LESSON XXX.

DIAGNOSIS AND TREATMENT OF CHANCROIDAL BUBO AND BUBONIC CHANCROID.

Manner in which these lesions occur. Definition. Usual teachings in regard to the chancroidal or virulent bubo. All buboes, not syphilitic, which do not suppurate, claimed as sympathetic or scrofulous. Phagedenic buboes. All sores which give rise to suppurating buboes not necessarily chancroidal. Early treatment of gland swelling associated with chancroid. Calcium sulphide an efficient agent in arresting the suppurative process. Statistics in proof of this. Later treatment. Rest in bed important. Danger of extension of trouble through formation of sinuses. Signs of such accident. Treatment necessary to their arrest and subsequent cure. Chancroids of the anus and rectum. Usual mode of advent. Aids to diagnosis. Modes of treatment. Chancroids of anus and rectum. Mode of origin. Aids to diagnosis. Modifications of treatment to meet varied conditions. General remedial measures when local remedies prove inefficient. The exulcerous form of chancroid the mildest type. Mode of treatment. The ulcus elevatum not a true chancroid. Mode of treatment. Modifications resulting from the union of the contagia of chancre and chancroid. Syphilitic disease more likely to be associated with the milder forms of chancroid. Frequency of this accident. The term mixed chancre a misnomer. No mixing possible. Each disease always independent of the other, and always of necessity antagonistic. Possible development of the initial lesion of syphilis after the healing of a chancroid.

Inflammation of lymphatic glands in connection with chancroid is not uncommon. The tumors, thus occurring, are termed *chancroidal buboes*. The inflammation is set up in such glands through the passage of the pus of the chanchroid through a lymphatic vessel. Inflammation is immmediately set up in the substance of the gland, which soon swells and becomes painful. Swelling of a lymphatic gland, from any cause, is usually called a bubo. Painful swelling of a lymphatic gland with inflammation, finally extending to the integument covering it, is termed an *inflammatory bubo*. When the inflammation is set up by inoculation, through the lymphatic vessels in connection with chancroid, it is termed a *chancroidal* or *virulent bubo*.

When an inoculation is thus effected, suppurative action is set up which (it has been taught as a rule to

which there is no exception) goes on to the formation of an abscess, and steadily progressing, in the course of two or three weeks, sometimes longer, finally finds its way through the parenchyma of the gland and the overlying integument. When this is effected, the lesion is called an open chancroidal bubo, or a bubonic chancroid. The purulent product of this lesion is, if not identical, analogous, in character, to that of the original chancroid.

This accident may be initiated at any period in the course of the chancroid, from its first appearance as a small suppurative point, throughout its existence. This is a strong argument in favor of the early and thorough destruction of chancroid. The activity of the suppurative process in the gland, bears a tolerably definite relation to that of the lesion from which it originates. When the source of the pus is active, virulent, it is not probable that any course of treatment, local or general, will prevent its termination in open bubo or chancroid. Where glands, associated with chancroid, inflame and yet do not go on to formation of abscess, or when abscess is thus formed and its contents are absorbed through treatment, local or general, it may be claimed that the chancroid, from which it is derived, is of mild type. It is, however, the habit of surgeons to classify all buboes (not syphilitic) which do not suppurate, as sympathetic or scrofulous.

Those resulting from irritation and not from inoculation, are termed sympathetic buboes. Whenever, through suppurative process, or by surgical inteference, the chancroidal bubo is open, it goes on to exhibit the diagnostic appearances of the original chancroid. Pus secreted by it, when inoculated at other points, or on another individual, produces the characteristic chancroid.

When the lesion from which it is derived, assumes the phagedenic form, the danger of extension of phagedenic action, to the bubonic chancroid, is imminent. Phagedenic action may also be set up in a bubonic chancroid after the original chancroid has healed. In such case the treatment should be the same as that pre-

viously directed (p. 244) for the phagedenic chancroid.

The earlier the destruction of a chancroid is effected, the less the danger of a complication through medium of the connecting lymphatic vessels. This accident seldom affects more than a single gland, and that usually in the groin, corresponding to the side on which the chancroid is situated. Occasionally, however, through intercommunication of lymph canals, it may appear in the opposite groin, even in both groins. A sore of very mild type may give rise to a bubo which may go on to suppuration. All sores which give rise to abscess of lymph glands are not necessarily of chancroidal origin. It is only by the activity of the contagium and of the inflammatory and destructive processes, exhibited in the inguinal lesion, that we can decide in what grade to place it.

It is safe, at first, to treat all imflammatory gland swellings in connection with chancroid, as if they were of simple origin, that is, by rest in the recumbent position, by local sedative applications, and at once to begin the use of the sulphide of calcium internally, giving parvules $\frac{1}{10}$ gr. every hour or two, or using a solution made fresh every day—

℞ Calx Sulphurata.................. grs. 2.
M. Aq.......................... ℥iv.

A teaspoonful every hour or two. Also using pressure (when it is well borne), by means of a compressed sponge, retained by a spica bandage, and moistened with the *lotio plumbi et opii*. If pressure is productive of pain, and this continues after it has been on for a little time, cold applications, even the ice bag, will usually give comfort, and, later, allow the pressure. If the feelings of the patient permit, the cold may be maintained and in some cases abort the bubo. Tincture of iodine painted on morning and night is also valuable, if the patient cannot take the rest required for other treatment. It has the advantage of being easily kept in place, and the popular credit of favoring abortion where this is possible, and when this cannot be hoped

for, of favoring suppuration. The early evacuation of the resulting abscess is usually advised. My habit, formerly, was to introduce a bistoury and make a free incision parallel to the long axis of the tumor at the earliest recognition of positive fluctuation. My later experience with the sulphide of calcium, administered internally, has caused me to delay operative interference until inefficiency of the sulphide of calcium has been fairly demonstrated.*

Once the bubo has been laid open by an incision, extending through its long diameter, it will be usually sufficient to pack the cavity with cotton or lint saturated with the ordinary tincture of iodine. This is a good styptic and has sufficient cauterant property to destroy

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* If suppuration, going on to the production of an open lesion, is inevitable, undoubtedly it is wise to encourage it, to evacuate the virulent product at the earliest moment, and thus afford access for efficient treatment for the destruction of this new formed chancroid. For this reason I had been an earnest advocate for early incision into suppurating buboes associated with chancroid. My experience in the few cases above alluded to, however, made me incline to the belief that a thorough and extended trial of the sulphide of calcium, in cases of inflammatory buboes associated with chancroid, might give such results as to make its use imperative in every such case.

In order to gain further light on this important matter, a systematic use of the calcium sulphide was made, in my service at Charity Hospital, in eighteen consecutive cases of inflammatory bubo occuring with, or as the immediate sequel of, well-pronounced chancroid. All the facts, considered of importance, were noted by myself and under my direction by Dr. Johnson, my House Surgeon.

Out of eighteen cases of inflammatory bubo presenting the rational evidences of chancroidal origin, and treated systematically by the use of small doses of the sulphide of calcium, resolution occurred in fifteen, and in only three cases was incision ultimately required. Applications of tincture of iodine and systematic compression were also employed in every case.

If we apply to these cases the usual rule that chancroidal buboes always eventuate in chanchroidal abscesses, always suppurate and require evacuation by natural means or surgical procedure, then we must hold that only three out of fifteen cases of inflammatory buboes associated with chancroid were the result of transference of the suppurative process from the chancroid to the adjacent lymphatic gland. It is just possible, however, that the influence of the sulphide of calcium may, in arresting suppuration, extend to the true chancroidal bubo. The apparent successful use of this drug in the series of cases herewith presented, at least suggests, and invites, a trial of its efficacy in all instances of threatened glandular suppuration, whether of purely sympathetic origin or associated with chancroid.

the chancroidal contagium and stimulate the abscess cavity to healthy granulation. Iodoform may be substituted if the iodine is objected to on account of pain; the pain caused by it, however, is very commonly transitory. Rest in bed is essential after the opening of the bubo, and until healing is well advanced, on account of the tendency to burrow, which abscesses in the region of the groin are wont to exhibit. The announcement of such an accident, is often, through a sharp rise of pulse and temperature, while the pain in the vicinity of the burrowing may be very slight. Whenever fever suddenly starts up in a patient suffering from an inguinal abscess or sinus, even when nearly healed, it is an almost certain sign of the formation or extension of a sinus, usually at the most dependent portion. In this event, after ascertaining its full extent by probing, in every case slip in a grooved director to the very bottom of the sinus, and if its direction is such as to make it surgically a proper thing to do, pass in a blunt curved bistoury and cut out—being careful not to leave a little pocket at the bottom. Injection of tincture of iodine may be made to advantage when cutting is not considered feasible. For the same purpose, a silver probe, dipped in nitric acid, (which forms a coating of nitrate of silver), may be conveniently applied by insertion of the probe. When possible, in cases where it is not considered judicious to lay it open throghout, the sinus should be drained by a counter opening, and, if suppuration is extensive, drainage effected by small perforated, rubber tubes, or carbolated threads. If not treated with promptness, extensive sinuses may form, requiring months to heal.

DIAGNOSIS AND TREATMENT OF THE URETHRAL CHANCROID.

A slight smarting on urination, or purulent discharge, appearing at the urethral orifice, six or eight days after impure connection, is suggestive chancroid of the meatus. Especially is a little blood in the discharge valuable as a diagnostic point—careful examination should

be made at once. This form is quite common, and is usually slow in its progress. If the tissues at the lower part of the contracted orifice are very thin, as is often the case, snipping them with a pair of blunt scissors will sometimes permit free application to the lesion without greatly increasing the surface thus exposed to inoculation, The use of a meatoscope, or a Toynbees ear speculum, will be of service in making examination and application beyond the orifice where, fortunately, chancroids are seldom met. If seen early, and the meatus is of sufficient size to expose it wholly, after cleansing with a weak carbolic lotion, and the part made properly dry, it should be thoroughly destroyed with nitric acid (after the manner described for small chancroids in other localities), subsequently dressing with a little thin linen wetted with a sedative lotion, or by small suppositories composed of equal parts of iodoform and cocoa butter. If the entire surface of the lesion cannot be exposed, treatment by iodoform suppositories will be best, using frequent hot water soakage, and insisting upon absolute rest.

DIAGNOSIS AND TREATMENT OF CHANCROIDS OF THE ANUS AND RECTUM.

These may occur as a result of connection *a posteriori*, or from inoculation. This accident, through chancroids previously existing in the vicinity, is suggested by pain in defecation and purulent discharge. The introduction of the finger may be sufficient to make out a diagnosis, but the short rectal bivalve speculum, with narrow blades, will give access, when required, for diagnosis and treatment.. But little especial treatment will be required, beyond that already suggested for other varieties. Cauterization to be made use of when called for; and absolute cleanliness insisted on.

If great difficulty and pain are experienced in introduction of necessary instruments and dressings, or if the lesion is penetrating the tissues rapidly, or is rebellious to treatment, the external sphineter may be divided *through the lesion*, and the cut surface treated, together

with the chancroid, by application of iodoform and tannin suppositories, subsequently using nitric acid if necessary to arrest the disintegrating process, and then resuming the iodoform suppositories, until healing is complete. The use of the vaginal speculum, in treating chancroid of the ostium vaginæ and parts beyond, is absolutely essential, not alone for the security of reaching the full extent of the lesions, but for occasional examinations beyond the site of existing lesions, and to insure against insidious development of new points. The healthy tissues adjacent to contagious surfaces, should be kept constantly separate by thin layers of carbolated or iodoform dressing; and by occasional soakage in hot water, secure absolute cleanliness, and relief to inflammatory conditions.

In all cases of chancroid, which, when judiciously cared for, are still rebellious to treatment—particularly those where ulcerations and sinuses have occurred, the general condition of the patient should receive especial attention. In cases of scrofulous habit, cod liver oil, iron, etc., are often of service in hastening the healing of a sluggish chancroid. The case cited page 223, where all measures failed, until a change of climate and a sea voyage wrought a prompt cure, is significant.

THE EXULCEROUS FORM OF CHANCROID, described as existing without perceptible loss of tissue, being either on a level or slightly above the surrounding surface, and hence not characterized by the usual marks of chancroidal action—must be classed as of the mildest form, and amenable usually to local astringent sedative applications. The sulphate of iron as a lotion—10 grs. to ℥ I of water—is often promptly curative.

THE ULCUS ELEVATUM, a lesion of the same type, is scarcely to be classed among chancroids, as it lacks wholly the characteristic features of such lesions. It is usually not larger than a flattened pea, and found on the borders of a prepuce, which is bathed in secretions more or less vitiated. It partakes more of the nature of a papilliary hypertrophy, and a local treatment adapted to such overgrowth should be employed, viz.: removing first the source of the irritant secretion, then apply the powdered persulphate of iron, or if necessary, to touch, lightly, with pure chromic acid.

MODIFICATIONS RESULTING FROM DEVELOPMENT OF SYPHILITIC ELEMENTS, IMPLANTED ON THE SITE OF A CHANCROIDAL LESION.

The milder the form of chancroid, the more likely to develop a syphilitic complication, after syphilitic exposure. Active chancroidal action, is doubtless as destructive of the syphilitic contagium, as of healthy tissue, but when, as is sometimes the case, the contagia of both chancre and chancroid are implanted on the same abrasion, at about the same time, the chances are, that the syphilitic disease germ, will find its way into a lymph space, and out of the reach of harm, before contact with the destructive chancroidal cell. This latter, going steadily on in its characteristic destructive action, while the proliferation of the syphilitic disease germs is progressing underneath. So it often happens, that, while the chancroid is in full typical action, the tissues underlying and surrounding, become gradually stiffened and indurated, until a sore presents, equally characteristic of both chancroid and the initial lesion of syphilis. This is known as the "*mixed chancre.*"

It will be at once seen that there is not, and never can be, any *mixing* of the contagion of chancroid and syphilis, one representing the *destruction* and the other the *growth* of tissue elements. Necessity for the treatment of the chancroid, is the same as before, but the complication requires the constitutional treatment appropriate for syphilis, at the first moment, when, through development of other characteristic syphilitic lesions, the diagnosis can be definitely settled. The development of induration of syphilis, after the healing of a chancroid (the tissues about which have remained supple throughout its existence) is also not uncommon, The possibility of such an occurrence must be borne prominently in mind, for several weeks after the healing of any lesion resulting from a suspicious sexual contact.

Remedies and Remedial Agents Referred to in this Volume, and their Application.

For Local Application to the Initial Lesion of Syphilis.

In the non-ulcerative forms; the indurated papule, and the dry scaling patch.

No. 1. White precipitate ointment, vaseline; equal parts; or,

No. 2. The mild mercural ointment; or,

No. 3. The oleate of mercury, 6 per cent solution, with vaseline; equal parts.

Apply by gently rubbing in a small quantity morning and night.

In all Uncomplicated Open Initial Lesions.

No. 4. Calomel pure, dusted on and protected by a thin film of borated cotton; or soaking the cotton with the following solution, and apply; or,

No. 5. Calomel, 20 grs.; lime water, 4 ounces; mix; or,

No. 6. Corrosive sublimate, 10 grs.; lime water, 6 ounces; mix.

For the Inflamed Initial Lesion.

Diluted solution of sub-acetate of lead, 4 ounces.

No. 7. Aqueous ext. opium, 10 grs.; or,

No. 8. Iodoform, 30 grs.; glycerine, 1 ounce; oil of roses, 1 drop; mix; apply on lint.

For the Phagedenic or Gangrenous Form.

No. 9. Iodoform, a sufficient quantity; 1 drop of the oil of roses to 30 grs.; applied freely.

Internal Remedies for Treatment of Syphilis, from date of Initiation, for at least 12 Months.

No. 10. Blue mass., 60 grs.; exsicated sulphate of iron, 30 grs.; make 30 pills (pil. duplex), one three times a day; or,

No. 11. Protoiodide of mercury, exsicated sulphate of iron, 40 grs.; aqueous extract of opium, 4 grs.; mix, make 40 pills; one three times a day.

External Applications for Innunction.

No. 12. The mild mercurial ointment; a piece as large as a filbert rubbed in thoroughly, morning and night; or,

No. 13. Oleate of mercury, 10 per cent solution; vaseline an equal quantity; a teaspoonful rubbed in, morning and night, always in a fresh and protected place.

For Mercurial Fumigation, or the Mercurial Bath.

No. 14. Calomel, (resublimed) 15 to 30 grs.; nightly, or every two or three nights, until its specific effect is obtained. Further directions on page.

After the Twelfth Month, the Mixture of the Biniodide of Mercury and the Iodide of Potassium.

No. 15. Biniodide of mercury, 3 grs.; iodide of potassium, 120 grs.; tincture of orange peel, 1½ ounces; syrup of orange peel, 1½ ounces; distilled water, up to 8 ounces; mix; a teaspoonful three times a day, or if gastric or intestinal irritation ensues—

No. 16. Biniodide of mercury, 3 grs.; iodide of potassium, 120 grs.; fluid extract of thuja, 8 ounces; mix; a teaspoonful three times a day.

In addition to the foregoing,

During the Sequelæ of Syphilis.

No. 17. Iodide of potassium, 1 ounce; distilled water, 6 drams; mix. Beginning with 5 drops in a small glass of water, or preferably of milk, increasing by a drop for each dose, gradually increasing the diluent to a tumblerful, until sixty drops are taken, equivalent to 60 grains of the iodide of potassium, three times daily, after meals, unless iodism occurs. In this case begin again with the minimum dose, and increase as before up to 40 drops, and then increase by 1 drop, until 60 grains is again reached. If decided benefit does not take place, the quantity may be even farther increased up to twice that amount, in grave cases, and continued, if well borne, until all signs of the disease have disappeared.

If the iodide of potassium is not tolerated, the following may be administered.

No. 18. Iodine, 24 grains; distilled water, 2 ounces; iodine of potassium, 48 grains; dissolve and add common molasses, or Stuart's syrup, 8 ounces; let it stand 12 hours. Administer from a dessertspoonful, gradually increased to a tablespoonful, thrice daily after meals.

In the Alopecia of Syphilis.

The following lotions will be found serviceable:

No. 19 Bi-chloride of mercury, 3 grains; hydrochloric acid, 30 minims; distilled water, 8 ounces; then add, spirits of cologne, 1 ounce; rose water, 1 ounce; glycerine, ½ ounce; mix; or

No. 20. Castor oil, 1½ ounces; rectified spirit, 1½ ounces; spirits of cologne, 1 ounce; tincture of cantharides, 2 drams; mix, apply nightly, washing the hair every morning with castile soap.

For Local Applications in the Treatment of Chancroid in the Slowly Destructive Forms.

No. 21. Sulphate of iron, 10 grains; aqueous extract of opium, 10 grains; distilled water to 1 ounce.

No. 22. Carbolic acid, 5 to 10 grains; solution of morphia, (U. S. P., containing 1 grain of morphia), 1 ounce. If the secretion is profuse,

No. 23. Iodoform and tannic acid, equal parts, dusted on; mix; in the more acute forms,

No. 24. Iodoform, 60 grains; vaseline, 60 grains; oil of roses, 1 drop; or,

No. 25. Iodoform, 60 grains; oil of roses, 1 drop; apply in powder; or,

No. 26. Iodoform, 1 dram; carbolic acid, 1 minim; oil of peppermint, 6 minims; mix.

For Destruction of the Chancroid, or Phagedenic Conditions.

Nitric acid, pure; galvano cautery, or the thermo cautery.

For Sluggish Conditions.

No. 27. Permanganate of potassa, 2 grains; distilled water, 1 ounce.
No. 28. Carbolic acid, pure; applied daily; or,
No. 29. Carbolic acid, 10 grains; glycerine, 2 drams; distilled water, 6 drams; mix; apply on a thin film of cotton.

For Application to Bubonic Ulcers, and Sinuses.

No. 30. Tincture of iodine, pure; and, for arrest of suppuration in any case.
No. 31. Sulphate of calcium, 1 grain; distilled water, 2 ounces; a tea spoonful every hour, solution to be freshly made every day; or,
Parvules, $\frac{1}{10}$ grs. each.

For Applications to the Phagedenic Chancroid.

No. 32. Hot water immersion, temperature 100° F.; actual cautery; charcoal poultices
Internally, (Ricords formula).
No. 33. Potassio tartrate of iron, $\frac{1}{2}$ ounce; distilled water, 3 ounces; syrup. 3 ounces; mix; a dessertspoonful to a tablespoonful three every six hours, preferably after meals.

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GONORRHŒA AND ITS SEQUELÆ.

LESSON XXXI.

GONORRHŒA.

Nature of gonorrhœa—Its usual seat—May be transferred to the mucous membrane of the eye, and to other points, through mediate contagion—Gonorrhœal ophthalmia a very grave accident—Gonorrhœa a non-specific disease, and may be set up by a variety of causes, although usually the result of venereal contact—Cases in illustration—Gonorrhœa identical with non-specific infantile leucorrhœa—Cases in illustration—Case showing how the origin of gonorrhœa may become important in a medico-legal point of view—Gonorrhœa induced by injections—Case in illustration—Gonorrhœa induced by urethral stricture—Case in illustration—Nature and composition of mucous membrane—Manner in which its secretion is elaborated—Manner in which the normal secretions are changed to a purulent discharge—Beale's view of disease-germs in gonorrhœa—Varieties in the severity of gonorrhœa—Case in illustration.

WE enter now upon a consideration of the third, and last, in the list of veneral diseases alluded to, in the opening lecture of our course, viz.:

Gonorrhœa.—This is a vicious, non-specific, contagious, inflammatory disease of the mucous membranes, and is usually acquired through contact in the venereal act.

It is characterized by free purulent secretion, without ulceration, occurring chiefly in the mucous membrane lining the urethra in the male, and the vagina and urethra in the female; and occurring exceptionally, in the mucous membrane of the rectum.