Chancroidal bubo and bubonic chancroid / by J. Macdonald Brown.

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BY

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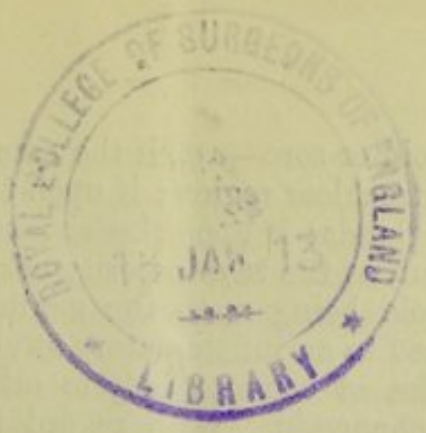

CHANCROIDAL BUBO AND BUBONIC CHANCROID.

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IT may appear unnecessary that such a subject as this should require further investigation. In the present day venereal diseases, and amongst them chancroid, have been the subject of most careful study, and many excellent treatises and monographs have been written thereon. For many years past, it has been well known that chancroid or soft chancre may have, as a complication, a bubo, and that this bubo may be one of two varieties—in some cases, both combined.

The two varieties of bubo are quite distinct from each other in their symptoms, pathology, and treatment. Yet, although in several of our standard works upon venereal diseases they are carefully differentiated, in many they are described in a somewhat confused manner, and in the latest English work on the subject,* all that is said of the special form of bubo which forms the subject of this paper is that "the wounds in some cases after incision closely resemble a large soft sore."

It has seemed to me, therefore, that a short, concise account of the two forms of bubo which often complicate chancroid might not be out of place, more especially as we have had in the Lock Wards of the Hospital lately two cases which clearly exemplify the features of the rarer form, and which, through the kindness of Dr. P. H. Maclaren, I am able to give a careful account of.

It might be well to note in passing, that the term bubo does not necessarily mean an inflammatory swelling confined to the region of the groin, but that it may occur in other glands than in those of the inguinal region.

A bubo, in fact, occurs at the site of the lymphatic gland or glands

* Cooper: "Syphilis and Pseudosyphilis," 1884.

nearest to the chancroid or sore—*e.g.*, if the sore be upon the finger, a bubo forms in the epitrochlear region; if upon the leg, in the popliteal or femoral regions of glands; if upon the cheeks, lips, &c., in the submaxillary, &c. &c.; but, as the vast majority of cases naturally appear in the groin (the chancroid being upon the genitals), the term bubo has become almost confined to an inflammatory swelling there.

The above remarks, of course, apply to other forms of bubo than those accompanying chancroid. With regard to the numerical occurrence of bubo as a complication of chancroid, many statistics have been given. Ricord* found that out of 207 cases of soft chancre, 65 had bubo. Agnew† states that it appears in one out of every three cases, and many other surgeons mention the same proportion.

The simple form of bubo would be much rarer than it is, if the patients came earlier under the care of the surgeon, and were enjoined complete rest, as the great exciting cause of such swellings is the constant movements of the part in walking, &c.

Buboes are undoubtedly more common in men than in women, probably from the more active habits of the former.

Chancroid may therefore be complicated by two forms of bubo: 1st, the simple or sympathetic; and 2nd, the chancroidal or virulent. Of these, Lee‡ remarks that "the progress of the first we can hope to arrest, while that of the latter will surely go on."

As before stated, these two varieties differ from each other in every respect, in symptoms, pathology, and treatment; it is, therefore, a matter of the utmost importance to be able to differentiate clearly between them.

I. Simple Bubo.—This form (called by Erichsen *Sympathetic*) § is most common during first fortnight of the existence of the sore, and lasts a variable time; if untreated, generally from four to six weeks. Its duration is often prolonged by sinuses. Such a bubo may follow many other causes besides chancroid—*e.g.*, excessive sexual indulgence; urethritis, simple or specific; mechanical lesion of genitals; various skin eruptions, &c.; but, as Bumstead and Taylor point out, in these forms suppuration is of extremely rare occurrence.‖

This simple form attending chancroid is too well known to require description; suffice it to say that the doughy, somewhat diffuse swelling speedily exhibits fluctuation, and that after evacuation of the abscess, a simple ulcer remains, which secretes laudable pus, and heals rapidly. As Lee has stated, "it is an inflammation of the lymphatics, such as often occurs after abrasions or wounds of other parts;"—the gland enlarges, tissues around inflame, but the resulting inflammation and suppuration are simple in character—*i.e.*, there is no specific material in the gland tissue.

* Fournier. Ricord: "Leçons sur le Chancre."

† "Principles and Practice of Surgery," vol. iii. 1883.

‡ Holme's "System of Surgery," vol. iii. 1882.

§ Erichsen: "Science and Art of Surgery," vol. i. 7th ed. 1877.

‖ "Pathology and Treatment of Venereal Diseases," 5th ed. 1883.

II. CHANCROIDAL or VIRULENT.—This form is much rarer than that above mentioned. Out of 33 cases of bubo attending chancroid, which have been treated in the Lock Wards during the past four months, only two presented the features of this variety. Here we have not a mere so-called sympathetic inflammation to deal with, but a truly specific one; the virus having traversed the lymphatic vessels intervening between the chancroid and the nearest gland, or, as it is termed, the "gland first in order" where it has become lodged. After describing the leading features of such a bubo, I shall briefly detail the two cases which came under observation, and, finally, shall endeavour to discuss the pathology, diagnosis, and treatment of the lesion. The bubo may appear at any period of the chancroidal disease, generally after the first two weeks of the existence of the sores, and occasionally after the sores have healed. Its course is not modified or interfered with by any external precautions. Its duration is prolonged and indefinite, and is stated by Hill and Cooper* to be two to three months, and in some cases years. As a rule it is limited to one groin.

Until the fluctuating swelling has been opened or has burst, its symptoms are pretty much identical with those of the simple bubo. Bumstead and Taylor, however, state that at this period it is accompanied by more pain and general fever than the simple form, and that the swelling is harder, more elastic, and more circumscribed; its course also is more rapid. It is when the abscess has given place to an ulcer, the so-called "bubonic chancroid," that the characteristic features of the lesion reveal themselves. The resulting ulcer is but a repetition of the chancroidal process, and is itself, in fact, a large chancroid. Its edges are everted, irregular, uneven, and undermined; its base uneven, irregular, and covered by a thick adherent greyish or yellowish slough. The discharge is copious, but of an unhealthy nature, irritating, greyish, and often sanious. Otis states that the pus from such an ulcer, if not identical with, is, at least, analogous to that of the sores.†

It has been demonstrated beyond doubt that such pus is inoculable (Erichsen, Hill, Otis, &c.).

Such an ulcer, unless checked, spreads with exceeding rapidity. It destroys tissue, and burrows in all directions, along the groin, down the thigh, and upwards along the abdominal wall. There is great destruction of skin; fasciæ, vessels, and glands may be laid bare; and Professor Sturgis, of New York, has seen cases where considerable hæmorrhage ensued from the erosion of the femoral and superficial epigastric vessels.‡

In one recorded case, fatal peritonitis resulted.

Bubonic chancroid once formed, lasts, as we have seen, for a very lengthened period, and may without treatment slowly cease to extend and gradually heal. This, however, generally only occurs after much destruction of skin and tissues. In such cases the poison has probably become worn out or so degenerate as to be incapable of producing further damage.

* "Syphilis and Local Contagious Disorders," 2nd ed. 1881.

† "Practical Lessons in Syphilis and the Genito-Urinary Diseases," vol. i. 1883.

‡ "International Encyclopædia of Surgery," Ashurst, vol. ii. 1882.

Such, then, are the leading features of this lesion. I shall now briefly refer to the two clinical cases mentioned previously.

ALEXANDER M., a strong, robust man of 35 years of age, was admitted to Ward IV. of the Royal Infirmary about the middle of April last.

He had remains of soft sores on the prepuce, and a soft fluctuating swelling in the left groin. He complained of considerable pain in the part, which was exaggerated on movement.

The bubo was opened, and a large quantity of thin puriform fluid evacuated. The resulting wound for two weeks was most assiduously treated with dry iodoform dressing, the patient at the same time being strictly confined to bed. In spite of this the ulcer gradually increased in size, and, in place of showing signs of healing, became more and more unhealthy-looking. A slight abrasion of the skin about an inch distant from it quickly assumed similar characteristics, auto-inoculation having evidently taken place.

So rapidly did the destructive process proceed, that in a few days only a mere bridge of skin separated the two ulcers from each other. This was subsequently divided to relieve tension, and two days later one large ulcer resulted.

On 5th May, the patient was chloroformed, and the margins of the ulcer brushed with pure carbolic acid, while solid chloride of zinc was thoroughly rubbed into the base. Simple water dressing was then employed, and five days subsequently an extensive slough separated, leaving a simple healing ulcer behind. This, under dry iodoform dressing, healed kindly in eight days' time.

JAMES S., 21 years of age, was admitted into Ward IV., on 12th July, complaining of pain in both groins, increased by walking. On examination, a soft fluctuating bubo was found in each groin.

Two months previously he had chancroid, but the sores had healed three weeks before admission. Only a fortnight previous did he feel any pain in the groins, or observe any swelling there.

The buboes were opened, and thin sanious pus evacuated. The sores had dry iodoform dressing applied. They increased somewhat in size during the following week, and presented all the features of bubonic chancroid, though in a somewhat mild degree. Subsequently, and without change of treatment, they gradually took on a healthy action, decreased steadily in size, and in fully three weeks' time had completely healed.

A chancroidal or virulent bubo is distinguished from a simple one by several marked differences. It occurs at a later period, rarely before the third week of the existence of the sores, and often at a much later date, sometimes, as in the second case described, after the sores are completely healed. The simple bubo, on the other hand, usually appears during the first week of the existence of the chancroid.

The two forms are indistinguishable before evacuation, although

Bumstead and Taylor, as already mentioned, have made out certain differences.

The contents of the abscesses differ in quality, and the pus of the chancroidal form is specific or nocuous. The differences in appearance of the ulcers have in a previous page been carefully described.

Lastly, in subsequent history the two buboes are widely apart—the simple gradually but surely cicatrises and heals, while the chancroidal rapidly extends and destroys, and unless active treatment be adopted heals extremely slowly.

With regard to the pathology of the lesion, many and varied explanations of the process have been advanced.

The old idea that a sympathy existed between the rootlets of the lymphatics and the gland in which they terminate is, as Bumstead observes, no longer tenable. Either irritant matter or specific matter is conveyed along the lymphatics to the nearest glands, and is arrested there, inducing a simple or a chancroidal bubo, as the case may be.

Lee, Sturgis, Erichsen, and others, believe that in the case of the chancroidal bubo, the virus is absorbed by the lymphatic vessels, while Bumstead considers that it erodes their walls, and so gains admission. Be this as it may, it enters the lymphatic trunks. As Lee has shown, the poison may inoculate the wall of the vessel in which it is contained in any part of its course, and may produce there a fresh venereal sore, but usually, however, the lymphatic gland is the part affected.

Arrived at the first gland, the virus cannot be traced beyond that point. This is probably due, according to Lee, to the lymph-channels beyond becoming closed, while the poison is discharged, in great measure, in the resulting suppuration.

The gland affected enlarges, undergoes inflammatory changes, and soon contains nocuous pus. At the same time, a suppurative peri-adenitis occurs, external to it; so that there exist two collections of pus in the first instance—an internal or glandular, which is nocuous, and an external or peri-glandular, which is innocuous.

Bumstead states that the latter collection of pus is the first to burst. Later, or when the collection is opened, the whole fluid, from admixture, becomes nocuous. It has been previously stated that chancroidal bubo generally only occurs upon one side, but, as in case No. 2, it occasionally is found on both. When bilateral, Ricord and others noted that there may be one of each form of bubo. Of the two varieties of bubo, the chancroidal is, according to Bumstead, the only one liable to be attacked by phagedœna. Otis states that if the chancroid be phagedœnic in nature, the bubo is also apt to undergo a similar change, and this even after the sores are healed.

Considering the time that elapses between the activity of the chancroid and the appearance of the virulent bubo, one cannot avoid being struck with the fact that the virus occupies a considerable time in its passage along the lymphatic channels *en route* from the chancroid to the gland.

Treatment.—Until fluctuation can be detected, every means must be

used to lessen the inflammatory action, and so, if possible, to avoid suppuration.

Complete rest in bed should be strictly enforced, the patient put upon a light, non-stimulating diet, and the bowels carefully attended to. Locally, there are many different modes of treatment. In the Lock Wards here, the usual application is that of lead and opium cloths, so used as to keep the part constantly moist. Iodine—or, as Agnew recommends, a mixture of tincture of belladonna and tincture of iodine (1-2)—painted over the part once or twice daily, is efficacious in many cases. Ice, leeches, blisters, mercury ointment, and collodion, are advocated by various surgeons. Sir Henry Thompson recommends a strong solution of nitrate of silver (90 grains to the ounce) as an extremely good local application. Sponge-pressure is frequently employed, and Otis advises this to be used in conjunction with lead and opium lotion.

Such, then, are the chief methods of using the so-called "abortive treatment." It only remains to add that some surgeons (especially in America) strongly advocate the internal administration of sulphide of calcium during this stage. Otis gives $\frac{1}{10}$th of a grain every hour or two in watery solution, or in parvules.

When signs of fluctuation present themselves, the abscess must be opened at once.

If the bubo is of a simple nature, it will soon heal up; if of a virulent character, you prevent burrowing and greatly lessen destruction of tissues by prompt incision.

The best method of treating the resulting sore, is by dry iodoform dressing—*i.e.*, dusting over the surface with iodoform powder, covering this with absorbent wool, and applying an ordinary bandage.

Under this treatment a simple bubo speedily heals, and a virulent sore, especially if mild in degree, will probably slowly assume a healthy action and cicatrise (*vide* Case No. 2). Some authors recommend tincture of iodine or iodocarbon paste. Certain cases of bubonic chancroid, however, despite such treatment, continue to extend their destructive action (*vide* Case No. 1), and with them still more active measures require to be employed.

The surface and edges of the ulcer must be destroyed by the knife, cautery, or by escharotics.

Of the latter, Vienna paste, nitric acid, sulphuric acid, carbolic acid, chloride of zinc, potassa fusa, perchloride of iron, tincture of iodine, and nitrate of silver, are those most commonly used.

Dr. Maclaren recommends that, as in the first case detailed, the patient should be chloroformed, the edges of the ulcer brushed with strong carbolic acid, and solid chloride of zinc rubbed thoroughly into its floor.

A simple water dressing may then be applied until the slough separates (4-5 days). Afterwards dry iodoform dressing.

Under such treatment, a speedy cure will be in most cases effected.

Chloride of zinc is especially useful as an escharotic, on account of the rapidity with which the resulting slough separates, and the healthy nature of the surface left after its removal.

Professor Neumann of Vienna adopts an extremely heroic method for destroying the specific action of the sore. He snips off, with scissors, a considerable portion of the healthy skin around the margin of the ulcer, and rubs Vienna paste thoroughly into its surface. This he does without chloroform.

It is a point of no small importance to remember that any case of chancroid may possibly be complicated by a virulent bubo, and that the best method of obviating such a result, is at once to destroy the local sore by nitric acid or other suitable escharotic.

Another form of bubo has been described as attending the chancroidal disease—the so-called "bubon d'emblée" of the French surgeons, where, although no previous local sore existed, a typical bubo gradually appears in the groin. Its existence is extremely doubtful, and by the most eminent English authorities on the subject is absolutely denied. In such cases, probably a small local sore on the genitals escapes observation.

By some authors, the term *indolent* is applied to a subacute form of simple bubo attending chancroid, which occasionally occurs in lymphatic or strumous subjects. Such a term seems to me calculated to mislead, and, I believe, ought only to be employed in describing the glandular enlargement of syphilis.

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