

The ulcerative forms are always troublesome and often very painful affections, and the prognosis should always be guarded. The earlier separation of the nail occurs and the focus of disease at the base of the nail is reached by local applications, the sooner may relief be expected. New and comely nails sometimes develop even after prolonged and intense basal ulceration. In nearly all cases where the perionychia is lateral or at the free border of the nail, a perfect nail may be predicted.

The growth of the new nail is very slow, and the spiculæ at the edges and the uneven plates which often form on the surface of the matrix, are important indications of retention of the nail-producing power. The new nail is often imperfect at first, being ridged and irregular, and it is sometimes permanently shorter than the old one.

Treatment.—Internal treatment is required in all forms of syphilitic affections of the nails.

Friable onychia calls for no other local treatment than careful trimming of the nails and prevention of irritation.

In case of separation of the nail, exposure of the matrix and the application every day or two of liquor potassæ, followed by the use of an ointment composed of one part of mercurial and two parts of diachylon ointment, will arrest the disease. The simple form of perionychia may be cured by the use of this ointment.

In ulcerative perionychia the diseased surface should be exposed as soon as possible and cauterized with nitric acid or a strong solution of nitrate of silver, allaying inflammatory reaction with water dressings. Subsequently iodoform or powdered nitrate of lead may be applied, and the phalanx be enveloped in diachylon ointment. The profuse granulations of the matrix may require the use of a strong solution of caustic potassa (3j-3ij or iv). Prolonged immersion of the hand in very warm water containing powdered borax (3ij-Oj) diminishes the swelling, and removes the secretions. The application of a bandage over the ointment, India-rubber finger stalls or gutta-percha tissue, may be used to reduce the swelling. Care must be taken to apply the pressure gradually.

In addition zinc and belladonna ointments or Goulard's extract may be used to meet special indications. The mixture of diachylon with mercurial ointment is smoother and more efficient than the ordinary mercurial plaster or the *emplastrum de Vigo*.

CHAPTER XV.

GENERAL REMARKS UPON AFFECTIONS OF MUCOUS MEMBRANES.

ATTEMPTS have been made by several authors, and especially by Babington, Ricord,¹ and Baumès,² to establish a classification of syphilitic eruptions upon mucous membranes founded upon their initial lesion, as is the case with the syphilodermata. There is no doubt that the manifestations of syphilis upon these two regions exhibit a general correspondence, which in some cases is almost perfect. At the same time, it must in general be confessed that although points of resemblance are often apparent between syphilitic eruptions upon cutaneous and mucous surfaces (which are indeed but one continuous membrane), yet that the physical conditions in which the latter are placed—their constant moisture, exposure to friction, etc.—prevent as accurate a classification as we are able to establish in the former.

One form of eruption at least, the pustular, is never met with upon mucous membranes.

ERYTHEMA.

Erythema of the mucous membranes is usually identical, in the time of its appearance and in its general character, with the same eruption upon the skin. Like the latter, it ordinarily appears six or eight weeks after contagion, and may affect any of the outlets of mucous canals, although it is most frequently seen upon the fauces, pituitary membrane, and genital organs, and in many instances, doubtless, fails to attract attention. It is most frequently seen upon the fauces in persons exposed to sudden changes of temperature, in smokers, and in those who are subject to frequent attacks of catarrh; upon the vulva in women who have frequent sexual intercourse, and upon the glans penis in men with a long prepuce. It may be the only general lesion present, or more frequently it is accompanied by other early manifestations. It may occur in patches like the erythematous syphilide upon the skin, as in a case described and figured by Ricord,³ of erythema of the glans penis coexisting with roseola upon the trunk, in which the former eruption was arranged in circles of a bright-red color, inclosing sound portions of the mucous membrane, and closely resembling the roseola upon the body. As a general rule, however, especially upon the fauces and vulva, the eruption is diffused and its outline well defined.

¹ Notes to Hunter on Venereal, p. 429 and 447.

² Traité des maladies vénériennes, ii., p. 443.

³ Iconographie, pl. xv.

Syphilitic erythema of the mucous membranes may exhibit mere redness of the surface without structural changes in the tissues. In some cases, however, the epithelium has a milky hue, and becomes detached in spots, giving rise to erosions. The surface is sometimes dry, and at other times smeared with an abundant secretion. There is usually but little swelling, except when the vulva, the tonsils, and the pituitary membrane, or the labia minora are affected. In the case of the nose, the swollen folds of mucous membrane may interfere with breathing or the passage of the tears through the lachrymal ducts, and also obstruct the Eustachian tubes. Aside from these mechanical annoyances, it is attended with but little pain or inconvenience.

This eruption often disappears quite suddenly, but is very prone to return. Its treatment consists in the internal administration of mercury; in the use of demulcent gargles, as of chlorate of potash or of marshmallow, when the fauces are affected; and in strict attention to cleanliness, and in the separation of opposed surfaces, when the genital organs are involved.

MUCOUS PATCHES.

"The name 'mucous patch' is applied to a lesion peculiar to syphilis, consisting of elevations of a more or less decided rose-color, frequently rounded in form, the surface resembling a mucous membrane, and situated in the neighborhood of the outlet of mucous canals, especially around the genital organs and anus, upon the mucous membrane of the mouth, and sometimes upon other parts of the body, more particularly at the base of the nails and wherever the reflection of the integument upon itself forms natural folds in the skin."¹

This affection is one of the earliest and most frequent secondary manifestations of syphilis, and is therefore one with which the student of venereal should be perfectly familiar; unfortunately obstacles have been placed in the way of acquiring a knowledge of it by the confusion which has been introduced in its classification, and in the terms which have been applied to it. Different authors, according to the views they have entertained of its nature, have described it among tubercles, pustules, and papules, and have called it by the corresponding names of "mucous tubercle," "pustule" or "papule." But the first two of these terms are entirely inappropriate, since it does not resemble syphilitic pustules or tubercles in its time of development, its symptoms, course, or termination. The name mucous papule is less objectionable, since it consists in most instances of a development of the papillæ forming broad elevations above the surrounding surface; but it is not always elevated, and may even be excavated, and it is moreover so distinct in its characters from ordinary papules, and of such importance as an indication of constitutional infection,

¹ DAVASSE and DEVILLE, Des plaques muqueuses, Arch. gén. de méd., 1845, t. ix.

as to entitle it to the separate name adopted by MM. Deville and Davasse, which I shall here retain.

As regards its histology, this lesion is found to consist mainly in a marked hyperplasia of the papillæ, and an abundant proliferation of cells in the mucous layer which present a muddy appearance due to granular changes in their protoplasm and segmentation of their nuclei. The sheaths of the hair bulbs and the walls of the vessels are likewise infiltrated and thickened. The surface of the patch may retain its epithelium, or the latter may become detached and removed; it may either become depressed below the surrounding surface by the process of ulceration, or rise above the same in consequence of further development of the papillæ, whence arise the various appearances which this lesion may present.

As already stated, this lesion is found at the outlet of mucous canals, and upon those portions of the external integument which are maintained by contact in a constant state of warmth and moisture, and are thus very nearly in the condition of mucous surfaces. Some idea of its comparative frequency in these various regions may be obtained from the following tables:—

In 130 men observed by Bassereau, mucous patches were found—

Around the anus	110 times.
Upon the tonsils	100 "
" " scrotum	66 "
" " lips	55 "
" " glans and prepuce	28 "
" " velum palati	27 "
" " tongue	18 "
" " pillars of the soft palate	17 "
" " internal surface of the cheeks	11 "
Between the toes	11 "
In the fold between the scrotum and thigh	5 "
At the nasal orifice	2 "
On the posterior wall of the pharynx	2 "
At the base of the toe-nails	2 "
" " meatus urinarius	once.
In the axilla	"
Upon the gums	"
Covering the thighs in an infant three months old	"

In 186 women observed by Davasse and Deville, mucous patches were found—

Upon the vulva	174 times.
" " anus	59 "
" " perinæum	40 "
" " nates and upper and inner parts of the thighs	38 "
" " tonsils	19 "
" " nostrils	8 "
" " tongue	6 "
" " toes	5 "
" " face	5 "
" " umbilicus	3 "
Around the nails	2 "

Upon the ears	2 times.
" " soft palate	2 "
" " inguinal fold	2 "
" " neck	once.
" " nipple	"
" " cervix uteri	"

It thus appears that the most frequent seat of mucous patches in men is around the anus and within the mouth, and in women upon the vulva. It has been asserted that they are much more frequent in the latter than in the former sex, but the difference is probably not so great as has been supposed. There is certainly no more common symptom in male patients affected with syphilis. They are also present in most cases of hereditary syphilis in infants, and, in consequence of the moist condition of the integument at this early age, are not confined to the regions above mentioned, but may be scattered over the whole surface of the body, and especially the nates and thighs.

The development of mucous patches is everywhere favored by inattention to cleanliness, and in the mouth by the use of tobacco, either by smoking or chewing; in men who are habituated to this practice, they constitute one of the most persistent and troublesome symptoms we have to deal with, and in dirty prostitutes of the lower class they are equally abundant and obstinate about the genital organs.

Mucous patches vary in appearance according to their situation. The chief points of difference are found between those seated upon the external integument and those upon membranes which are strictly mucous.

The former, which are met with for the most part around the anus and genital organs in the two sexes, consist of rounded disks, either single or aggregated, of a reddish or grayish color, granulated and elevated to the height of about a line above the integument, upon which they appear to be superimposed, like a number of cones laid upon the part. They then receive the name of *condylomata*. Their appearance is so peculiar, that when once seen it cannot be forgotten.

Their mode of development is as follows: A red spot first appears upon the skin, and a slight effusion takes place beneath the epidermis—sufficient to loosen it from the derma but not to raise it in the form of a vesicle or bulla; the epidermis is removed by friction, or falls off, and exposes a raw surface upon which a moist, grayish pellicle is formed; the surface is elevated by hypertrophy of the superficial layers of the skin and gives rise to the broad, flat, wart-like disks above referred to.

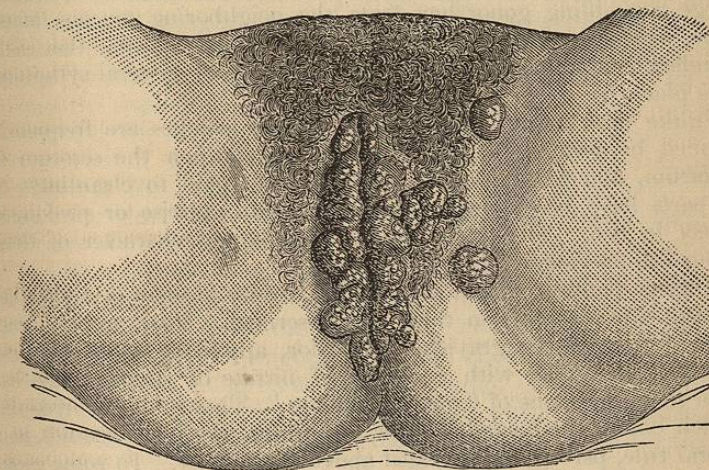
In Fig. 119 we have a representation of exuberant condylomata situated around the vulva.

Another and a very singular mode of origin of mucous patches is from the surface of a chancre, which, during the reparative process,

may granulate above the surrounding integument, and become covered with a thin, translucent and grayish pellicle. This transformation of a primary into a secondary symptom has already been described in the chapter upon chancre. It occurs most frequently upon the genital organs, but Bassereau relates an interesting case in which it took place upon the lower lip,¹ and I have met with an instance upon the upper eyelid.

When originating from a chancre, mucous patches are seated upon an indurated base, but otherwise the tissues beneath them are found on pressure to retain their normal suppleness. Contrary to the statements of some authors, they never present the copper color of other syphilitic eruptions, but are either of a reddish or grayish-white color. If the patient happen to be jaundiced, the pellicle covering them may be tinged with yellow. They are usually smeared with a

FIG. 120.



Vegetating condylomata about the vulva. (Jullien, after a cast in the museum of the Hôpital Saint-Louis.)

very offensive muciform secretion, which is peculiarly unpleasant when the patches are seated in the neighborhood of the genitals, and I have repeatedly known the odor to be so strong as to pervade the room. In a few exceptional instances the patches are dry.

Mucous patches readily become ulcerated. When exposed to friction against the clothes or the opposed integument, the pellicle covering the patch is removed, and a red, superficial, but depressed ulceration takes the place of the elevated disk. Such is the origin of the raw surfaces frequently seen upon the sides and front of the scrotum in syphilitic patients.

Ulcerated mucous patches upon the margin of the anus closely re-

¹ Op. cit., p. 326.

semble ordinary anal fissures, from which they may be distinguished by their more prominent and rounded edges, and by the grayish pellicle which is generally visible upon the sides of the cleft. When situated between the toes, they yield a thin, brownish, and very offensive discharge, and they often project upon the dorsum or palmar surface of the foot in the form of a crescent at the base of the interdigital sulci. Ulcerated and fissured mucous patches upon the margin of the anus, between the toes, or elsewhere, are called *rhagades*.

Condylomata upon the vulva are generally elevated and of a reddish color, as is well represented in Ricord's *Iconographie*, Pl. XX. Those that I have seen within the vagina and upon the cervix uteri, have more closely resembled mucous patches upon the external integument than those situated upon other mucous membranes, as, for instance, within the buccal cavity. Mucous patches upon the genital organs in both sexes sometimes give rise to a discharge resembling gonorrhœa from the neighboring mucous membrane, which is not unfrequently observed about the time that early secondary symptoms appear, or when a relapse of general symptoms takes place.

Unlike most syphilitic eruptions mucous patches are frequently attended by pruritus, especially when seated upon the scrotum or perinæum, and when proper attention is not paid to cleanliness or the parts have become warm and moist from exercise or prolonged contact in bed. The unquestionably contagious character of these lesions has previously been mentioned.

Mucous patches within the buccal cavity present a somewhat different appearance from those now described. Their most characteristic feature is the grayish-white color, appearing as if they had been pencilled over with a crayon of nitrate of silver, which has given them the name of "opaline patches." They are more irregular in their outline than condylomata, and unlike the latter are not, as a general rule, perceptibly elevated above the surface. In some cases, the adventitious deposit which gives them their grayish color and which is with difficulty removed, is confined to the irregular margin of the patch, while the centre remains sound; and when presenting this appearance they have been compared to the track of a snail.¹

The most frequent seat of this form of mucous patches is upon the internal surface of the lips and cheeks, upon the sides and dorsum of the tongue, upon the gums, tonsils, and soft palate. They sometimes extend beyond the pillars of the fauces, and are seen upon the walls of the pharynx and the posterior nares. Since the invention of the laryngoscope they have also been seen upon the epiglottis and mucous membrane of the larynx.

A frequent situation is at the angle of the mouth, where they are

¹ *Iconographie*, pl. XX., bis.

often intersected by cracks and fissures, the sides of which present the characteristic grayish color of this lesion, and where they are continuous with small patches of impetigo upon the external integument. Upon the dorsum of the tongue, their base is sometimes hard, indurated, and fissured; or the pellicle which at first covers them may be rubbed off by the food, leaving a slightly depressed surface resembling an aphthous ulceration; or, again, they may granulate above the surface and form vegetations. When seated upon the tonsils, mucous patches are peculiarly exposed to irritation and ulceration from friction of the food in deglutition, and ulcers are formed, attended by considerable inflammation and swelling of the surrounding parts, and in which the characters of the original lesion are entirely lost. Deglutition is very much impeded, and the surrounding inflammation may extend to the Eustachian tube and produce partial deafness.

Bassereau states that mucous patches may react upon the neighboring lymphatic ganglia, in the same manner as syphilitic eruptions situated upon the scalp, but only in case their development is attended by acute inflammation. Thus the submaxillary glands are frequently swollen from sympathy with mucous patches upon the fauces, and the inguinal glands may be enlarged in consequence of the presence of condylomata upon the scrotum, but the effect upon the latter is less readily perceived, because they are generally indurated from their anatomical connection with the primary sore. In two cases observed by Bassereau, in which the chancre was situated at a distance from the genital organs, the inguinal glands were enlarged in consequence of mucous patches in the last mentioned situation. This effect upon the ganglia is, however, exceptional, and always consists of mere engorgement, and never of induration.

The following tables from the same author exhibit the period of development of this lesion after contagion, when no treatment had been instituted, and also when mercury had been given for the primary sore :

In the former case, mucous patches appeared :

On the 20th day after contagion in	1 instance.
" 29th " " " "	1 "
From 1 to 2 months after contagion in	25 instances.
" 2 " 3 " " "	5 "
" 3 " 4 " " "	7 "
" 4 " 5 " " "	5 "
" 5 " 6 " " "	3 "

In the latter case :

From 2 to 3 months after contagion in	2 instances.
" 3 " 4 " " "	6 "
" 4 " 5 " " "	5 "
" 5 " 6 " " "	5 "
" 6 " 7 " " "	6 "
" 7 " 8 " " "	2 "
" 8 " 12 " " "	5 "
" 12 " 18 " " "	3 "

I will again remind the reader that these dates have reference to the first development of the eruption only. The difference in the two tables shows the power possessed by mercury to delay the appearance of secondary symptoms.

Mucous patches are exceedingly chronic and persistent, and are very prone to reappear; they are, indeed, the most frequent evidence of the renewed activity of the syphilitic poison.

TREATMENT.—In addition to the general treatment by mercury which mucous patches require, in consequence of the indication they afford of the existence of syphilitic intoxication, certain local applications are advisable. In the case of condylomata, Ricord's favorite treatment, which consists in washing them twice a day with Labarraque's solution of chlorinated soda, then sprinkling them with calomel, and separating the opposed surfaces by the interposition of lint, is generally very successful, but it is sometimes necessary to destroy them with nitrate of silver, nitric acid, or the acid nitrate of mercury.

Mr. Victor de Méric speaks highly of an ointment employed by several physicians of the German Hospital, London, consisting of two drachms (8.00) of calomel, the same quantity of sulphate or oxide of zinc (it matters not which), and one ounce (30.00) of lard. After a few applications, the excrescences become dry and horny, fall off, and leave a raw surface which soon heals. When there is much inflammation present, the application of poultices should precede this treatment.¹

Mucous patches in the mouth should be touched with nitrate of silver, or one of the stronger caustics, and other applications may be employed, which will be mentioned in a subsequent chapter. This local treatment should by no means be neglected, since without it these lesions will often persist in spite of the use of remedies directed to the cause of the disease.

In the section upon the treatment of the syphilides, general directions for those of the vulva and anus will be found.

In a recent communication, Butlin² recommends a solution of chromic acid (10 grains to the ounce of water) for the more superficial ulcerative syphilitic affections of the tongue and mouth. The parts are to be painted, by means of a camel's-hair pencil, three or four times a day. In some cases, a stronger solution may be required. The application usually causes little, if any, pain. I have found it beneficial.

¹ Lettsomian Lectures, p. 42.

² On the use of chromic acid in certain affections of the tongue, see Practitioner (London), March, 1883.

CHAPTER XVI.

AFFECTIONS OF THE ORGANS OF DIGESTION.

THE MOUTH.

ERYTHEMA.—Erythema of the buccal cavity is usually confined to the neighborhood of the fauces. It may readily be confounded with the effects of an ordinary cold, from which it often can be distinguished only by the history of the case. The presence of narrow, dusky-red bands of inflammation along the border of the velum ending abruptly at the base of the uvula is considered by some observers to be characteristic of syphilitic erythema. Associated with this condition, as well as with other lesions, there is often a general œdema, especially of the velum and uvula. The latter organ may become much swollen, but no portion of it should be removed, since under treatment it soon resumes its normal proportions. The uvula also may be completely or partially eroded by ulceration. In the latter case, even when its attachment to the soft palate is very slender, the uvula need not be excised, since during the process of repair adhesions form between the eroded surfaces. In this way the natural conformation of the parts may be restored to a remarkable degree.

MUCOUS PATCHES.—The most common syphilitic lesions of the mouth are mucous patches. They are most frequently found upon the tonsils, the uvula, the velum palati and its pillars, the sides of the tongue and the mucous surfaces of the lips, especially the lower. At the angles of the mouth they are often continuous with a pustular eruption upon the integument. The inner surface of the cheek near the last molar tooth is another favorite seat. The dorsum of the tongue and the gums are less frequently affected.

PAPULES AND VESICLES.—Papules are often seen in the mouth coincidentally with a general papular eruption. Owing to the constant maceration of the mucous membrane of the mouth, the formation of vesicles is rare if not impossible.

The name "*plaques des fumeurs*" has been given to certain patches most frequently seen on the mucous lining of the cheeks near the angles of the mouth. Fournier¹ considers their location absolutely diagnostic, and, in view of their situation and color, he has called them "*plaques naérées commissuraires*." They occur most frequently in the mouths of inveterate smokers, and are due to accumulation of

¹ Des glossites tertiaires, Paris, 1877, p. 54.