

use the deadly Urari¹ poison. But the dart may kill as an arrow quite as well as through means of the poison, should it hit the trunk of a small animal. For its force is surprisingly great. With very little practice, I can blow the little, light, wooden dart 180 feet; strike it at 60 feet so firmly into a board that it cannot be removed unbroken; and transfix with it, at a short distance, a fir board a fourth of an inch in thickness, or thirty folds of cartridge-paper.

I will also venture to take exception to the frequent propensity of travellers and others to magnify savage skill in the manufacture of such poisons, at the expense of civilised ingenuity. The Urari of the Essequibo, the Upo or Upas of Java and Borneo, the Wütsau of China, are potent poisons, no doubt. But in potency they never will stand comparison with several of the pure principles which the chemistry of civilised nations has detached from poisonous vegetables. Any tribe of men, compelled by circumstances to obtain their food by shooting game with poisoned arrows, would profit greatly could they substitute digitalin, aconitina, conia, strychnia, and other pure principles of plants, for their own cruder extractiform poisons. These principles, indeed, might be so used as to deal destruction to the very largest animals on the face of the globe.

ARTICLE II.—*The Pathology of Tuberculous Bone.* By CORNELIUS BLACK, M.D., Lond., Fellow of the Royal College of Surgeons of England, Corresponding Fellow of the Imperial Society of Physicians of Vienna, Member of the Pathological Society of London, etc., etc., etc.

(Continued from p. 793.)

STAGE OF EXUDATION.

THE second stage of tuberculosis of bone is characterised by an exudation from the blood-vessels of the affected part. Not only does this exudation occur in the immediate vicinity of the vascular membrane of the cancelli, but it is likewise discovered in the lacunæ and canaliculi, to which the vessels of bone do not extend. In the latter case, the solid portion of the exudation is carried thither in a state of solution, and is subsequently deposited by a process similar to that of the nutrition of the ultimate tissue of bone. In a properly prepared section of bone which has undergone the second stage of tuberculous disease, we find that the morbid action is not confined to any particular part of the cancellous tissue; but that, on the contrary, the walls of the cancelli, the vascular membrane of the latter, their cavities, the lacunæ and their canaliculi, are alike the seat of deposit, although not equally so in point of frequency.

¹ Generally corrupted by English writers into *Wourali*, and by the French into *Curare*. Schomburgk, the best authority, says that the Macusis who make it call it invariably *Urari*.

The process of tuberculous exudation in bone is, in every respect, similar to that which occurs in the pulmonary tissue,—namely, firstly, an exudation into the basement tissue of the vascular membrane of the cancelli, which may or may not extend into the lacunæ and canaliculi; and secondly, the occupation, to a greater or less extent, of the cavities of the cancelli themselves. Hence, in a section of bone illustrative of this stage, we find that, in some cancelli, the vascular membrane, like that of the air-cells of the pulmonary tissue, has undergone a degree of thickening, and is more granular than in its healthy condition—that, in other cancelli, a portion of their cavities is occupied by deposit—whilst, in a third series, they are completely *stuffed* with this exudation. In the last mentioned condition the cancelli appear, under the microscope, as so many spaces of irregular size and shape, densely packed with exudation-matter in colour deeper than the bony fibres which constitute their walls.

FIGURE IV.

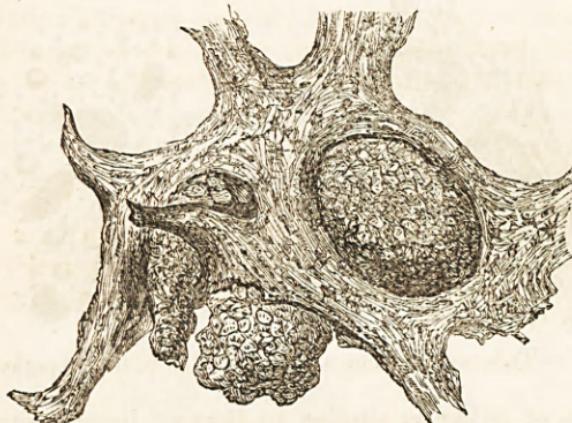


Fig. IV.—Tuberculous bone, showing the cancelli stuffed with exudation, which has undergone partial development into cells. Drawn under the Camera Lucida, by Mr Tuffen West.

On adding a drop of distilled water to the preparation, a quantity of granular matter of irregular shape, and varying in size from 1-7000th to 1-15,000th of an inch in diameter, and dark, irregular, granular patches, from 1-600th to 1-1300th of an inch in their long diameter, are detached from the cancelli, which are thereby rendered more transparent than before. In colour these patches vary from a light yellow to a dirty reddish-brown, which is no doubt due to the different degree of staining which they have undergone by the haematin of the blood extravasated into the respective cancelli. They consist of portions of the lining membrane of the latter detached during the process of exudation, and imprisoned amidst the tuberculous matter which occupies the cavities of the cancelli.

As they and the granular matter before mentioned lie *in situ* in their respective cancelli, a few oil-globules of various sizes are seen

to be scattered amongst them; whilst others lie on the surface of the osseous walls of these cavities. In this state the lacunæ of the latter are but dimly visible. On adding now a solution of potash to the preparation, the number of detached granules and patches increases, the cancelli becoming less and less occupied by the deposit, and the structure of the osseous walls of the latter more and more defined. There appears with this result a great increase in the number of oil-globules, which crowd different points of the field of vision, and the formation of which is contemporaneous with a marked diminution in the degree of opacity of the granular matter and irregularly sized patches before named. It is thus evident, that the latter have, by a species of degeneration, undergone a degree of fatty transformation, which, in the further stage of the disease, is carried to a still greater extent.

FIGURE V.

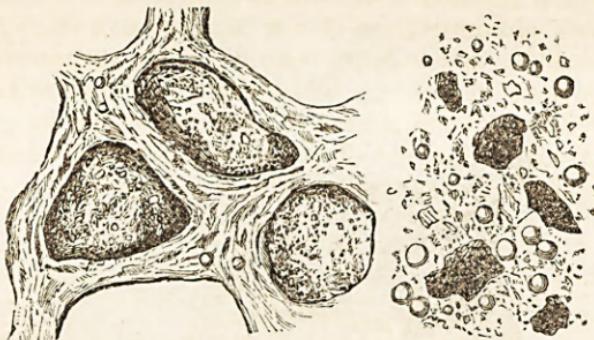


Fig. V.—Tuberculous bone after the action of liquor potassæ.

The action of æther is similar to that of liquor potassæ. The number of granular patches detached by the former, is, however, not so great, nor are the patches quite so transparent, as by the latter re-agent.

Acetic acid has the effect of rendering the cancelli, their contents, and the bony fibre more transparent.

In examining the naked walls of the cancelli after the removal of the contents of the latter, minute projections of bone, constituting exostoses, are not unfrequently observed to spring from them into the cavities of the cancelli (Fig. VI.). These vary in size from a minute elevation on the surface of the cancellous wall to an exostosis which occupies nearly the whole cavity of a cancellus. In this new bone lacunæ, similar to those of the real bony tissue itself, are sometimes to be seen. In the lacunæ and canaliculi of the real bony tissue, tuberculous and osseous deposits likewise occur. In the former deposit the lacunæ and canaliculi appear darker than in their healthy condition. By the action of a solution of potash or of æther, they are rendered lighter; and here and there, after the addition of

æther, may be seen a single drop of oil filling a lacuna. If to another specimen, in which the lacunæ and their canaliculi are occupied by tuberculous deposit, hydrochloric acid be added, the earthy matter producing the opacity of their walls is dissolved, their membranous outline is thereby rendered visible, whilst the tuberculous character of their contents is distinctly seen. By washing away the hydrochloric acid, and by subsequently adding a weak solution of potash, the contents of the lacunæ are broken up into granules and minute oil-globules; whilst the lacunæ themselves appear as irregularly transparent cells, scattered over with a number of minute and adherent granules.

Where the lacunæ and their canaliculi are occupied by bony deposit, they form objects of much darker appearance than the contiguous lacunæ and canaliculi which are not similarly affected. In this respect the contrast is very striking. That bony deposit does occupy the lacunæ and canaliculi, may be chemically determined by the action of a mineral acid, which causes, firstly, the canaliculi, then the dark circumference of the lacunæ, and lastly, their dark centre to dissolve, and to leave behind a faint, membranous outline of their previous existence. This positive demonstration is negatively proved by the action of a solution of potash, by æther, or by the spirit of turpentine, which produces no change whatever in the appearance of the lacunæ and canaliculi in question.

FIGURE VI.

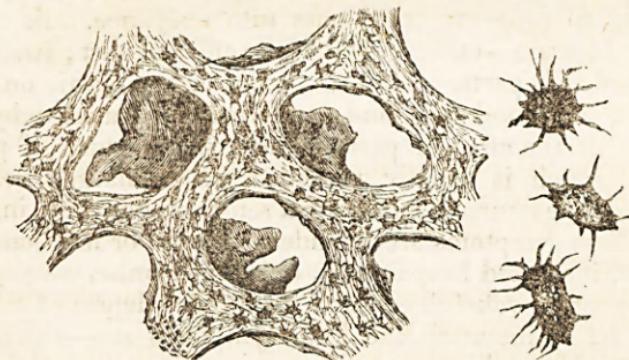


Fig. VI.—Tuberculous bone after the removal of the contents of the cancelli by boiling in æther. Osseous walls show the lacunæ and canaliculi more or less occupied by deposit. The cancelli exhibit exostoses springing from their margins. Separate lacunæ more highly magnified, and showing different degrees of occupation by deposit. Seen in spirit of turpentine.

It will thus be seen, that wherever the nutritive blastema can penetrate bone, there also tuberculous exudation occurs; and that, although due provision is made, by the system of lacunæ and canaliculi, for the proper nutrition of the ultimate tissue of bone, it is nevertheless evident, from the extra-vascular position of these, that their power of absorption must be extremely limited, and that

any deposit within them can scarcely, if at all, admit of subsequent removal. Hence the explanation of the incurable character of tuberculosis of bone, when exudation has proceeded to the obliteration of its lacunæ and canaliculi. Fortunately, however, this obliteration is frequently confined to a portion only of the diseased tissue, which, for the reason of the extra-vascular position of the lacunæ and canaliculi before named, may either pass into abeyance, and thus remain for an indefinite time, or, should this result not take place, it may admit of removal by operative procedure with the prospect of recovery to the less diseased contiguous portions of bone.

The pathological changes, then, which attend the second stage of tuberculosis of bone, may, in *resumé*, be stated to be :—

- I. Exudation into the basement structure of the lining membrane of the cancelli, and consequent thickening of the latter.
- II. Exudation into the cancelli, with more or less consequent detachment of their lining membrane.
- III. Obliteration, more or less, of the lacunæ and their canaliculi by tuberculous deposit.
- IV. The growth of exostoses from the osseous walls of the cancelli, and the occasional occupation of the lacunæ and canaliculi by osseous deposit.

The local symptoms which characterise this second stage of the disease are more or less acute, according to the tendency of the disease either to progress or to pass into abeyance. In the former instance, there are—enlargement of the affected part; swelling of the superjacent soft parts, which are more or less elastic on pressure; deformity; increased heat and tenderness, aggravated by pressure or motion of the affected part; often a slight blush of redness on the skin, which is usually pencilled with enlarged veins; with deeply-seated nocturnal pains, or a sense of gnawing in the bone itself. These symptoms are attended by more or less loss of appetite, thirst, increased heat of skin, quickened pulse, wasting of flesh, loss of strength, wakefulness, and scanty and depraved secretions.

In the latter instance, the local symptoms are—enlargement of the bone itself, thickening of the superjacent soft parts, deformity, enlargement of the veins of the skin, little or no perceptible increase of temperature, some degree of pain on percussion, occasional sense of weight, aching, or of gnawing in the affected part, with more or less impediment to the free use of the neighbouring joint. The general symptoms are expressed in a certain loss of flesh; pallor and, occasionally, haggard expression of countenance; variable appetite; somewhat quick, small, and feeble pulse; cool skin, and general absence of excitement in the system.

The following cases are related in illustration of the above statements :—

CASE IV.—H. W., aged 7 years, of nervo-bilious temperament, thin and spare, with predisposition to tuberculosis on the father's side, accidentally fell upon a knife, by which the right knee was cut and injured. The wound healed in good time, and for four months afterwards he continued to use the limb. During this time, however, the inner side of the knee-joint became gradually enlarged, pain on motion supervened, and at length the knee-joint flexed until the toes only rested upon the ground whilst standing or in the act of progression. On taking charge of the case, on the 13th of November 1850, I found, on examination, enlargement of the head of the right tibia, which was the seat of constant aching and uneasiness, and of frequent, sharp, lancinating pain. The enlargement was so confined to the head of the tibia, that the natural symmetry of the knee-joint was, in a great measure, destroyed by a protuberance on the inner side, which immediately arrested the attention. There was increased heat of the part, which was tender on pressure, and which betrayed a considerable degree of sensitiveness on passive motion of the knee-joint. The veins on the inner side of the joint were enlarged, the superjacent soft parts tense and elastic, the knee-joint itself was partly flexed, and the ham-string tendons were rigid and prominent. The body had gradually wasted since the occurrence of the accident; the countenance was thin, pale, and emaciated; the appetite deficient; the tongue thinly coated with a dirty-white fur; the alvine and urinary secretions were scanty and depraved; the skin, cool during the greater part of the day, often became somewhat hot towards night; the pulse was quickened, small, and feeble; and the sleep was generally disturbed.

In the treatment, the patient, at the outset, was confined to bed; the affected limb was laid at perfect rest; six leeches were immediately applied to the most sensitive part; and the bleeding from their bites was promoted, as long as possible, by flannels wrung out of hot poppy decoction, which was followed by the application of a hot bran poultice to the knee during the following night. Half a grain of mercury with chalk, two and a half grains of Dover's powder, and eight of sesquicarbonate of soda, were given every three hours; whilst the diet was restricted to milk, weak tea or coffee, and the different farinacea. On the following day the knee was repeatedly fomented with the hot poppy decoction, and at night a blister was applied to the whole front and sides of the joint. The same medicines and diet were continued. This treatment was followed by considerable relief to the pain, which, together with other symptoms of local excitement, had subsided at the end of a fortnight. The knee-joint was now fixed by a posterior splint, the limb was rolled in starched bandages, and the patient put upon crutches. Two grains of iodide of potassium were given in a light vegetable infusion three times a-day; the secretions of the liver and of the bowels were solicited by an occasional dose of grey powder, rhubarb, magnesia, and the sesquicarbonate of soda; the circulation through the skin was promoted by daily tepid salt-water sponging; and the diet consisted of animal food, milk, and other articles before named. By and bye, the iodide of potassium was discontinued, and three drachms of the cod-liver oil were administered every night and morning. At the end of seven weeks from the assumption of crutches, the motions of the knee-joint were performed without the slightest uneasiness, and nothing but the enlargement of the head of the tibia remained. All restrictions were now removed from the limb, the cod-liver oil was continued, and fresh air and a generous diet were enjoined. Two months afterwards the oil was discontinued, the patient was apparently in perfect health, and the mere enlargement of the head of the tibia alone remained.

CASE V.—H. M., aged 7 years, a girl of nervo-lymphatic temperament, with predisposition to tuberculosis on the mother's side, fell one day, and struck the right knee with some force upon the ground. From this time she experienced more or less uneasiness in the part, and a gradually increasing lameness set in.

This attracted the attention of her parents, who, seven weeks after the accident, requested me to take charge of the case. At this time the right knee was generally enlarged to the extent of an increase of two inches in the circumference of the joint, which was partially flexed, and, to a certain extent, crippled in its movements. The enlargement existed more on the inner than on the outer side of the joint, the swelling was somewhat elastic on pressure, and manifested no uneasiness except over the head of the tibia. Here the integuments were somewhat hotter than natural, and betrayed a degree of tenderness on pressure, which was aggravated by deeper pressure upon the head of the bone. Examination of this part left no doubt of its enlargement; whilst the statements of the patient herself showed that it was the seat of many uneasy sensations, particularly on motion of the limb, and during the night. The effect of this condition on the general system, was read in the pale, haggard expression of countenance; loss of flesh; soft, flabby condition of the muscles; small, feeble, quick pulse; diminished appetite; and in the imperfect discharge of the digestive and other functions.

With the view of relieving the heat and tenderness over the head of the tibia, the application of four leeches was advised; but the determined obstinacy of the patient overcame the wavering resolution of the parents, and no abstraction of blood in consequence took place. Perfect rest, however, in the horizontal posture, repeated fomentations of hot poppy decoction, bran poultices enveloping the whole joint, the use of mercury with chalk, Dover's powder, and the sesquicarbonate of soda, and a milk and farinaceous diet, subdued the more active symptoms in the course of a fortnight. The limb was now confined by a posterior splint and starched bandages, and the patient put upon crutches. A good diet without stimulants was allowed, and three tea-spoonfuls of cod-liver oil were administered immediately after the morning and evening meals. In eight weeks the splint and bandages were cast aside, the soft structures of the knee-joint had returned to their natural condition, and the head of the tibia was free from uneasiness either on percussion or in the attempt at progression. A degree of fulness, however, was visible over this part, which was evidently due to enlargement of the head of the tibia, and which gave to the limb at this point a circumferential increase of nearly half an inch over the corresponding point of the opposite limb. Six months have now elapsed since all treatment was discontinued; there has hitherto been no return of the disease; and the patient, notwithstanding the continuance of the tibial enlargement before named, remains in the perfect use of the limb.

CASE VI.—B. S., aged 23 years, of bilio-lymphatic temperament, married, mother of three children, whilst stepping from a railway carriage in the autumn of 1854, suddenly felt, at the moment the right foot touched the ground, a sensation as though something had given way in the corresponding instep. She experienced for a few minutes great pain in the part, which, by and bye, subsided in a great measure, and she walked a distance of nearly two miles to her home. For several weeks afterwards she continued to use the foot, which, however, was scarcely ever free from some degree of uneasiness, particularly during the night. A few days after alighting from the railway carriage, she observed, for the first time, swelling of the instep. The foot continuing to get worse, a neighbouring surgeon undertook the treatment of the case, which, with certain remissions and aggravations of symptoms, continued under his care until the winter of 1857-8. On January 10th, 1858, the further treatment of the case was confided to me. At this time the whole dorsum of the foot was swollen, to the extent of an increase of five inches over the circumference of the left; the skin was tense, elastic on pressure, pencilled with veins meandering in various directions over the surface, was somewhat hotter than natural, and presented, at several points, a faintly bluish appearance; whilst, at others, and especially over the scaphoid bone, it manifested the faintest erythematous blush. Pressure at various points, passive motion, or any

attempt to use the foot in progression, aggravated the pain, which was more or less constantly present. This was more severe during the night than in the day, and bore the different characters of a gnawing, boring, aching, breaking, and twisting pain. The general system expressed a pale, haggard, dull, faintly sallow countenance; a large, flabby, dirty-white tongue; defective appetite; no thirst; sluggishness of the bowels; scanty, highly-coloured urine, but depositing no sediment; and a moderately cool skin. The pulse ranged from 80 to 90 per minute, was small, sharp, and somewhat excitable; the sleep was broken and disturbed; and the disposition of the mind was to the gloomy and foreboding. She knew but little of the history of her immediate relatives; nevertheless she stated, that two of her sisters had died of pulmonary consumption.

In the treatment of the case the foot was laid at perfect rest on a level with the body; any attempt to walk upon it was strictly forbidden; to relieve the local excitement and pain, six leeches were applied, and these were followed by the application of a blister to the whole dorsum of the foot. Two grains of the iodide of potassium in an ounce of the decoction of sarsaparilla, and a pill, containing one grain each of the mercury with chalk and the compound extract of colocynth, with four-sixths of a grain of opium, were given three times a-day. The diet for some days consisted of milk and the different farinaceæ, to which animal food was subsequently added. The treatment was continued without any modification until the following March, when, owing to a tenderness of the gums, which had existed for a fortnight, the mercury with chalk was omitted from the pills. During this time the foot had undergone a steady improvement in the abatement of the local pain and the gradual subsidence of the swelling; the countenance had, in a great measure, lost its expression of haggard anxiety; the tongue had become clean; the appetite regular and good; the bowels natural in their action; and the sleep sound and refreshing. The foot was now supported by a sling from the neck, the patient put upon crutches, active exercise was enjoined, and the same diet and medicines were continued. By June the foot, with the exception of a certain degree of enlargement of its dorsum, had returned to its natural condition, the patient could both stand and walk upon it without the least uneasiness, and the general health was re-established.

The indications of treatment, which flow from the foregoing pathological considerations of the exudative stage of tuberculosis of bone, have for their object—

- I. To remove active congestion when it exists.
- II. To promote the absorption of exudation from the affected tissue.

In every instance, in which the disease is progressing, active congestion, to a greater or less extent, co-exists with tuberculous exudation in bone; therefore, in the treatment of the second stage of tuberculosis of this structure, the remedies applicable to the first stage are, to a certain extent, demanded. These are local depletion, frequently repeated anodyne fomentations, absolute rest of the affected part, and counter-irritation.

It will be seen, in the relation of the above cases, that, in the second stage of tuberculosis of bone, the structures of the neighbouring joints are generally more or less involved; and that the remedies applicable to the fulfilment of the former of the above indications, are also eminently calculated to subdue the co-existing excitement in these articular tissues. They ought, therefore, to be

perseveringly and rigidly carried out, in the manner before stated, until the symptoms of active congestion, as well of the bony tissue as of the neighbouring structures, have entirely disappeared. This having been done, and further exudation having thereby been prevented, the efforts of treatment are next to be directed to the fulfilment of the second indication, in promoting, as far as possible, the absorption of the exudation which has already taken place. This object is best effected by the exhibition of those medicines which are known from experience to exert an alterative effect upon the system—to favour the liquefaction of exudations—to allay pain and nervous excitement—and to promote the healthy discharge of the bodily functions. Amongst such remedies, mercury in the form of grey powder, the alkalies, particularly potash in combination with iodine, opium and its different preparations, cod-liver oil, iron, and the different vegetable tonics, deserve to be specified. The use of mercury with chalk in small doses, extending over a lengthened period, and given in conjunction with opium, iodide of potassium, and a light vegetable bitter, is often attended by the happiest result. While it were unquestionably better, for the constitutional powers of the patient, not to carry the use of this preparation of mercury to the extent of complete ptyalism, it is nevertheless to be observed, that the induction of a slight tenderness of the gums by this remedy, and the maintenance of this condition for a short time, will, in many instances, be followed by a much more rapid and beneficial effect upon the local disease than where no such tenderness of the gums has been produced. Such extended use of the grey powder is, however, only admissible in those cases which threaten to run a determined course, and in which the natural vigour and energy of the system have not been entirely broken down. In other instances its use must be limited to its alterative effect; whilst the more prominent place is given to cod-liver oil, iron, and the other remedies previously named. In all instances, in which the tongue is clean, the skin cool, the pulse small and feeble, and the body emaciated, cod-liver oil, and the different preparations of iron with vegetable tonics, are indicated. Their use, however, must be closely watched, inasmuch as it occasionally happens that, notwithstanding their perfect agreement with the system for a time, fresh local excitement supervenes on their continued exhibition, which ought, therefore, to be regarded as a certain indication of the necessity for their immediate withdrawal.

To favour the action of the above agents upon the general system, to restore the general health and vigour of the body, and thereby to affect beneficially the local disease, *exercise* is of paramount importance in the treatment of this stage. This, to a certain extent, should be of an active character; but when the lower extremity is the one affected, active exercise, provided the diseased part were not placed beyond the control of the patient, would quickly excite a fresh accession of mischief, which would not only defeat the object in view,

but which might compromise the safety of the limb. It is, therefore, absolutely necessary, in every such case in which active exercise is proper, to place the diseased part beyond the *will* of the patient, and the possibility of its being used. A surgeon who should neglect this precaution, would, in my opinion, be guilty of a dereliction of one of the most important duties which attach to the treatment of this stage. Wherever the use of the diseased part can be prevented by the application of splints and starched bandages, these ought invariably to be employed; because they not only render motion of the part impracticable, but they steady and support the neighbouring joints, whilst the equal pressure of the bandages tends to prevent the recurrence of active congestion, and to promote the absorption of exudation-matter in the soft superjacent tissues of the diseased bone. They ought also to be employed for some time after the *apparent* recovery of the patient, and for this reason—the vessels of bone are extremely slow in returning to their natural caliber and contractility; they are, therefore, in doing so, posterior in time to those of the superjacent soft parts, from the condition of which, inference, as to the state of the osseous tissue, is derived—their proneness to relapse is correspondingly great—and they consequently require, after the removal of the more visible signs of disease from the soft parts, a continuance, for a time, of the above means of restraint. In some cases splints and bandages, or even the latter only, cannot be borne. When this happens, as is more frequently the case in the tarsus, the corresponding limb ought, during exercise, to be suspended by a sling, which not only prevents the uneasy sensation which would be produced by the force of gravity, but which constantly reminds the patient of the necessity for maintaining a continued desuetude of the affected part.

To the use of issues, moxas, setons, and open blisters in the immediate neighbourhood of the disease, strong objection exists on the ground that they would prevent the application of splints and bandages, from which a much more beneficial effect may, in the manner before stated, be obtained.

When circumstances are favourable, removal of the patient to the sea-coast sometimes greatly contributes to recovery, which, in other instances, would be promoted by a lengthened residence at Leamington, and by the judicious use of those of its waters which have, by recent analysis, been shown to be somewhat rich in iodine.

Throughout the whole treatment of this second stage, particular attention should be given to *food* and *drink*. These, at the commencement, will generally require to be of an unstimulating kind, as milk, the different farinacea, and the various white meats, to which the red meats, and sometimes the moderate use of malt liquor or wine, may, when all local excitement has entirely ceased, be added. Attention, too, is further required to *sleep* and the condition of the *skin*. The former allays excitability, refreshes the nervous system, and invigorates every organ; whilst the daily

ablution of the latter maintains, in a healthy condition, its important function, increases the activity of its circulation, and thereby not only contributes to the relief of local congestions, but also to the increased aeration of the blood and the vivifying properties of that fluid.

(*To be continued.*)

ARTICLE III.—*Case of Vicarious Menstruation in a Female aged 53.*
By HENRY R. BLAIR, M.D., Edin., L.R.C.S.E., Maybole.

MRS —, aged 53, the mother of a large family, consulted me on account of a spitting of blood. The patient is of a spare habit, and has a History blanched and anaemic appearance. Has been generally healthy until the present time, when she became annoyed with a pain in her side and a slight cough. This continued for a day or two, when she spat up blood in considerable quantity, which was frothy and of a bright florid colour. Being alarmed at this, she applied for advice to a medical man, who prescribed some astringent pills, and recommended the application of a blister to the chest. The latter was not applied.

The spitting of blood continued for a day or two, when it entirely left her. For some time she enjoyed her usual health, but at the end of about four weeks the haemoptysis again returned. At this time she first

Symptoms. consulted me. On visiting her, she complained of a violent pain in the head, with giddiness, confusion of thought, and extreme faintness on the slightest exertion.

This was accompanied by slight pains in the uterus and loins.

On examination, the chest was found healthy, the resonance was clear, and the respiratory murmur distinct on both sides. The heart was also healthy, but the sounds were feeble and the action impaired. The liver occupied its natural position, but she sometimes felt pain or uneasiness in that region.

Upon inquiry, I found she had menstruated regularly from her sixteenth Previous year until she first felt the pain in the chest. At that time it History commenced as usual, but was scanty, and as the spitting went on it gradually ceased. This at once explained the nature of the case, although, from the advanced age of the patient, it was not obvious at first.

As I did not think it prudent to check the haemorrhage, I tried to induce a return by the natural channel. With this object in view, I Treatment. prescribed for the patient the Pil. Ferri et Aloes, one to be taken night and morning; and to use the hot hip bath every night, to which a quantity of mustard was added. She was also strictly enjoined to keep her bed during the attack.

This treatment had not the desired effect of reinducing the menstrual secretion. The haemoptysis ceased after continuing two days. The whole amount of blood voided was about six ounces.

During the interval, I recommended her to continue the pills, and her strength and appetite seemed to improve under that treatment. At the next monthly period the haemoptysis again returned. The haemorrhage was greater, and the attack altogether more violent at this time. It continued longer also, but gradually declined, and finally ceased at the end of a week. Subsequently, her general health was very bad, and she suffered from constipation of the bowels. It improved, however, under a tonic regimen, and at the next monthly period the haemorrhage was slight and watery. Since then, two periods have elapsed, and there has been no tendency to a return. The health is improving, and the appetite is good.