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Esthiomène, or Lupus Vulvæ. A historical pathological, and clinical study, with analysis of six cases from the General Hospital, Birmingham, and ten micro-photographs.

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IN the year 1849 Huguier published his remarkable essay entitled, "De l'Esthiomène de la Vulve et du Périnée." He derived the name from the Greek word *ἔσθιω* which signifies to eat away. Previous to the appearance of this essay every variety of vulvar ulceration had been described under the name of "lupus," irrespective of the cause and nature of the ulceration.

After the publication of Huguier's essay the term *esthiomène* was adopted by numerous French and English authors, many of whom retained the term *lupus* concurrently. It is obvious that numerous authors understood by both terms merely a process of ulcerative destruction and did not intend to point to any definite causation by the choice of name.

TERMINOLOGY.

Esthiomène has been frequently described under the term *lupus* to which all varieties of descriptive adjectives have been appended, such as *lupus hyperphicus*, *serpiginosus*, *prominens*, *perforans*, etc. According to the main features presented by the case described the term *lupus* did not imply tuberculosis. Another name frequently met with is *herpes*—*herpes excedens* and sometimes "*herpes esthiomène*." Among German authors the condition was most frequently described as "*ulcus*." Virchow called it "*ulcus rodens vulvæ*," while F. Koch used the term "*ulcus chronicum elephantiasticum*." Recent authors, both Continental and British, have published their cases under such terms as "*lupoid ulcer*," "*genito-anal scleroma*" and "*esthiomic ulcer*."

This large variety of names used in describing *esthiomène* points to two facts; firstly, that the writers did not describe one special type of perineal ulceration with hypertrophy, but all and every kind of ulcerative process met with in the vulvo-anal region; secondly, that

the nature of esthiomenic ulcerations was quite unknown, and that the authors in the choice of nomenclature tentatively indicated their own theory of causation.

HISTORICAL OUTLINE.

The first work known on the subject "of esthiomène or lupus vulvæ" is Huguier's essay "De l'Esthiomène de la Vulve et du Périnée," presented to the French Academy of Medicine, and published in the *Mémoires de l'Académie de Médecine* in 1849. The name of esthiomène (from the Greek word 'Εσθίω) was meant to indicate the destructive burrowing nature of the process. Huguier retained the term lupus, under which the condition was widely known, and in so doing gave rise to endless discussions on the part of those writers who insisted that Huguier considered it a tuberculous condition and those who maintained that Huguier viewed it as a disease *per se*. Huguier held no views regarding the ætiology of esthiomène. He classifies the types of esthiomène as follows:—

1. Superficial ambulant and serpiginous variety: (a) erythematous; (b) superficial tuberculated, serpiginous.
2. Perforating variety.
3. Hypertrophic variety: (a) hypertrophic vegetating; (b) hypertrophic, œdematous and elephantiasic.

It would be difficult to find anywhere in medical literature a more masterly description of morbid changes than Huguier presented us with when he appended to his essay the clinical study of six cases of esthiomène. It is not surprising that to this day his work has remained one of the best known and most frequently quoted of French essays. In spite of his avoidance of any discussion regarding the nature of esthiomène, necessitated by the lack of knowledge of the causation of syphilis and lupus and the insufficient histological methods of his time, Huguier's essay is one of primary importance in the study of ulcerative conditions of the vulvo-anal region.

In the same year in which Huguier's essay appeared (1849) Guibout published an article in the *Union Médicale*, entitled "Des diverses affections non-vénériennes des organes génitaux-urinaires chez la femme qu'on est exposé à considérer comme vénériennes."

Amongst a number of different varieties of ulcerations he collects one group of types which he calls "Esthiomène, or Lupus of the Vulva," which he endeavours to distinguish from syphilis, cancer and elephantiasis arabum. His treatise deals mainly with the ætiology of esthiomène and with the differential diagnosis between esthiomène and the conditions mentioned. He concludes that esthiomène is lupus, the same type of lupus as it occurs on the face. "Il n'y a réellement à la vulve qu' à la face un esthiomène." He

does not enlighten his readers with regard to the ætiology and nature of lupus but withholds all theories concerning the nature of lupus.

Bernutz in 1874 published an essay on esthiomène in the *Archives de Tocologie* in which he follows the example of Guibout in tracing the identity between lupus facialis and lupus of the vulva but differs from him in diagnosing it as a scrofulous, *i.e.*, according to him tuberculous, condition.

His views were accepted by all French authors until 1885 when Eugène Deschamps issued his "Etudes sur quelques ulcérations non-vénériennes de la Vulve et du Vagin" in the *Archives de Tocologie*. He deals mainly with the theories of causation and concludes that esthiomène is not a disease *per se*, but that lupus may sometimes be the cause and syphilis at other times.

Another "Thèse de Paris" on the subject of esthiomène was written by Fiquet in 1876. Once more we have a return to the views of Bernutz, namely, that esthiomène is lupus of the perineum and that it is a tuberculous manifestation is indicated by the fact that the patients are usually afflicted by pulmonary tuberculosis concurrently.

The next contribution in point of time to the literature on esthiomène appeared in 1887 in New York in the shape of a monograph published by Isaac Taylor, M.D., in the "Gynæcological Transactions of Philadelphia," entitled "On Lupus, or Esthiomène of the Vulvo-anal Region." The author uses the term lupus merely in the sense of destruction, for he holds that patients afflicted with esthiomène are usually free from "scrofula." Isaac Taylor is the first writer who inclines to the view that esthiomène or lupus might from several peculiarities appertaining to this condition be considered a disease *sui generis*.

The first British author who contributed a valuable paper towards the literature on esthiomène was Angus Macdonald, who in 1883 published three cases in the *Obstetrical Transactions of Edinburgh* under the name of "Lupus of the Vulvo-anal Region."

He states: "There is no essential difference between lupus of the vulva and lupus on any other part of the body." But he does not think of lupus as a strumous or tuberculous affection. "It would appear that lupus must be looked upon as a local not a general affection, its origin having to be sought for in some local irritation."

Mathews Duncan published two valuable monographs on esthiomène which appeared in 1884 and 1885. The first, on "Lupus of the Pudendum," was printed in the *Medical Times*, vol. ii, 1884. The author adheres to the term lupus because he sees a resemblance between lupus of any part of the body and lupus of the perineum, but he does not admit that they are "pathologically the same as is generally believed."

He distinguishes two types, *lupus minimus*, where the ulceration is slight, and *lupus maximus*, where ulceration is considerable.

In his second paper: "On the Ulceration of Lupus on the Female Genital Organs, including pits, perforations and excavations" (Transactions of the Obstetrical Society, 1885), Mathews Duncan describes five cases of *esthiomène*.

He uses the term *lupus* in preference to *esthiomène* "since it expresses the great eroding character of the disease, including ulceration, inflammation and hypertrophy variously combined, not cancerous, not epitheliomatous, not syphilitic."

"The name of *lupus* is retained in order to avoid change and because the character of the disease brings it into alliance with the ordinary run of such cases."

Duncan forwards no views regarding the nature of the disease.

An interesting analysis and full report on all cases published under the name of *esthiomène*, or *lupus vulvæ*, up to the year 1887 was published by Dr. Grace Peckham Murray, who herself added two valuable monographs on the subject. Her first dissertation: "A contribution to the study of ulcerative lesions of the vulva commonly called *lupus* or *esthiomène*," appeared in the *American Journal of Obstetrics* in 1887. The author describes in detail a case she had under observation for many years and which conformed to the type described by Huguier as "*Esthiomène hypertrophique et végétant*."

The author then proceeds to classify the cases published as *lupus* or *esthiomène* according to their various clinical and pathological characteristics. She found in most cases that a definite constitutional disease was present, being usually the cause of the perineal ulceration; in fully half the cases there was a clear history of syphilis, in some tuberculosis was present, and in a few malignant disease.

"A hitherto undescribed form of New Growth of the Vulva" is the name of an essay published by R. W. Taylor in his "Journal of Cutaneous and Genito-urinary Diseases" in 1889. Two cases of "new growth" are described which the author considers distinct from syphilis and gonorrhœa "but which might be mistaken for *lupus*." He states that in one case the new growth supervened on a chancroid lesion but was quite "benignant" in character, "showing only inflammatory tissue." His cases conform in every detail to the types described by Huguier as *esthiomène*, showing varying degrees of ulceration and hypertrophy.

Numerous contributions to the study of *esthiomène* have been published by German authors under the name of "*ulcus vulvæ*." This term was introduced by Virchow and adopted by Veit in his "Handbuch der Gynæcologie," 1898. The latter considers that in

all cases of *ulcus vulvæ syphilis* has preceded but that the ulcer itself is not specific in nature.

The last of important publications on esthiomène in point of time is S. Pozzi's chapter on esthiomène in his "*Traité de Gynécologie clinique et opératoire*," 1907. He describes the two chief forms, mainly ulcerative and mainly hypertrophic, and agrees with the earlier French writers Bernutz and Fiquet in assigning the condition to tuberculous infiltration.

Some of the most recent studies on the subject under discussion were published by Dupuy et Rullier, St. Lazare Hospital, Paris, 1907, who term the condition a simple scleroma, neither tuberculous nor syphilitic in nature but simply due to local irritation and uncleanness.

MORBID ANATOMY AND HISTOLOGY.

The two main features that all cases of esthiomène present in a varying degree are ulceration and hypertrophy; one or other of these features may be greatly in excess over the other, but unless both are present the case is not one of esthiomène. Hence a large number of cases published as esthiomène which showed only ulceration must be excluded from the records.

The degrees of hypertrophy and ulceration depend on the stage of the disease.

At an early stage small inflammatory patches or superficial excoriations may mark the first step towards ulceration while the hypertrophic tendency is sometimes represented only by small fleshy nodules.

Later the ulceration and the hypertrophy become more marked. The whole vulva may be greatly deformed, every part of it being altered in outline. The clitoris and labia minora are, however, more frequently affected than the other structures.

Large firm masses project irregularly from the general surface of the vulva and sometimes beyond the labia majora. These masses represent definite vulvar structures. Usually there is no sign of the structures themselves, nor can the parts be differentiated from each other. These masses are not unlike the wattles and combs of birds and are so distinctive in their appearance that it is impossible to confuse them with the inflammatory hypertrophies of tuberculosis or elephantiasis. The hypertrophied masses of esthiomène are sometimes pedunculated, but more often sessile. Their surfaces are almost always uneven, tuberculated, torn and jagged. In the deep fissures between the irregular convolutions a process of ulceration often goes on which may lead to deep fistulæ. The hypertrophied masses are firm, elastic to the touch and quite painless. The skin is usually dry and hard and sometimes dead-white in colour; as a

rule the colour is pinkish-yellow, contrasting with the purplish-brown of the surrounding vulvar structures.

With extensive hypertrophies pressure sores may occur on the surfaces, but these are not nearly as common as in elephantiasis Arabum since the hypertrophy never reaches the same dimensions.

The ulcerations vary considerably. They may be deep or shallow, sloughing or dry, red, purple or brown. They are always irregular, and an ulcer may be shallow in one part and deeply excavating in another. The edges may be thick or thin, rolled or undermined, sloping or vertical, in fact, there is no definite type and every feature of ulceration may be found. When shallow the ulcers are usually extensive, when deep they present small orifices on the surfaces.

It appears that in cases where the hypertrophy is very marked, the ulceration is not as a rule very extensive.

The third stage is the stage of actual destruction. Destruction is due to deeply burrowing ulceration causing fistulæ between the body-cavity, the pelvic organs and the external surface. The fistulous tracts may heal, thus leading to strictures and atresia of vagina, urethra and rectum. It is remarkable that in this severe form of the disease the ulcerative process is greatly in excess over the hypertrophic one.

The cicatrices produced are firm, unyielding and large. Their later contracture leads to very marked deformity. On the surface of the vulva they are tense, shiny and smooth, and show a constant tendency to ulcerate again.

HISTOLOGY.

The first pathological report on esthiomène in the annals of medical literature is by M. Robin who examined four cases of Huguier and attached them to his essay in 1849. This is what he says:—

“Un épithélium normal, le tissu subépithélial est épaissi d'un centimètre, élastique, blanchâtre et crie sous le scalpel. Les tissus cellulaires n'offrent rien de caractéristique. Ce sont des tumeurs homéomorphes, c'est-à-dire composées par des éléments anatomiques qui se retrouvent dans les tissus normaux de l'économie.”

Cornil made microscopical sections of the specimens removed by Bernutz from his cases, and he found marked alterations of lymphatics and hypertrophy of papillæ. The blood vessels of the papillæ were engorged. In the deeper parts of the subcutaneous tissues he found a large amount of new connective tissue with long, fine spindle-shaped connective tissue cells of an “embryonic nature.”

In 1876 Fiquet published his “Thèse de Paris” on esthiomène and appended to it the microscopical report by Troisier on his cases.

Troisier found the epidermis for the greater part normal. But

the walls of the vessels in the subcutaneous tissues were enormously dilated and engorged; numerous embryonic cells were seen in their vicinity. The deeper tissues showed quantities of new connective tissue, with dilated vessels surrounded by dense masses of round cells.

The same appearances presented themselves to Fr. Deschamps when he examined the tissues removed from his patients. He found: "une espèce d'infiltration hypertrophique de la peau particulièrement du derme, altération des vaisseaux lymphatique, un épaissement du corps muqueux de Malpighi, des colonnes descendantes inter-papillaires. Les papilles hypertrophiées, vaisseaux papillaires enlargies et le tissu de la papille infiltré d'éléments embryonnaires et de leucocytes."

Both Dr. Thin, who examined the tissues of Mathews Duncan's cases, and R. W. Taylor pronounced the specimens removed from cases of esthiomène as "simple inflammatory tissue."

The two valuable essays written by Dr. Grace Peckham Murray of New York were accompanied by microscopical reports by Dr. Coe. He found the epidermal structures absolutely normal, but an extensive round-celled infiltration was seen in the corium, "the cells being similar to those seen in ordinary granulation tissue. They are arranged in groups which occupy the interstices of the connective tissue and are frequently seen surrounding dilated blood-vessels." "In short the microscopical appearances are those of simple inflammation of connective tissue with this peculiarity that the round cells show a decided tendency to form circumscribed groups or nodules."

In 1903 André Boursier in his book on gynæcology entitled: "Précis de Gynécologie," and again in his essay in 1908, "On Hypertrophic Ulcerations of the Vulva," which appeared in the *Journal de Médecine de Bordeaux*, reaffirmed the purely inflammatory nature of esthiomène and reported his histological findings as follows: "L'épiderme épaissi envoie dans le derme des prolongements épidermiques inter-papillaires. La masse de la tumeur est faite par un tissu conjonctif à fibres ondulées contenant une grande quantité de cellules en amas surtout autour des vaisseaux. Ceux-ci surtout les lymphatiques sont très dilatés et sont gorgés de cellules blanches et rouges. Les vaisseaux sont quelquefois si dilatés que la tumeur est caverneuse. Dans les tissus sous-dermiques on trouve aussi des vaisseaux dilatés. Il n'y a que peu de tissu élastique."

It is interesting to note that those cases where tubercle foci and bacilli were demonstrated (Martin et Nicolle, Günther and others) although published as esthiomène, did not present the characteristics necessary to constitute cases of esthiomène.

Many of the older writers who found giant cells and epithelial cells based their assumption that esthiomène is of the same nature as lupus of the face on their findings. We know that the epithelioid

and giant cells are not pathognomonic of tuberculosis and we do not accept the conclusions of these authors.

In more recent days, the demonstration of the bacillus of Koch having become easy, tuberculous affections of the vulva are no longer described as cases of esthiomène.

Not unfrequently this name has been given to ulceration which was definitely of the nature of carcinoma and rodent ulcer. While some cases so described were probably epitheliomatous or even sarcomatous from the outset others were quite possibly esthiomènic at the beginning and then malignant (vide case appended of M.L.). No histological reports were published by those authors who maintained that esthiomène is a malignant degeneration attended by hypertrophy and ulceration so that their conclusions must be considered as purely theoretical.

New tissue elements and tubercle bacilli have never been found in true cases of esthiomène; simple tissue-elements of a purely inflammatory nature have been described by all writers whose cases conformed to the main features of esthiomène.

BACTERIOLOGICAL EXAMINATION.

Amongst the older investigators of esthiomène Dr. Louise Cordes alone published a detailed report of her bacteriological examination ("Second Contribution to the Study of Ulcerative Lesions of the Vulva commonly called Lupus or Esthiomène," by Dr. Grace Peckham Murray). She found a streptothrix on the surface of the ulcer with mycelial threads projecting into the interstices between the epithelial cells. This was clearly a saprophytic organism.

Before the discovery of the bacillus of Koch no reports on bacteriological examinations of esthiomènic tissues were published, but after that event a number of sections with the tubercle bacillus *in situ* were described by those who maintained that esthiomène and "lupus" are the same disease.

No description of esthiomènic tissues with the spirochaeta pallida *in situ* has yet been published.

CLINICAL FEATURES OF ESTHIOMÈNE: TYPE OF SUBJECT.

Esthiomène is most frequently found in women between 20 and 40 years of age; it is rare under the age of 20 and only occasionally met with in women over 55.

It occurs more commonly in the unmarried than in the married. Rarely are esthiomènic patients mothers of large families; when the disease comes on late in life the patient is more likely to have had a number of healthy children than when it begins early in the patient's history. Miscarriages, premature births and small families are commonly met with among the esthiomènic.

The poorest and most neglected section of the community furnishes the bulk of the cases. Occasionally it happens that a patient is afflicted by esthiomène whose life is one of ease and whose habits are regular. In Germany and France a great number of very severe cases of esthiomène have been seen and described, and in both countries the authors lay great stress on prostitution and a life of misery and neglect. There is no doubt that a direct relationship exists.

CONDITION OF GENERAL HEALTH.

Subjects of esthiomène are often described as blooming, robust young persons. Many authors have expressed surprise that with so much destruction, often with strictures and fistulæ, there was so little constitutional disturbance. Dr. Grace Peckham Murray's patient, though suffering from deeply spreading ulcers went about all day with heavy baskets plying her trade as a pedlar. Dr. Murray's analysis of 33 cases published as esthiomène shows that 21 enjoyed good health, 5 had poor health, and in 7 the state of health was not mentioned.

The stage of the disease determines the state of health. When fistulous tracts burrow into the rectum and intercurrent attacks of pelvic peritonitis make their appearance a cachectic state results which rapidly leads to a fatal termination.

SYMPTOMS.

The insidious nature of esthiomène is characteristic. For many months hypertrophy and ulceration may be present without the patient being aware of the condition. In the early beginnings there is a curious absence of burning, darting and pricking sensations.

The patient may have known for some time that a "lump" was present in some part of the vulva but has taken no notice until a discharge appears which causes her to seek medical advice. This is at times sought only when ulceration is getting extensive and itching becomes troublesome. Comparatively few cases are seen at a very early stage so that the beginnings are unknown. In the appended case of E.E. two small patches of inflammation and a small mass of inflammation around the urethra were present; it is one of the earliest cases described. Even when the disease is well advanced there are few local disturbances; when incontinence of urine and fæces result from fistulous burrowings there may be a remarkable absence of pain. The discharge from esthiomènic ulcers is usually scanty and rarely offensive.

HISTORY OF PREVIOUS HEALTH.

The disease which is most frequently found in the previous history of patients suffering from esthiomène is syphilis. The number of cases of syphilitic infection (usually contracted some

years previous to the first appearance of esthiomène) is striking and important. Many patients have a distinct history, others show indications of having had syphilis. The next disease in frequency is phthisis. Occasionally phthisis and syphilis appear to have been present concurrently. Trauma and abscess have at times been present and have been looked upon as the primary cause of esthiomène.

ENLARGEMENT OF GLANDS IN THE GROIN.

In a large percentage of cases of esthiomène the presence of enlarged lymphatic glands has been noted. This is almost always the case where syphilis has been present. The absence of such enlargements has at times been mentioned with some surprise by authors who described cases of esthiomène in syphilitic subjects.

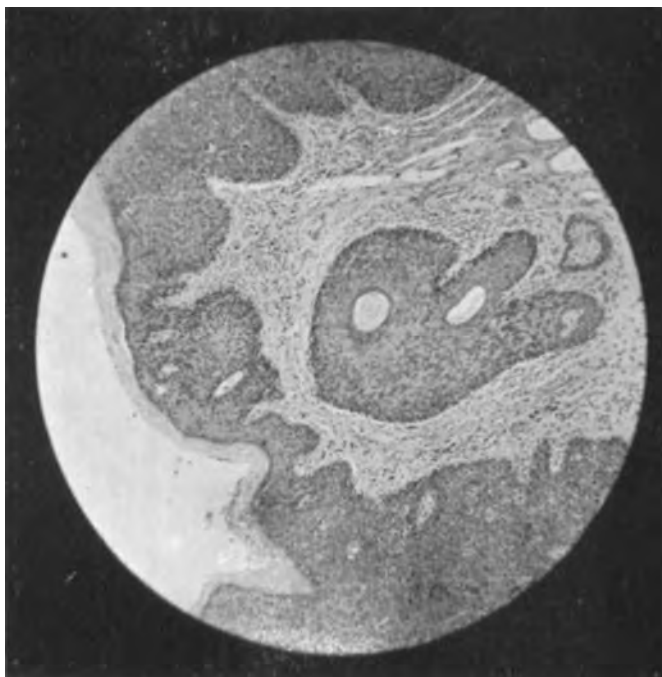
DURATION, COURSE AND PROGNOSIS.

One of the distinctive features of esthiomène is the prolonged course it runs. This is due to the following reasons:—

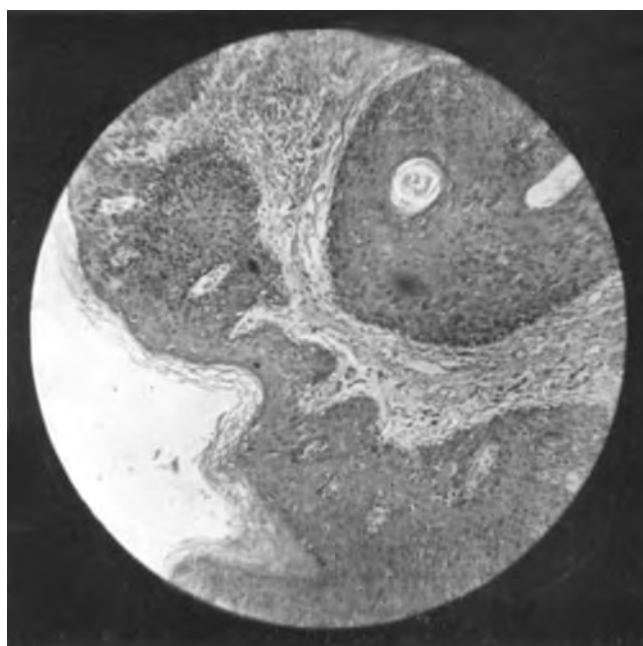
1. The chronic nature of the disease; acute ulceration is practically never met with. In this respect the esthiomènic ulcer resembles the callous ulcer of the leg which may persist throughout a lifetime.
2. The tendency towards healing and cicatrization, a temporary arrest of the disease process with apparent response to treatment and followed sooner or later by a new breaking down of cicatrized portions.
3. The general health is not seriously affected until the pelvic viscera become affected, which occurs late.

In the majority of cases of esthiomène recovery is complete and permanent. Cases which show response to treatment within the first two years of the history present a favourable prognosis. Very often those ulcerations which are comparatively acute and rapidly spreading respond more definitely than slow callous ones. Occasionally it happens that recovery appears to have been complete, but some small area of ulceration has persisted and when treatment is stopped esthiomène recurs. Where the condition has existed for some years and response to treatment has been nil or slight and temporary with speedy relapses, the prognosis is very grave. The longer it persists the greater is the possibility of excavations and fistulæ appearing; these invariably end in death from exhaustion. Intermittent attacks of pelvic peritonitis with vomiting, diarrhœa and a febrile temperature are typical of the last stages of esthiomène. Fatal cases are rare in our days, as the nature of the disease is now more generally recognized and as treatment is now within the reach of all.

The appended case of M.L. points to the possibility that malig-



Case I. M.L. Low Power. Section I.



M.L. High Power. Section II.

nant disease may supervene in esthiomène. No doubt this is a very rare occurrence but esthiomène itself is a comparatively rare condition. Amongst the cases diagnosed and published as esthiomène malignant degeneration is not mentioned. There is a possibility that hypertrophy with ulceration of esthiomènic nature may have existed undiagnosed for some time before carcinomatous elements made their appearance and were then considered part of the malignant process.

SIX CASES OF ESTHIOMÈNE.

1. Case of M.L. Age 35, married. Occupation, pressworker. Diagnosis on admission, esthiomène.

Personal History. Patient married at the age of 18. A miscarriage at the second month in first year of married life. Soon afterwards had another miscarriage at the sixth week. In the following year gave birth to a full term child which was perfectly well until its eighth month when it died of bronchitis. Since then there have been no pregnancies.

History of Previous Health. Patient was well until age of 15 when she worked in an enamel factory and began to suffer from frequent colds and coughs. After marriage at 18 felt ill and has never been really well since.

At the age of 22 had a severe attack of "pleurisy and inflammation of the lungs," and patient states that she has been short of breath ever since. At 28 had some pain in the back and was treated as an out-patient at the orthopædic hospital. She wore a plaster of Paris jacket for two years, and her back has been better since.

Menstrual History. Catamenia began at 15 and with intermissions during pregnancies have been quite regular and normal.

History of Present Complaint. Patient consulted Dr. Th. Wilson on account of itching and soreness of vulva which have come on recently. There had been no similar trouble before.

Itching worse at night. Discomfort amounting sometimes to actual pain increases on walking and is usually localised in vulva but sometimes radiates into right groin. Both pain and itching are greatly increased during menstruation and micturition. There is no difficulty in passing urine. Patient has noticed an occasional slimy and slightly blood-stained discharge from the vulva, quite odourless and small in amount. When discharging, the parts are more painful. Walking and standing causes it to increase in amount.

General Condition. Patient is thin and looks delicate; there is a marked malar flush with cyanosis of lips. Finger tips are clubbed especially those of right hand. No pain or inconvenience are experienced at the present time.

Examination. Lungs, heart and spine show nothing abnormal.

Inspection of Vulva. A mass of hypertrophied tissue is visible in right half of vulva. It represents the hood and body of the clitoris and the right labium minus. Not one of these structures can be distinguished from the mass which stands out in bold relief from the vulvar surface. Its surface is convoluted, rough, wavy, resembling the combs and wattles of birds. Its general colour is yellowish pink, while in the most projecting parts there is no ulceration of the surface. The mass is sessile. The tissue is firm, elastic, dry and fleshy to the touch.

The other vulvar structures are normal in size.

Two areas of ulceration are visible; one $\frac{1}{2} \times \frac{3}{4}$ in. in size is situated at the anterior end of the left labium majus; it is red and moist, superficial, with faintly marked margins. The other ulcer is placed on the outer side of the hypertrophied area, near the posterior end of the fleshy mass; it is shallow and moist.

Vaginal examination shows nothing abnormal.

Inguinal regions: no scars, one enlarged gland.

Operation. Excision of all hypertrophied and ulcerated portions of vulva. Removal of gland in right groin.

Specimens. 1. The hypertrophied mass consisting of right labium minus, the clitoris and its prepuce, the vestibule. 2. Enlarged right inguinal lymphatic gland.

Naked-eye characters. Specimen 1. A fleshy mass of undifferentiated tissue, showing a dull opaque whitish surface of thickened skin tuberculated by blunt papillæ; the latter are slightly red and show abrasions as if on the point of giving way.

A strip of skin half an inch wide around this mass shows nothing abnormal except for a small hard nodule in the vicinity of the anterior pole of the mass but separate from it. The ulcerated areas show unhealthy granulations.

Microscopic Examination. Sections made of hypertrophied mass, gland and nodule show typical squamous-celled carcinoma. The stratum corneum is thinned and has disappeared in parts; large masses of darkly staining proliferating epithelium cells are seen growing downwards in solid pillars; numerous cones and keratinous whorls are seen lying detached in the deeper strata of subcutaneous tissues.

The gland shows carcinomatous infiltration.

OBSERVATIONS.

1. No definite history of syphilis or gonorrhœa could be elicited but the miscarriages and "one child sterility" indicate the possibility of such infection.

2. Affections of respiratory system and spine suggest previous

tuberculous taint but lungs on examination were free from lesion.

3. The hypertrophy and ulcerations of the vulva such as were found in this case are typical of esthiomène. The question arose whether the vulvar condition here was connected with syphilis or tubercle, or whether it was a condition *per se*, possibly due to trauma. Unexpectedly the microscope revealed malignant disease. Marked hypertrophy with very shallow ulceration do not occur with carcinoma. It is possible that esthiomène has been present for some time and that malignant disease has supervened at a later stage.

Section I. Low Power. The section shows typical epitheliomatous tissue. Solid phalanxes of epithelial cells are seen pushing their way downwards into the subcutaneous tissues. The usual relationship between the skin layers is lost.

One "pearl" or whorl of compressed corneal cells are seen lying in the midst of an obliquely cut column of epithelial cells.

Apart from a small amount of small cell infiltration the tissues in the vicinity seem normal.

Section II. High Power. This shows a column of carcinomatous cells with a "pearl" lying in their midst.

II. Case of L.B. Age 28, married.

Personal History. Married eight years ago. One child, full term, born three months after marriage, lived two days. No pregnancies since, no miscarriages.

History of present complaint. Patient complains of "something in the seat" which causes much pain on sitting down and discomfort on standing and walking.

Two years ago noticed a swelling near the anus which increased gradually; 6-7 months ago it began to discharge. Discharge was brownish, sometimes blood-stained and fetid. Pain has come on lately.

History of other illnesses. Has had a "bad sore throat" several times. Also suffers from severe headaches and has a "rash on the arms coming out from time to time." No other illnesses.

Catamenia. Began at 16, always been regular.

Family History. Father and mother, four brothers and one sister alive and well.

Husband has been a brass-caster and hawker alternately since he was 15. Five years ago was in the army for 1½ years but was discharged.

Local Condition. Patient had been attending the General Hospital, Birmingham, for some time as an out-patient and the condition was diagnosed as "a condylomatous hyperplasia of anal and vulvar tissues."

On admission to Ward 15. A nodular hard swelling with a scar is present in the right groin, hard, enlarged glands in the left groin.

Vulva: At the left margin of the anus is a nodule about the size of a hazel nut, firm and inelastic. The skin round the anus is thickened, red and moist. There is a small ulceration on the left side of the anus. A depression and fold of skin on the right. At the posterior part on the inside of the right labium majus is an irregular ulcerated area.

Treatment. Inunctions of unguentum Hydrargyri 3i daily, until salivation occurred; after that administration of potassium iodide.

A small amount of tissue was removed for examination from the hypertrophied area near anus and the ulcerated area on vulva.

Within a few weeks the parts around vagina and anus were healed but there was a good deal of hypertrophy and atresia of sphincter ani.

OBSERVATIONS.

1. A definite history of acquired syphilis manifesting itself by sore throats; rashes, headaches, and "one child sterility."

2. The presence of ulceration and hypertrophy.

3. An interesting fact is the rapid response of the local condition to antisyphilitic treatment. The disease had obviously been contracted eight years previous to treatment; the symptoms were those of the secondary stage; the local changes were early and fairly acute.

Microscopic Examination. The parts removed show the usual dense inflammatory tissue associated with syphilitic lesions. The dermis and subjacent structures are infiltrated by large masses of plasma cells. The stroma is dense, the vessels greatly thickened. The various layers of the true skin have lost their natural inter-relationship. The corneal layer is thinned and the stratum Malpighi is greatly increased. Solid pillars of slightly œdematous prickle cells extend into the tissues below.

Microscopic section of hypertrophied tissue. Low power. Density is its main characteristic; small-celled infiltration and vascular engorgement are at their height, while marked fibrosis makes its simultaneous appearance in thickened capillary-walls and solid connective tissue stroma.

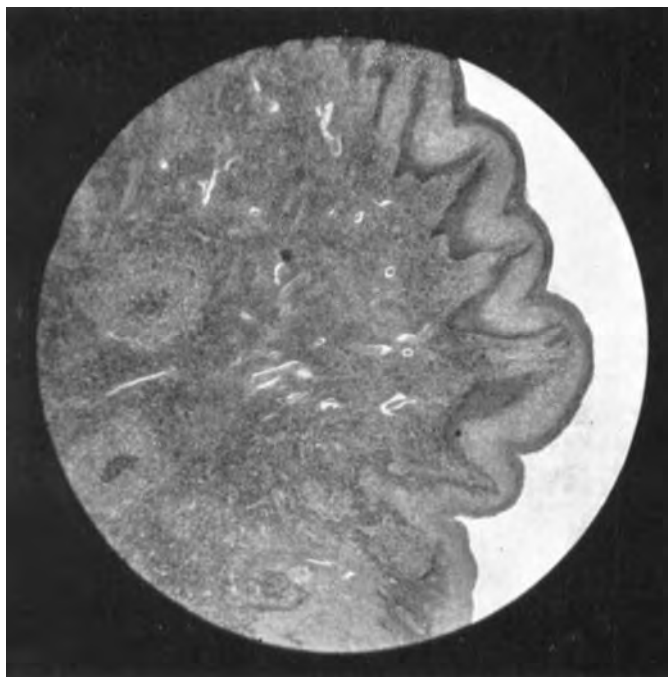
The epithelium is thickened, œdematous and unhealthy.

Case III. E.J.H., age 22, single.

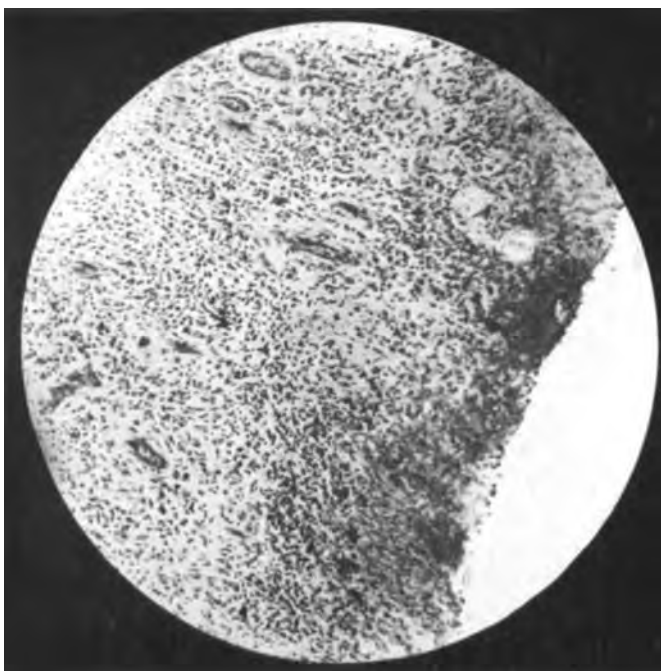
Complaint. "A breaking out" in the vulva for three years.

Diagnosis. Tubercular or syphilitic ulceration.

Condition on Examination. On the inner surface of the right labium majus is a large ulcer with sharply cut edges, 2 inches long, 2 inches broad. At the base is a thick greyish adherent slough.



Case II. L.B. Low Power.



Case III. E.J.H. Section I. Low Power.
Photograph by Dr. Hewetson.

Was admitted to Ward 15 General Hospital, and put on anti-syphilitic treatment which brought about slow but complete improvement.

A small portion of the edge of the ulcer was removed for examination.

Microscopical Examination. The epidermis is greatly thinned; in some places it has disappeared altogether. A few thin detached lamellæ of fibrous deposit are visible on the surface. The papillæ of the dermis have disappeared; their places are taken by typical fairly recent inflammatory tissue-elements with numerous vessels. There is some extravasation of blood. The vessels are thickened. The cellular infiltration is more extensive in the deeper structures where the inflammatory processes are more marked.

OBSERVATIONS.

1. Complete absence of history of syphilis, tuberculosis and trauma.

2. The condition improved under anti-syphilitic treatment, and finally complete cure was established.

3. The inflammatory tissue here found was typical of the kind present in syphilitic lesions.

Section I. Photograph by Dr. Hewetson. Low Power. Floor of Ulcer.

The whole thickness of the skin, both dermis and epidermis, is destroyed. No surface epithelium left anywhere. A dense mass of darkly staining small cells lying in a mass of fibrinous material replaces the skin layers. Immediately beneath this a stratum of young connective tissue with numerous new vessels and early spindle cells is visible. Deeper still we find well organized fibrous tissue with rare groups of small cells, thick vessels, wavy translucent bundles of connective fibres showing occasional nuclei.

Section II. Photograph by Dr. Hewetson. Low Power. Portion of tissue from vicinity of ulcer.

The epidermal epithelium is comparatively thin, but shows no disintegration apart from a tendency on the part of the stratum corneum to shed. In the subcutaneous tissues we find occasional outposts of inflammatory foci consisting of a circumscribed mass of round cells. Here and there we come upon a thickened vessel.

Section III. Photograph by Dr. Hewetson. High Power. Portion of tissue taken from the edge of the ulcer.

The epidermis shows œdema and general disintegration of all its layers. The corneal layer is thickened and vacuolated. The cells of the stratum corneum stain feebly in parts and show broken up nuclei. The normal relationship of the epithelial cells of the stratum mucosum to the corneum is lost. The dermal papillæ are irregular; the interpapillary epidermal columns have varying shapes

and grow in different directions. Groups of large fat globules are situated in the midst of skin layers. In the subcutaneous tissues we see occasional groups of inflammatory cells.

Section IV. Photograph by Dr. Hewetson. Low Power. Section from hypertrophied mass of tissues.

This section shows very dense fibrous tissue of old standing with many wavy strands of connective tissue fibres and few cell elements. The blood vessels are exceedingly sclerosed; the connective tissue laminae in their vicinity show a concentric arrangement around the vessels. Extensive fatty degeneration of the tissues is taking place.

Section V. Photograph by Dr. Hewetson. High Power. Section from edge of hypertrophied mass.

This section shows inflammatory tissue of fairly recent date. The chief elements are large numbers of small round cells which form very dense masses in some parts and numerous blood vessels. Some of these are widely dilated and engorged with red blood cells. Others have thickened walls surrounded by young connective tissue.

Section VI. Photograph by Dr. Hewetson. High Power. Blood vessels showing marked sclerosis and endarteritis.

Situated in the deeper strata of the fibrous mass, the blood vessel shows a tunica intima enormously thickened and tending to obliterate the lumen. The endothelium is disintegrated in parts, showing irregular thickenings which project into the lumen. In some places the endothelium has disappeared. Both the middle and outer coats are immensely hypertrophied. There is a marked increase of muscular tissue in the middle coat, especially in the longitudinal layer. The main bulk of the vessel wall is formed by fibrous tissue which is interspersed between the muscular fibres and heaped up around the vessel. The outer coat merges into surrounding undifferentiated fibrous tissue. The vessel indicates a process of fibrous degeneration of very long standing.

Case IV. C.N., age 34, married. Nullipara. The wife of a discharged soldier, admitted to Wolverhampton General Hospital under Dr. Thomas Wilson with ulceration and hypertrophy of the vulva.

Condition on Admission. An emaciated anxious looking woman of medium height and build.

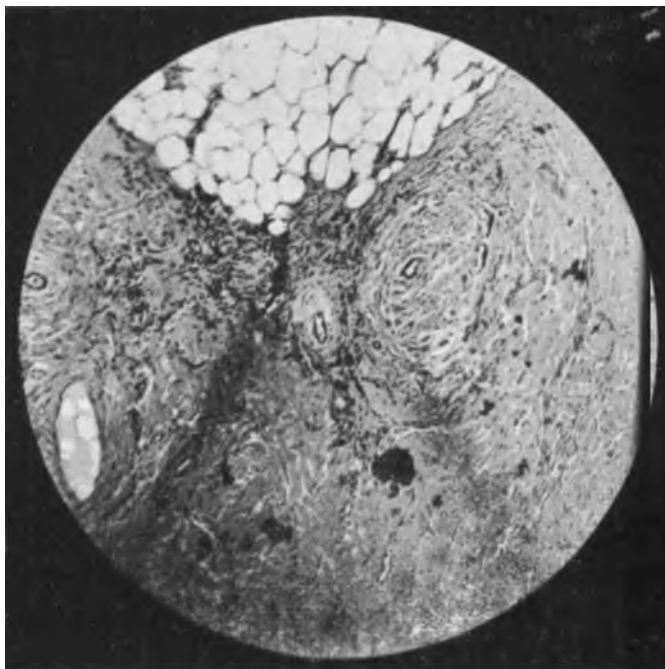
State of Vulva. The labia majora were greatly enlarged by a solid œdematous swelling, and the clitoris was elongated to $2\frac{1}{2}$ in. and was 1 in. in diameter. There was an irregular deep callous ulcer in the vestibule and adjacent anterior vaginal wall; another at the posterior commissure. There was narrowing of the vaginal orifice by firm, unyielding tissue. A similar stenosis was present of the anus and the rectum. Round the anus several polypoidal outgrowths, the size of marbles, were present.



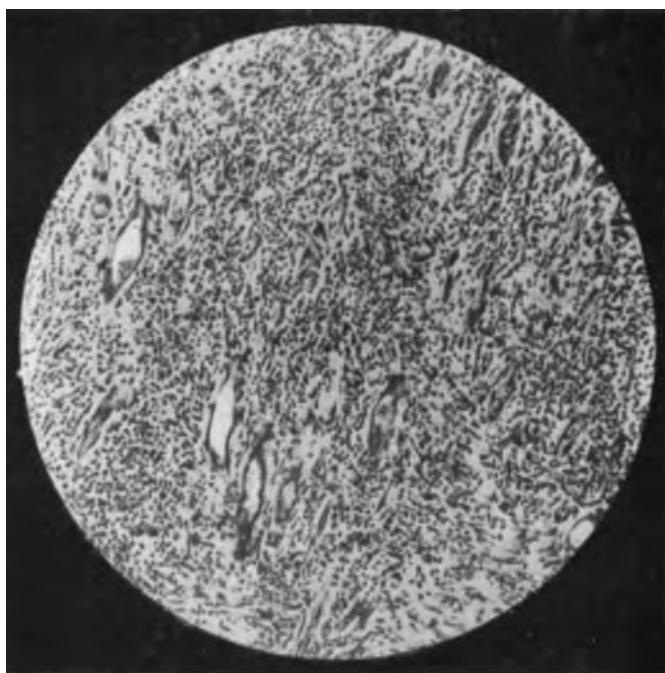
E.J.H. Section II. Low Power.
 Photograph by Dr. Hewetson.



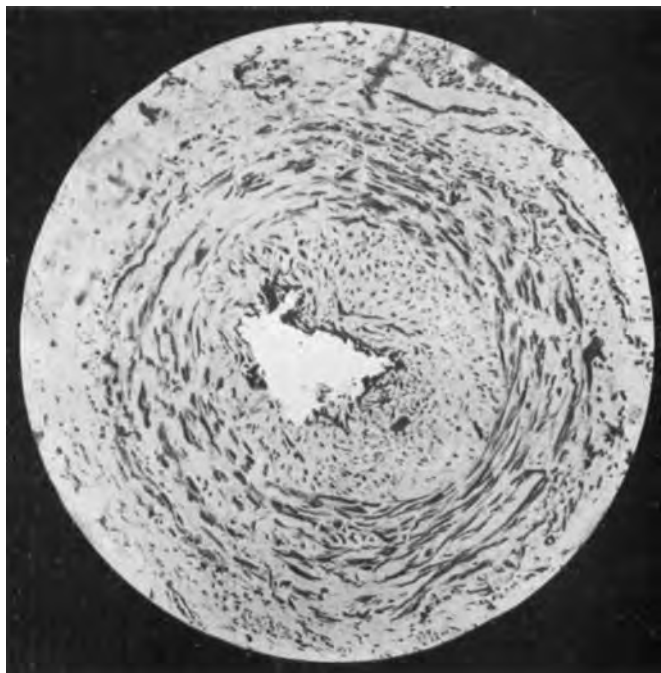
E.J.H. Section III. High Power.
 Photograph by Dr. Hewetson.



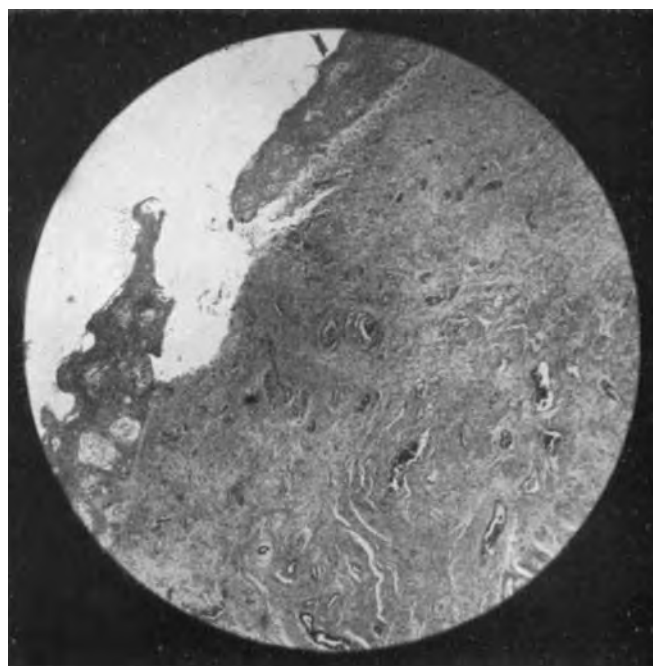
E.J.H. Section IV. Low Power.
 Photograph by Dr. Hewetson.



E.J.H. Section V. High Power.
 Photograph by Dr. Hewetson.



E.J.H. Section VI. High Power.
 Photograph by Dr. Hewetson.



Case V. E.E. Low Power.

The patient suffered from incontinence of urine and sometimes of fæces.

On the day before admission an attack of diarrhœa and vomiting commenced which continued for several weeks. Several further attacks took place while the patient was in hospital. They were accompanied by abdominal pain and tenderness and by enlargement and tenderness of the uterus which at times could be felt hard and firm above the pubes.

Treatment. Mercurial inunctions, local application of black lotion, large doses of potassium iodide, were tried without effect.

An anæsthetic was given, clitoris and hypertrophic growths were removed, the raw surfaces and ulcerating portions scarified with Paquelin's cautery. The vaginal and rectal atresiæ were forcibly dilated.

After this procedure there was some improvement and the patient was discharged some time afterwards.

Later History. After discharge from hospital the patient became rapidly weaker and thinner owing to continuous incontinence of urine and fæces and recurring attacks of pelvic peritonitis. An abscess formed in the left groin which broke through the skin and discharged thin pus. A second abscess formed gradually on the upper and inner aspect of the right thigh.

The ulceration of the vulva continued to spread.

The patient finally died of exhaustion after a severe attack of vomiting and diarrhœa.

OBSERVATIONS.

1. A hypertrophied mass of tissue was present. Ulceration of the vestibule and posterior wall of vagina, stricture of the rectum and atresia of the vagina. The ulceration in the groin in conjunction with pelvic pain and tenderness, vomiting and diarrhœa suggest the spreading of the ulceration to the anterior rectal wall and implication of pelvic peritoneum.

2. Death was due to exhaustion caused by a chronic septicæmia and intermittent attacks of subacute peritonitis.

3. There was no definite history of syphilis. Marriage (with discharged soldier) was childless; this may be taken as a possible indication in the direction that patient suffered from acquired syphilis.

4. Duration: 11 years. Any other type of ulceration but the esthiomènic one would have produced fatal symptoms at a much earlier stage.

5. The absence of all response to antisyphilitic treatment is a fact frequently recorded in cases of esthiomène of this type. It is generally admitted that lesions of the vulva vagina and anus do not respond to antisyphilitic remedies. This fact, however, does not

exclude the possibility that the lesion is a syphilitic one. Response to treatment appears to depend on the stage and age of the local affection.

Case V. E.E., age 58, married. Multipara. Patient has been married 42 years; had eight children of whom four died and four are well and strong. Youngest is 23 years old. One miscarriage at the age of 34.

Complaint. Burning sensation in region of uterus and vagina, constantly present; occasional sharp shooting pains in vagina, pain during micturition. Blood-stained discharge from vulva for two years. Has been getting thin and not been feeling well for two years.

History of previous health. Husband is a soldier; she lived with him in India for 17 years, and while there had "fever with ague" and smallpox. Has never been strong since.

Catamenia. Began at 14, regular, painless. Menopause at 50.

Condition on Admission. Patient is very thin, face flushed and somewhat drawn. Has some pain in pelvic region.

Inspection of Vulva. Round the urethra is a red fleshy body, very tender to the touch. Vaginal examination reveals nothing abnormal. Abdomen: nothing to note. Heart and lungs normal. Arteries greatly thickened.

Operation. Patient was carefully examined under a general anæsthetic.

A red fleshy mass was seen surrounding the meatus urinarius; sessile, size of large pea, bleeding slightly when touched. Just inside the vaginal orifice on each side a red patch was visible not unlike a caruncle in appearance and surrounding it there were numerous small red spots.

The cervix was dilated and the fundus thoroughly curetted. There was nothing abnormal in the curettings. The inside of the uterus was smooth and normal. The mucous membrane of the fleshy body around the meatus urinarius was incised and the body removed. The surface was cauterized.

The mucous membrane over the red area in the vagina was incised and stripped off the vaginal wall; the raw surface was sutured with silkworm gut.

Microscopic Examination. Both the red patches excised from the vaginal wall and the fleshy body around the urethra show inflammatory tissue of great vascularity with extensive round-cell infiltration and blood extravasation. No formed elements are present.

OBSERVATIONS.

1. This case resembles the condition which Huguier calls "esthiomène superficiel, erythémateux et tuberculeux"; "l'épaisseur de la

peau semble être augmenté excepté sur quelques parties. Ça et là on observe des points plus rouges, comme papuleux. Le tissu cellulaire sous-cutané est légèrement tuméfié et infiltré. Cette variété d'esthiomène coexiste le plus ordinairement avec les autres espèces d'esthiomène."

The red raised areas in the vagina correspond to this description, while the fleshy mass around the urethra indicates that the process of hypertrophy has begun.

The history indicates syphilis.

Section. Low Power. Floor of ulcer and subjacent tissues.

Epidermis completely disintegrated showing only a few vestiges of oedematous epithelium cells. The subcutaneous tissues are transformed into dense fibrous masses. In some places the connective tissue is completely organized, forming a dense homogeneous mass, in others wavy strands of fibres are still visible.

The vessel walls are enormously thickened. There is no vascular engorgement and no small cell-infiltration; the inflammatory stage is over and the process of chronic fibrosis is complete.

Case VI. P.P., age 34, married. Multipara.

Diagnosis. Esthiomène of vulva and vagina.

Local Condition. Vulva is a brownish-red colour, showing slightly swollen areas of shiny cicatricial tissue.

Two small external piles are seen on the anterior part of anus. The labia majora is normal.

On separating the labia minora a firm mass becomes visible, projecting out from the lower portion of posterior wall of the vagina. It is pale red and moderately firm to the touch. On each side of this mass, in front of the fourchette are two small ulcers about $\frac{1}{4}$ in. in diameter. They have clear cut edges; their floors are covered with pale weak granulations. The depth of the ulcers is about $\frac{1}{4}$ in. The left ulcer runs obliquely upwards and backwards and communicates directly with the anterior rectal wall.

The meatus of the urethra is much contracted and admits a small catheter with difficulty.

The upper part of the vagina is healthy; the lower half is covered with small nodules and is contracted. Uterus and appendages are normal.

Personal History. Married at 20. Husband a bricklayer. Children, 5; two died in infancy; 3 alive and well. Labours easy and normal with rapid convalescence.

Previous Illnesses. During last pregnancy, i.e., nine years ago, caught a sore on vulva from husband; carried child to full term; it was quite healthy. Six weeks after birth of child had an abscess in

right groin which took several weeks to heal. Has never had a rash or sore throat.

Family History. Father died æt. 65 of heart disease. Mother died æt. 77. Three sisters alive and well.

History of present illness. In January 1904, patient had "rheumatic" pains. At about the same time she felt "something" give way near the anus and bled a little. Ever since she has been having a discharge from the vagina. There has been no pain. After defæcation patient has noticed a discharge from the anus and the vagina; motions have at times been blood-stained.

Lately there has been frequency of micturition.

Catamenia. Regular until two years ago. Lately has menstruated only half the normal number of times. Leucorrhœa, sometimes blood-stained, very severe for the last 14 months. Bowels have always been regular.

General condition. No wasting, no loss of appetite. No enlarged glands, but scar in right groin.

OBSERVATIONS.

1. This case corresponds to Huguier's type of "esthiomène hypertrophique et perforant." A mass projects from the vagina; a vagino-rectal fistula is present; the urethra is stenosed.

2. There is a clear history of acquired syphilis; the infection begins definitely with a local sore and sterility dates from the time of infection.

TABLE I.

Name and Status.	Age.	History of Syphilis.	General Health.
I. M.L.; married; primipara; pressworker.	35	Yes.	Delicate.
II. L.B.; married; primipara; wife of discharged soldier.	28	Yes.	Suffering from symptoms of secondary syphilis.
III. E.H.; single.	22	Probable.	Not stated.
IV. C.N.; married; nullipara; wife of discharged soldier.	24	Probable.	Very poor health. Profound cachexia.
V. E.E.; married; multipara; wife of soldier in India.	58	Probable	Poor.
VI. P.P.; married; multipara.	38	Yes.	Poor.

TABLE II.

Name.	Symptoms.	Diagnosis on Admission.	Duration of condition.
I. M.L.	Pain and itching.	Esthiomène.	Three years.
II. L.B.	Discomfort on sitting and walking.	Condylomatous hyperplasia of vulvar and anal tissues.	Two years.
III. E.H.	Not stated.	Syphilitic or tuberculous ulceration of vulva.	Three years.
IV. C.N.	Incontinence of fæces and urine; attacks of abdominal pain with vomiting and diarrhoea.	Syphilitic ulceration.	Eleven years.
V. E.E.	Burning pain; and dysuria.	"Inflammation of the vulva."	Two years.
VI. P.P.	Incontinence of fæces.	Esthiomène.	Two years.

TABLE III.

Name.	Condition of the Vulva.	Response to Treatment.
I. M.L.	Marked hypertrophy of the clitoris and right labium minus; two shallow ulcers; some discharge; enlarged gland in groin.	Operation; excision; after history not known.
II. L.B.	Hypertrophied mass around anus; stricture of rectum; scar and gland in groin; deep ulcer in right labium majus.	Anti-syphilitic treatment; cure.
III. E.H.	Great hypertrophy of right labium minus; large ulcer on inner surface of right labium majus.	Anti-syphilitic treatment; excision; cure.
IV. C.N.	Great hypertrophy of clitoris and labia majora; atresia of vagina; great deformity; fistulæ of rectum and urethra; extensive ulceration.	Anti-syphilitic treatment; operation; no response; death from cachexia.
V. E.E.	Large hypertrophied mass round urethra; two ulcers near ostium vaginae.	Excision and cautery; after history not known.
VI. P.P.	Fistulous ulceration extending from vulva into rectum, hypertrophied areas in vagina.	Excision and anti-syphilitic treatment; after history not known.

ÆTIOLOGY.

Theories that have been advanced regarding the pathological nature of esthiomène.

A rapid survey of the different views that have been advanced regarding the cause of esthiomène shows the difficulty encountered

by the older writers to distinguish without the aid of the microscope between the various types of hypertrophy with ulceration. It must be remembered that many wrote before the days of the discoveries of the bacillus of Koch and the spirochæta of Schaudinn, and also that many of them drew their conclusions from the history and clinical aspect of the case alone without verifying their theories by a careful examination of the tissues. The following are the theories which have been supported by various authors:—

1. Esthiomène is due to tuberculosis, local or general.
2. Syphilis, a tertiary or parasymphilitic manifestation.
3. Malignant disease, epithelioma, or a form of rodent ulcer.
4. A form of elephantiasis, either a “Stauung’s elephantiasis” (lymphatic obstruction elephantiasis), or an “inflammatory elephantiasis,” local thickening after inflammation.
5. A purely inflammatory condition, most frequently caused by trauma or local irritation, and sometimes following other lesions such as tuberculosis or syphilis.
6. A disease *sui generis* of unknown nature.

1. *Tuberculosis.* The idea that esthiomène or lupus vulvæ is a tuberculous manifestation was widely held. Its chief advocates among the eminent writers of the nineteenth and twentieth centuries are Bernutz, Fiquet and Pozzi. We have already seen that Bernutz was the first to ascribe to “lupus vulvæ” a tuberculous nature. His views were adopted by Fiquet who noted the presence of phthisis in a third of his cases afflicted by “lupus vulvæ.” Pozzi in 1907 stated that he thought all cases of lupus vulvæ or esthiomène directly or indirectly due to tuberculosis.

Comparatively few of those authors who retained the term “lupus” and saw a resemblance between lupus of the perineum and lupus elsewhere held that they partook of the same pathological nature. The term “lupus” implied to the earlier writers merely “a process of eating away.” They did not venture to express any views on the cause of the process. Huguier, Guibout, Angus Macdonald, and Mathews Duncan saw a resemblance between lupus of any part of the skin and esthiomène, but did not connect either with tuberculosis. Mathews Duncan makes the following statement: “The name of lupus is retained in order to avoid change and because the character of the disease brings it into alliance with the ordinary run of such cases.” He uses the term lupus in preference to esthiomène because since it expresses the “eroding character of the disease, including ulceration, inflammation and hypertrophy variously combined.” In his first essay: “Lupus of the Pudendum” (*Med. Times* 1884), he states that: “There is much resemblance between this

form of lupus and that of other parts but I do not tell you that they are pathologically the same as is generally believed."

He concludes by saying: "The disease has been said to have alliance with scrofula but I have failed to trace clinically any such connection."

In the same strain writes Angus Macdonald. He says: "There is no essential difference in lupus of the vulva and lupus of any other part. Various attempts have been made to connect lupus with certain cachectic conditions such as syphilis or scrofula. The latter view is especially common among the French authors."

From the foregoing we conclude:—

1. That to many authors lupus was a term that implied a slowly increasing and widely destructive ulceration the nature and cause of which were unknown.

2. That owing to a superficial resemblance between lupus on any part of the body and esthiomène the name of lupus was applied to the latter. Before Huguier's introduction of the term "esthiomène" all ulcerations of the vulva were designated by the name of lupus. He did not discard the old name and much confusion resulted from this, especially later when the nature of lupus became known.

3. Some of the older writers, aware of the relationship of lupus to tuberculosis, rejected the view that esthiomène was a tuberculous lesion, but still did not discard the name of lupus in describing esthiomène. The name of lupus signifying in the light of new knowledge a tuberculous lesion of skin and subcutaneous tissues is fallacious as applied to esthiomène, since the latter is *not* a tuberculous lesion. Vulvar tuberculosis presents totally different characteristics from esthiomène. The term lupus should be altogether omitted in the discussion of esthiomène, and "tuberculous ulceration of the vulva" in preference to "lupus" should describe all cases where tuberculous tissue is found.

2. *Syphilis.* The syphilitic nature of esthiomène has been admitted by Jonathan Hutchinson, Malcolm Morris and many German authors. It is surprising that many authors of detailed accounts of cases of esthiomène appeared to omit enquiry into a history of syphilis. In many cases published no note is made regarding history of previous health. In Dr. Grace Peckham Murray's tabulated analysis of 33 cases, 19 probably had syphilis, 7 had a definite history of syphilis, and the rest showed no record. A general survey of the literature of the cases published as esthiomène conveys to the analytical reader the impression that a syphilitic element is present in every case. Dr. Grace P. Murray and Deschamps considered syphilis the most probable causative factor of esthiomène. Veit, Koch, v. Winkel and other German authors declared syphilis to be the only cause of esthiomène.

3. *Cancer*. Cancer has been held by some writers (Deschamps and Murray) to be one probable cause of esthiomènic manifestations; others again (Brodie, Cooper and Paget) declared all cases due to cancer. Macnaughton-Jones held that "lupus vulvæ may be considered an epithelioma," and again he said that it might be considered in the light of a rodent ulcer. His views were not supported by microscopic examination. There is no doubt that malignant degeneration may occasionally though rarely occur (see case of M.L.) and the cancerous elements may destroy rapidly all signs of pre-existing esthiomène. This occurrence has no doubt contributed to the reputation of mortality of the disease.

4. *Elephantiasis*. According to some German authors esthiomène is a form of elephantiasis. The term "Stauung's elephantiasis" was introduced by F. Koch to designate the form of elephantiasis which is produced by lymph-channel obstruction. This lymphatic obstruction he thought might be due to previous lymph-glandular inflammation, and sometimes operative removal of glands from which the tissues of those areas that they drained were unable to recover and became the seat of suppuration and disease especially cancer and tuberculosis. Koch was unable to prove syphilis or tuberculosis in the cases cited by himself. Other authors, though sharing Koch's view that esthiomène is a form of elephantiasis did not ascribe it to lymphatic obstruction but merely to a connective tissue hyperplasia produced by a long continued inflammatory process.

5. *Inflammation*. That esthiomène is a purely local inflammatory condition without any relationship to constitutional disease is a view frequently expressed. André Boursier ("Précis de Gynécologie") held that esthiomène "est une ulcération chronique de la vulve due ordinairement à des causes banales et se compliquant d'un élément hypertrophique résultant d'un processus éléphantiasique." Dubreuilh et Bran in their Thèse de Bordeaux state that it is merely "une ulcération chronique ne présentant rien de spécifique." Dupuy et Rullier (1907) maintained that it is neither syphilitic nor tuberculous in origin but merely a chronic ulceration with subsequent hardening.

R. W. Taylor (1889) thought that some cases were due to inflammation caused by trauma or irritation of purely local occurrence, while others followed local syphilitic manifestations though not being syphilitic lesions themselves. He states: "That a large and perhaps greater number of chronic deforming vulvar affections are due to simple hyperplasia of the tissues induced by irritating causes, traumatisms and irritations." "That many cases are due to simple

hyperplasia in old syphilitic subjects who suffer from chronic ulceration of the vulva long after all specific lesions have departed."

6. The last theory to be mentioned and the one least frequently met with is that esthiomène is a disease *per se* of unknown nature. Isaac Taylor of New York advocated that "esthiomène or lupus vulvæ might from several peculiarities which appertain to it be considered a disease *sui generis*." He did not forward any theories regarding the possible nature of this disease but was inclined to think it a "local disease grafted on a constitutional one such as cancer, syphilis or tuberculosis." He has apparently remained the only advocate of this view.

THE AUTHOR'S VIEWS ON THE NATURE OF ESTHIOMÈNE.

A careful analysis of the cases of esthiomène that we were enabled to study and of the vast amount of literature published on the subject lead us to the conclusion that it is a manifestation of tertiary syphilis and that the syphilitic virus is the sole cause of the condition. There can be no doubt that a number of accessory factors have a marked influence on the course and appearance of esthiomène, but they could not be mistaken for the causes of a state which, considered from every possible point of view, bears the stamp of syphilis. Such accessory causes are inflammation, abscesses, uncleanliness, and above all a low state of health aptly termed by the French "*la misère physiologique*." That irritation with inflammation of the parts could be the sole causative agents of a state characterised by deep and wide spreading ulceration extending into the pelvic organs is inconceivable. Nor can we understand how recent authors can read "tuberculosis" into a case of esthiomène which is so different in appearance, histology, symptoms and results to a tuberculous state of the vulva. A case of esthiomène is occasionally met with which may at the outset simulate tuberculosis, cancer or indurative elephantiasis oedema. Such cases are, however, rare, and a careful enquiry into the history of the case cannot fail to enlighten the student regarding the class of disease to which such a case should be relegated. When a portion of tissue can be removed for examination a first glance through the microscope reveals the true nature. A positive Wassermann reaction will confirm it. With our present day knowledge of the bacillus of Koch the spirochæta pallida, the tissues of gummata, cancer, etc., and with the serum test for syphilis, no mistake regarding the diagnosis of esthiomène can arise. In recent years the term of lupus vulva has characteristically given place to "tuberculosis of the vulva," and the name of ulcer vulvæ has been dropped. Huguier's term "esthiomène" is now but rarely used which seems a matter of regret, for if used in the definitely

understood sense that it is a tertiary syphilitic manifestation it replaces the cumbersome expression: "syphilitic hypertrophy of the vulva with ulceration."

We shall now proceed to state on what grounds we base our conclusion that esthiomène is a syphilitic manifestation.

Social status and personal history.

The poor and neglected furnish the largest number of cases. Servants and laundry workers, wives of soldiers and sailors count among its most frequent victims. Sterility, relative and absolute, is common. Large families are only met with where the disease comes on late in life.

Age and period of occurrence.

"As regards the date of the outbreak it can be said that tertiary syphilis may appear at any date after infection from the first year onwards; in rare cases they may become manifest even while the secondary eruptions are still present. More usually there has been a period of quiescence and apparent health between the secondary and tertiary phenomena; years of greatest incidence are the second and especially the third after infection" (F. W. Andrewes). The variability in time of the appearance of tertiary lesions, at the end of the secondary stage or after a long period of apparent cure explains the great differences in the age incidence of esthiomène. Although from 20-40 seems the commonest period yet it may occur before or long after that age. A granuloma appearing in the region of the perineum after a long period of apparently perfect health is a common manifestation of "latent syphilis."

The histories of the six appended cases point to syphilis directly or indirectly:—

1. C.N., æt. 24, wife of discharged soldier, never had a child.
2. M.L., æt. 35, pressworker; married æt. 18; had two abortions first year of married life. One full-term child second year; it died in infancy. No children since though married 17 years. "After marriage began to feel ill and has never been quite well since."
3. E.E., æt. 58. Has been married 43 years. Had eight children of whom four died. Husband soldier in India where patient spent 17 years with him. Has never been quite well since then.
4. P.P., æt. 38. Married æt. 20. Had five children. "During last pregnancy caught a sore on vulva from husband." Though but 29 years of age at that time has had no children since.
5. E.J.H., æt. 22. Single. Three years ago had a "breaking out on the vulva."
6. L.B., æt. 28. Married æt. 20. One child born three months after marriage lived two days. No children since. Has had sore throats several times, also a rash on both arms from time

to time and suffers from severe headaches. Husband has been brass-caster and hawker alternately since age of 15. Was in the army for 1½ years but was discharged five years ago.

State of health.

For many years esthiomène may persist and progress without producing any marked change in general health. In most cases, however, some other indication of syphilis is present concurrently, such as anæmia, lassitude, rashes or headaches. The patients whose cases we append were anything but healthy. It is important to note that the appearance of esthiomène does not constitute an attack on the general health, the patient may appear fairly healthy until the ulceration begins to burrow deeply.

1. C.N., emaciated and anxious looking; deeply burrowing ulceration.

2. M.L., patient thin and spare, looks delicate.

3. E.E., has been getting thin the last two years and feels ill.

Where esthiomène appears as an isolated affection after many years of good health there is very little constitutional disturbance. Where, however, it appears early in the course of syphilis, while there are still external evidences of the secondary stage, the general health is poor even if the esthiomènic lesion is slight. As a rule esthiomène assumes a much severer form in early acute cases of syphilis than in late tertiary cases.

Symptoms.

It is surprising how little inconvenience esthiomène may cause to the sufferer. Some apply for medical relief early because they are alarmed by the presence of ulcers and thickenings of the parts; others do not come for advice until itching or discharge cause inconvenience. In our day it is uncommon for patients to wait for relief until the ulceration has attacked the urethra, bladder or rectum. There is rarely any pain and examination of parts causes no suffering. The painlessness of syphilitic ulcers is a characteristic feature.

Enlarged inguinal glands.

The presence or absence of enlarged inguinal glands does not influence the diagnosis of esthiomène. Where enlarged glands are reported it is frequently the case that esthiomène has supervened on the secondary stage of syphilis. With extensive ulceration of the vulva it is natural to find "septically infiltrated" glands. Such glands are usually large, firm, elastic and isolated, easily distinguished from the hard, small, shotty buboes connected with each other by thick stringy lymph-channels, so typical of early syphilis. Both types of glandular enlargements may be present in esthiomène. Often no infiltration is palpable, even in a severe case.

Cicatricial tissue in tertiary syphilis.

The cicatricial tissue which follows in the wake of syphilitic ulceration is characterized by its bulk, its tendency to contract strongly and to break down again into ulceration. These features we find present in the fibrous tissue following esthiomène. The deformity found may be enormous, the parts being anatomically unrecognizable; strictures follow even slight degrees of esthiomène; repeated breaking down of healed ulcerations and of hypertrophied masses is the cause of the chronic nature of the condition.

Duration, course and causes of death.

The chronicity of esthiomène is a significant feature. All tertiary syphilitic ulcers are notoriously slow to progress and slow to heal. In no other ulcerative condition is the history so prolonged, so eventful of recurrences, and so little disturbing in its effects. The course depends largely on the early recognition and treatment of the condition. It may last a few months only, when it usually results in cure, or a great many years in which death almost invariably ensues.

The causes of death are significant of syphilis. The syphilitic virus kills by indirect methods; it causes a general destruction of tissues, until one or other system specially hard hit refuses to function and dissolution results. Esthiomènic ulceration, in itself of no fatal import, becomes destructive to life when fistulous burrowing begins with its attendant malnutrition and toxic results. Copious thin faecal material is constantly escaping through a recto-vaginal aperture or through a communication between small intestine and vagina, in which case wasting is particularly rapid. The ulceration, burrowing widely, may affect all the pelvic viscera and, finally reaching the pelvic peritoneum, may establish a fistula between the viscera and the peritoneal cavity. This was the case in C.N. who suffered from numerous attacks of severe abdominal pain accompanied by vomiting and diarrhoea, no doubt due to intermittent slight attacks of pelvic peritonitis. These often bring the history to a close.

Response to treatment.

It has been said that esthiomène cannot be a syphilitic lesion because it does not respond to antisyphilitic treatment.

Anyone acquainted with tertiary syphilitic lesions is aware that some yield with difficulty or not at all to mercury and potassium iodide; such lesions are frequently found in the mouth (leukoplakia), in the perineum and at the end of the alimentary canal (strictures). Esthiomène, when of a chronic nature and occurring late in the syphilitic history, often shows no response to treatment, especially

when fistulæ and strictures are present. Early cases on the other hand respond satisfactorily. It is therefore erroneous to diagnose a case as syphilis or not syphilis from its response to antisyphilitic treatment. The fallacies are, firstly, that some lesions do not yield to such treatment; secondly, that the alterative effects of potassium iodide influence other inflammatory conditions besides syphilitic ones; and thirdly, where other lines of treatment have been used, rest, feeding, cleanliness and scraping, it would be obviously fallacious to ascribe the cure to antisyphilitic treatment alone. In the cases appended, four were cured by antisyphilitic treatment combined with surgical interference, one with antisyphilitic remedies alone, and one (C.N.) in whose case such treatment was carried out intermittently over many years showed no response whatever and died after suffering eleven years from deep pelvic ulceration.

Histology.

"It is customary to regard the formation of gummata and the process of fibrosis, which are the essential lesions of tertiary syphilis, as two distinct changes. This is not strictly the case. Both are new formations of connective tissue, and at the outset are similar; but whereas in fibrosis permanent fibrous tissue is formed, in gumma the cells tend to early necrosis and death. In the one case the reaction achieves its goal, in the other it fails. If this be so it is no matter for surprise that the two processes are often seen in company; *i.e.*, that failure occurs in one part of the affected area and success elsewhere." (F. W. Andrewes in "A System of Syphilis," edited by D'Arcy Power and J. Keogh Murphy.) Have we not here the exact picture of what happens in esthiomène? Is not the condition one of constant fibrous tissue formation, showing an ever-spreading margin of new granulative tissue, a heaping up of old fibrous tissue with a tendency to necrosis in one part and cicatrization in another?

'That the hypertrophied masses of esthiomène are gummatous and consequently undergo the same fate as gummata elsewhere to necrose, leaving indolent chronic slow-spreading ulceration, of that there can be no doubt. The cell elements are the same as those of gummata, the inflammatory cells are mostly plasma cells and lymphocytes. Numerous capillaries are present; the fibrous coats of vessels are immensely thickened even at an early stage. Later the intima of vessels are also thickened. At any period of the existence of the gumma it may break down. This breaking down may occur early when the tissues surrounding the necrosed area are still infiltrated with plasma cells and the granulation tissue is new and vascular. Or it may occur later when the well-formed connective tissue has already settled down into strands of wavy fibrillated bundles. At

an early stage the necrotic cells look uniformly granular and gelatinous. A zone of small darkly staining cells surrounds the necrosing area. Beyond it we find the ring of never failing fibrous tissue from which cicatrizing processes will spread inwards when necrosis is completed and the breaking down tissues discharged.

The sections of tissues from the appended cases show all these features. There are numerous areas where fat deposits, degenerating cells and spaces of uniform appearance without cell-elements mark the areas of impending necrosis. We find them surrounded by rings of small round lymph cells and plasma cells. At the edges of the hypertrophied masses we note the presence of fibrosis in every stage of formation.

It may be asked: if esthiomène is of a gummatus nature with slow fibrosis, necrosis and repair, how can one account for the cases of rapid deep ulceration, spreading from the vulva into the pelvic organs and sometimes causing death within a few months and sometimes within a few years of renewed attempts at cicatrization? (One case reported by Munier died 15 months after onset of esthiomène.) We give the answer in the words of F. W. Andrewes: "In addition to the formation of local gummata there is a diffuse type of perishable granulomatous infiltration, which may attack the skin but is also apt to affect the fauces, pharynx and larynx. Here the tissues seem to melt away as it were by a process of rapidly spreading ulceration. The loss of tissue may be very great and the cicatricial contraction of the tissues concerned in repair may lead to serious deformities."

Granulomatous infiltration with wide-spread ulceration appears to occur in the ill-nourished wasting people with no powers of resistance. It appears to have some analogy to phagedænic ulceration which undoubtedly occurs in those whose tissues from some cause or other show no attempt to combat the syphilitic virus.

It may be stated here that phagedæna is a rare occurrence in tertiary syphilitic ulcerations of the vulva. The granulomatous infiltration described above and sometimes occurring in esthiomène is not as rapidly destructive nor as extensive as phagedæna.

Why is esthiomène a tertiary manifestation of syphilis?

1. Histologically esthiomènic tissues are gummatus. They undergo the usual processes of necrosis and cicatrization with contraction that we observe in gummata.

2. Esthiomène makes its appearance several years after the primary infection.

3. There rarely are concomitant lesions indicative of the second stage, though they do sometimes occur.

4. Ulceration and fibrosis when they make their appearance in the secondary stage yield much more readily to treatment than when

they manifest themselves in the third stage. Esthiomène is obdurate in a large number of cases.

5. Professor Fournier shows that the integumentary tissues are the commonest sites for early tertiary lesions to appear in. It is not surprising that esthiomène may appear after many years of good health, unaccompanied by other syphilitic lesions. This fact may to some extent explain the numerous mistakes of diagnosis which have been made with regard to this condition.

Treatment.

1. *Constitutional.* If possible the patient should remain in bed until all ulceration is healed. In severe cases where there is destitution a prolonged stay in hospital should be enforced. The object is to prevent all irritation of the parts, to enforce absolute cleanliness, to improve the general condition of health by regular and ample feeding and to obtain facilities for consecutive medicinal treatment. With such means early and slight cases of esthiomène often yield rapidly and remain cured.

The main medicinal treatment consists in the administration of mercurials and of potassium iodide. The mode of administration, dosage and length of period during which it is given will depend on the nature and stage of each case. The salvarsan treatment should be tried wherever it is possible to employ it.

2. *Local.* Strict cleanliness is of extreme importance. Frequent warm baths are indicated. The bathing of parts with soothing lotions (opium where there is itching) keeps them quiescent and prevents rubbing and scratching. Lotio nigra may be used freely and the perineum should be kept as dry as possible and dusted with borax and calomel powder. Ulcers should be touched with five per cent. solution of silver nitrate.

Where there are fistulæ with incontinence of urine and fæces special care and trouble to keep the perineum clean should be taken.

Operative measures are frequently indicated and prove of great value where no response to medicinal treatment has been observed, where the hypertrophy is increasing and the ulceration continues to spread. Operative treatment consists in removing the hypertrophied masses en bloc. Sometimes a considerable portion of the vulva has to be sacrificed. Where superficial callous ulceration exists, scraping of the floor and edges is beneficial. When the ulceration is deep and burrowing scraping is of no avail. Fistulæ cannot be closed by operation on account of the unsoundness of the neighbouring tissues. Strictures, after the healing of surrounding portions, may be dilated; this is not always successful.

Surgical treatment should never replace medicinal. Even if by

operation the parts are apparently cured, antisyphilitic treatment must be persevered with for fear of recurrence.

We may here say a word on the early removal of a portion of tissue for microscopic examination. This should be done as soon as the case comes for treatment. Such a procedure may reveal malignant disease where it is sometimes least suspected (M.L.).

SUMMARY AND CONCLUSION.

1. *Nomenclature.* The term *esthiomène*, established in medical literature by the French writers of the nineteenth century, has been misunderstood and misapplied by many authors. We hold that it should be retained as a useful term replacing the expression "hypertrophy with ulceration." It should be clearly understood that it is a tertiary syphilitic lesion.

"Lupus vulvæ" should be replaced by the expression "tuberculosis of the vulva." Lupus vulgaris as it occurs in the skin, often of the face, has not been known to occur in the perineum. Tuberculous ulceration and tuberculous hypertrophy, however, do occur in that region.

The term elephantiasis has been applied to hypertrophy occurring in chronically œdematous parts whence the return of lymph has become obstructed or rendered sluggish, and where owing to the unhealthy state of the enlarged parts a low form of chronic inflammation has set up. The hypertrophied masses of *esthiomène* are not œdematous tissue enlargements; they are granulomatous growths with a tendency to necrosis.

2. *The Nature of Esthiomène.*

1. *Esthiomène* is not a disease *sui generis*.
2. It is not a form of low chronic ulceration occurring on a soil weakened by constitutional syphilis or tuberculosis.
3. *Esthiomène* is not a merely local inflammatory state following on irritation.
4. There is no relationship between tuberculosis and *esthiomène*.
5. The only connection existent between *esthiomène* and malignant disease is that the former may occasionally undergo malignant degeneration.
6. *Esthiomène* is not due to lymph stasis hence it does not belong to the group of hypertrophies called "elephantiasic."

3. *Esthiomène a tertiary syphilitic manifestation.*

(a) A direct or probable history of syphilis is almost always obtained.

(b) The majority of early cases of *esthiomène* respond to antisyphilitic treatment. The late and chronic cases which do not

respond do not indicate that esthiomène may at times be due to other causes than syphilis; there are many tertiary lesions, such as strictures and leukoplakia and others which do not yield to the usual antisyphilitic remedies and which are none the less due to syphilis.

(c) The chronic course of esthiomène marked by attempts at healing with subsequent relapses, the absence of local disturbances, the non-impairment of the general state of health indicate the syphilitic nature of the condition.

(d) The masses of cicatricial tissue with subsequent contraction producing severe strictures and extensive deformities is typical of no other disease. Where the necrosing process is in excess over the tendency to fibrosis we have the enormous tissue destruction characteristic of syphilis.

(e) In no other constitutional disease is there such a constantly present combination of hypertrophy and ulceration as in syphilis. In elephantiasic hypertrophies there may be a small amount of ulceration. Often none is present. In tuberculosis of the vulva the ulceration is usually extensive and the hypertrophy of parts is slightly marked or absent.

(f) The microscope reveals the typical gumma or granuloma of the third stage.

(g) Up to the present time we find no cases recorded where the *spirochæta pallida* was found in esthiomènic tissues.

It is a well-known fact that the organism does exist though in comparatively small numbers in the lesions of the tertiary stage, but they are usually difficult to find (D'Arcy Power and Murphy, "System of Syphilis"). With easier methods of demonstrating the organism the time will no doubt come when the *spirochæta* of Schaudinn will be seen in esthiomènic tissues with the same ease as the bacillus of Koch in tuberculous lesions.

(h) With equal certainty of proof will the positive Wassermann reaction relegate all cases of esthiomène into the field of tertiary syphilitic lesions.

My sincere thanks are due to Dr. Thomas Wilson who kindly allowed me to publish his cases and to make use of the literature and sections related to them, and to Dr. John Hewetson to whom I am indebted for permission to use six excellent photographs taken by himself.

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