at the rapidity with which these ulcers heal up, for cicatrization may proceed over this unhealthy stratum of tissue, and the cicatrix may assume a sound healthy condition; so that it is not essential for the sloughs to be entirely discharged. The apparent progress thus quickly made is, however, too often deceptive, and we may very likely be disappointed by seeing the ulcers begin again when we had hoped the case was nearly well. I am not aware that the deeper layers of cellular tissue, such as those forming partitions between the muscles or investing the internal organs, are affected in this manner.

The local treatment consists in the employment of mild astringent lotions with well regulated pressure by means of oil silk and a bandage. Sometimes a stronger stimulus, such as nitrate of silver in substance or solution, by exciting a little inflammation, will be found to clear away the sloughs, promote a more healthy discharge, and induce cicatrization. They are troublesome cases, and the disease driven from one spot is very likely to make its appearance at another, so that you will frequently see a limb covered over with cicatrices, which are depressed below the surrounding skin, and fixed to the fascia beneath from the loss of the subcutaneous stratum of cellular tissue, in addition to that of the skin itself.

This disease of the cellular tissue is more common in a circumscribed than a diffused form, particularly in children. A little firm lump is found under the skin, which from its mobility and the unaltered state of the skin over it might be mistaken for an enlarged gland, were it not that such lumps very often occur in places where there are no glands. It is not tender or painful, and is discovered accidentally. If it be cut into it is found to consist of a mass of the yellowish white scrofulous lymph described above infiltrated into the cellular tissue. It is somewhat firmer than when it exists in a diffused form, and much resembles tuberculous deposit. In course of time it softens; the skin becomes red, thin, undermined, and bluish over it, and at last ulcerates in the middle. The ulcer thus formed has peculiar characters. It is raised above the surrounding skin, its surface is covered by the dirty yellowish slough

of lymph in the cellular tissue, which extends for some little distance beneath the livid undermined integument forming the margin of the orifice, and it furnishes a thin fluid mixed with flakes of the slough gradually separating and passing off. By degrees the slough is disintegrated and discharged piecemeal, the livid integuments ulcerate away, the surface of the sore becomes clear, and cicatrization proceeds, closing up the gap, but leaving an indented scar which is ever after conspicuous and fixed to the subjacent fascia in consequence of the loss of the cellular tissue. These sores generally heal without much difficulty. Now and then the disease spreads from the point first affected to the surrounding tissue which becomes disorganised and sloughs away, leading to extensive destruction of the skin, as in the woman whose case I just mentioned to you; but this does not very often happen. The difficulty of the case consists in the liability to the formation of other similar lumps beneath the skin in various parts of the body, each of these running its course in the manner I have described. They are thus the cause of great annoyance and suffering, as well as of much disfigurement. I have occasionally met with these circumscribed deposits of scrofulous lymph in the deeper parts of the limbs and in the interior of the body, in the front of the vertebral column, and in the substance of the lungs, liver, spleen, and kidneys.

Sometimes they are the consequence of an injury to a limb, which has weakened its vital force and rendered it liable to disease. Thus some few months ago, a delicate woman applied at the out-patient room, on account of ulcers of the forearm, which were preceded by circumscribed deposits of lymph in the cellular tissue, such as I have been describing, and two or three of these in an early stage could be felt beneath the integuments of the arm. She said that she first suffered from the complaint three years ago, after an injury to the elbow, which required leeches, and that she had not been free from them since.

While situated fairly beneath the skin they may be sometimes dispersed by stimulating applications, such as the tincture of iodine or nitrate of silver, which cause scaling of the cuticle or slight vesication. When they have burst, the discharge of the sloughs and the healing of the ulcers is assisted by solutions of sulphate of zinc or copper, under oil-silk and a bandage.

A very similar disease of the cellular tissue occurring both in a diffused and circumscribed manner, is met with in persons who are not of scrofulous habit, but who are enfeebled and out of health in consequence of over exertion, bad living, or intemperate habits, whose digestive organs are disordered, the tongue white, and urine loaded. The complaint is in these cases more easily controlled and more quickly eradicated than when it depends upon the scrofulous character of the constitution.

Small *abscesses* form in the skin, and larger ones in the subcutaneous tissue of scrofulous persons. They give scarcely any pain till the integuments are reddened over them, and they are often discovered accidentally when they have attained considerable size. They some-

times originate in the softening of the masses of lymph which I have just described; at others the suppuration takes place without being preceded by any deposit of lymph. When seen in the early stages you should endeavour to disperse them, which may not uncommonly be effected by attention to the general health, by air and exercise, and by the application of iodine or a succession of small blisters to the skin over and immediately around them. When the commencing redness of the skin precludes the hope of a cure by absorption, I think it is the best plan to open them, for if that be not done, the integuments become extensively undermined before they burst, and troublesome sinuses with ugly cicatrices are the result. The little abscesses forming in the cutis itself, (the cutaneous abscesses,) for the most part, exist in considerable numbers, are particularly common about the neck and front of the chest, and unless they are opened early they destroy the superficial layers of the skin, and leave ulcers which exhibit a languid indolent character with great indisposition to heal.

As the result, then, of inflammation upon the surface of the body in scrofulous persons we have—besides pimples, pustules, and a variety of eruptions—ulcers, often in great numbers, and so extending over a considerable area, though not individually of great size; ulcers preceded and surrounded by deposits of lymph, diffused or in spots, in the substance of the cutis, and ulcers preceded by small abscesses which are also formed in the substance of the cutis. We have likewise, in the subcutaneous tissue deposits of lymph, diffused and circumscribed, and abscesses, both of which involve the skin during their progress, and lead to its destruction much in the same manner as when the disease affects the structure of the cutis itself.

The *skeleton* of the scrofulous child exhibits an imperfection in its organization, and a liability to disease corresponding with that of the soft parts. It is found to be deficient in its earthy constituents, and to contain a superabundance of oily matter, and it is very frequently the seat of inflammation, which sometimes occasions necrosis, but more often leads to ulceration. The disease affects chiefly the spongy bones, the cranium and face, the bones of the foot and hand, and the extremities of the long bones.

In the early stages of the disease the bones are found to be preternaturally vascular, and there is effusion of serous fluid into their cancellous texture. Next they become more porous than natural in consequence of interstitial absorption going on in them, weakening their frame work and enlarging their cells. The earthy components suffer in an especial manner, and in consequence of their removal the bones become soft, so that a scalpel will pass into them without its edge being turned. A deposit of the peculiar grey, friable, ill-organized lymph, which I have described as the scrofulous substance, may take place in the cells of the bone, and it is probable that the extensive destruction of the cancellous extremities of bones which is sometimes observed in scrofulous persons is in part occasioned by the softening of this substance involving the osseous texture in its own destruction.

This friable, cheesy, ill-organized lymph which forms the scrofulous deposit in bones, does not invariably soften and suppurate, and so lead to the destruction of the bones. Such result seems to depend rather upon the continuance of the inflammation which produced it, than upon anything essentially deleterious in its own nature. That at least is true in great measure, though it must be admitted that the inferior quality of the lymph renders it peculiarly liable to such changes, and its imperfectly organisable character must make it sometimes a source of irritation to the surrounding parts, and an exciter of that inflammation which expedites its own dissolution. In some instances a change takes place in it quite the reverse of softening; it becomes gradually drier and more friable, and at last undergoes calcareous degeneration, like scrofulous deposit in other places; it is thus converted into a white chalky powdery substance, which seems to lie loose in the cancellous texture of the bone, or at any rate to be connected with the walls of the containing cells by a very feeble tenure.

A more common form of disease of bones in these delicate persons consists in inflammation of the exterior of the bone and periosteum, occasioning thickening of the former from deposit of crumbling earthy matter on its surface, and the appearance of small ulcers, with drops of thick curdy pus intervening between them and the periosteum. As the disease goes on the pus increases in quantity, makes its way through the periosteum, and ultimately bursts through the skin, the ulcers on the bone having been also on the increase during this time. The sinuses thus occasioned continue to discharge a thin watery fluid for months, or it may be, for years; little fragments of crumbling bone are occasionally detached, and pass through the openings, but in the course of time these ulcers heal; the gaps occasioned by them being only in part filled up the sinuses close and leave cicatrices which are indented and closely connected with the bone.

This disease often occurs upon several parts of the same person, one bone becoming affected after another, and it does not always terminate so favourably as I have just described, for the ulceration sometimes extends more deeply into the bones, and causes great havoc. Thus the bones of the face, more particularly those of the palate, may crumble and ulcerate away till scarce any of them remains; the teeth, becoming loosened, from the inflammation of the membrane which lines their sockets, drop out, and the disease extends to the alveolar processes of the jaw bones. In course of time the parts heal up, but not, perhaps, without leaving great deformity. You will now and then find to your surprise that a considerable portion of the hard palate has disappeared under this crumbling ulceration, with scarce any premonitory symptoms, and with very little ulceration of the soft palate. You will gain information of the fact by pressing the finger against the roof of the mouth, and discovering that it yields very easily; and when the soft palate is destroyed, which takes place before long, a communication exists at once between the nose and the mouth. The opening so made is

and never healed up, though the margin of it may cicatrize, and you are left to your ingenuity to fill the gap by a plate of silver, gutta-percha, or other contrivance.

The metacarpal and metatarsal bones, and the phalanges, are liable to this chronic scrofulous ulceration, the metatarsal bone of the great toe more than any other. There are at the present time in the hospital three young persons with this disease. In one it affects the proximal, and in the other the distal, end of the bone. It commenced with swelling, as if there were synovial disease of the neighbouring joints, but I cannot be sure whether this were really the case, or whether the inflammation commenced in the extremities of the bones themselves. Soon matter formed, and was discharged, leaving sinuses, which lead down to the carious surfaces. Some fragments of bone have been discharged. It may be that removal of some portion will be required, but this is not often necessary, for if the health of the patients be improved, the disease will probably cease, the ulcerated surfaces will heal over, or the adjacent ends become ankylosed, and the toes will be somewhat shortened, in consequence of the loss of some of the bony substance, which will be re-produced only to a very slight extent.

It was long supposed that the common scrofulous disease of the joints commences with inflammation and deposit into the cancellous substance of the bones; the synovial affection being thought to be secondary to this. Recent and more accurate pathological investigation has proved this view to be by no means correct. In the cases where joints have been examined during the early stage of scrofulous disease, the bones have generally been sound, and the synovial membrane the only part presenting the signs of inflammation. The symptoms also accord best with this view, for the swelling, which appears at an early period, and is often the first sign of disease, takes the direction of the synovial membrane, and seems to depend either upon thickening of it, or effusion into its cavity. The cartilages disappear in young subjects without much pain, and the work of destruction is propagated to, and goes on with, great comparative rapidity in the loose friable structure of the articular extremities of the bones. Now and then, no doubt, the order of the progress of the disease is reversed: it may commence with inflammation of the cancellous extremities of the bones, and extend from them to the synovial membrane and the cartilages, but in the greater number of cases the synovial membrane is the part first affected.

I have no particular remarks to make with regard to the treatment of this disease of the bones, in addition to those which I have specified when speaking of the general management of scrofulous patients. The inflammation certainly is not more easily subdued when it attacks the bones, than when it appears in the softer structures of the body; and I am not aware that any benefit is to be expected from local applications. I am in the habit of allowing the patients to go out of doors, even at the risk of some detriment to the part affected. I think in the early stages of the disease, when the symptoms of inflammation only are present, that a few

leeches may be applied, and repeated at short intervals, with advantage. You will remember that this local depletion is by no means incompatible with a general tonic regimen. When suppuration has taken place, the importance of endeavouring to promote the absorption of the pus is increased by the difficulty with which the cure of a sinus connected with an ulcerated bone is accomplished; and I have before told you, that the absorption of pus lying upon a diseased bone is more likely to take place than under other circumstances. We have, therefore, the double reason for persevering with those applications which seem to assist in promoting this desirable end, such as the tincture of iodine painted once or twice a-day upon the skin, so as to keep up a free scaling of the cuticle, or a succession of small blisters in the immediate neighbourhood of the abscess.

The only instance in which I am aware that scrofulous inflammation affects the cartilages, is in the larynx, where they suffer both primarily, and as a consequence of disease, of the mucous membrane. In this specimen the cricoid cartilage is necrosed, separated from the adjacent tissues, and bathed in thick curdy pus. The patient died in consequence of the swollen state of the mucous membrane and submucous tissue closing the opening of the glottis. Here are also specimens of the same disease in the thyroid as well as the cricoid cartilage, and it is in like manner attended with the formation of abscess and with inflammation of the mucous membrane of the larynx. The disease you see is in each instance confined to the larynx, and does not extend to the trachea, so that the operation of tracheotomy, performed in the usual situation, would be fairly below the seat of the mischief; this would not be quite so certain if laryngotomy, or the incision between the cartilages of the larynx, were resorted to. These cases, however, are generally complicated with so much disease in the lungs and other parts, that we are not often justified in resorting to an operation of some danger for the doubtful chance of relieving this one of the many ailments under which the patient suffers.

ON OVARIOTOMY.

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(Read at the Quarterly Meeting of the Bath and Bristol Branch of the Provincial Medical and Surgical Association, Sept. 27th 1849.)

MR. PRESIDENT,—Having lately performed with success an operation for the extirpation of a multilocular ovarian cyst, an account of which has appeared in the *Journal* of our Parent Association, I will venture, with your permission (this being the first case that has occurred in the western part of England,) to offer a few remarks in justification of so dangerous a proceeding.

In doing this, I will not attempt to advance any new facts on the subject, but endeavour to excite a