intermingled with the papules. This will be seen to some extent in almost every case of papular syphilide. In some instances we shall meet with eruptions at this stage of syphilitic disease, which may even present a general pustular character. These variations from the simple papular appearance are easily explained by reference to the minute structure and behavior of the syphilitic papule, as previously given by Kohn. Thus he says, "These cells [which make up the body of the papule] are not destined to become permanently organized, as they degenerate and disappear, or assume a dull granular appearance, undergo fatty degeneration; or they may become heaped together in the form of detritus and become pus." Pustular and vesicular eruptions at this period of syphilitic infection, with our knowledge of the processes through which the papular eruptions are produced, would seem rather to result from lack of formative power in the lymph, and from the inability to form, or the easy liquefaction of the hyperplastic materials evolved or exuded into the papillary layer of the cutis; this occurring probably from a low state of the system induced by general causes, or by some especial dyscrasia not necessarily dependent upon the syphilitic influence. In some rare cases — usually in debilitated youths — superficial ulcerations occur, involving large patches of the papillary layer of the cutis, varying from the size of a quarter dollar to that of one's palm, not unfrequently mistaken for a so-called tertiary manifestation, notwithstanding that they only appear in the usual period of the papular syphilide. With proper attention to the general health, they will always be found amenable to the treatment found most useful in the simple papular eruption.

(To be concluded.)

SIX CASES OF MECHANICAL DYSMENORRHŒA, WITH REMARKS.

BY VIRGIL O. HARDON, M. D.

CASE I. M. G., aged thirty-two, married, nullipara. Has suffered from dysmenorrhœa since the third menstrual epoch. Experiences severe bearing-down, expulsive pain, commencing from twelve to twenty-four hours before the flow appears. She is obliged to go to bed and remain two or three days. Large clots are expelled, and their expulsion is accompanied by increase of pain. After menstruation ceases she is perfectly well until the next period. She has been married seven years, but has never become pregnant. Examination showed the body of the uterus to be in its normal position and of normal size. The cervix was long and conoid, with an external os so small as scarcely to admit a Sims's probe. Above the external os the cervical canal

was of normal size. All the tissues were free from pathological change. July 28, 1875, five days after the cessation of the menses, the patient was etherized, and the cervix slit up bilaterally as far as the vaginal junction. A small roll of cotton cloth was placed in the cervical canal, and a pad of cotton wet in glycerine placed against the os. These dressings were changed every second day. At the end of twelve days the wound was entirely healed. Menstruation occurred eighteen days after the operation, and was free from clots and almost painless. There has been no recurrence of dysmenorrhœa, and fourteen months later patient became pregnant.

CASE II. K. N., aged twenty-eight, married, nullipara. Has suffered from dysmenorrhœa since two months after marriage. Pain commences a few hours before the flow appears, and subsides when the latter is well established. Clots are expelled, accompanied by bearing-down pains. In the intervals of menstruation patient is well, with the exception of slight leucorrhœa. Has been married five years, but has never become pregnant. The womb was in its normal position, and all the pelvic organs were free from pathological change. The cervix was one and five eighths inches in length from the os externum to the vaginal junction. The cervical canal was of normal size. December 30, 1875, six days after the cessation of the menses, patient was etherized, the cervix slit up bilaterally for half an inch from the os, and both lips were amputated at that point. The dressings were the same as in Case I. In thirteen days the wound was entirely healed. Menstruation occurred on the sixteenth day, was absolutely painless, and has continued so ever since. Patient has not become pregnant.

CASE III. E. M., aged twenty, single. Has suffered from dysmenorrhœa since puberty. The pain precedes the flow by a few hours, and is of an expulsive character. The blood is expelled in large clots. In the intervals she is perfectly well. The body of the uterus was in its normal position, and all the tissues were free from disease. The cervix, however, was long, and at about half an inch from the os was bent upon itself at an acute angle, so that the os looked directly forward and rested against the anterior vaginal wall. The os was too small to admit a Sims's probe. January 25, 1876, five days after the cessation of the menses, patient was etherized, and an incision made in the median line of the posterior lip, cutting completely through all the tissues to a point just above the angle of flexion. The dressings were the same as in Case I. Patient menstruated, without pain, eighteen days after the operation, and since that time has had no return of the dysmenorrhœa.

CASE IV. H. L., aged thirty-four, married, nullipara. Has suffered from dysmenorrhœa since puberty. Severe pain commences before the flow occurs, and is of an expulsive character. There are no clots. In the intervals she is perfectly well. The womb was normal in size and

position, and all the tissues were healthy. The os externum was small, requiring some force to introduce a Sims's probe. The stenosis extended as far as the os internum. December 10, 1876, patient was etherized, and the cervix slit up bilaterally as far as the vaginal junction. The incision was continued through the os internum with a narrow bistoury, cutting about one third through the cervical wall, as nearly as could be determined. The same dressings were applied as in Case I. Patient did well until the third day, when she got out of bed, contrary to orders, and stood with bare feet upon a cold, uncarpeted floor. Next day I found her suffering from acute pelvic peritonitis. The dressings were removed at once and not returned. The peritonitis was checked in five days, and patient recovered. She refused to submit to any further treatment, and now remains in the same condition as before the operation.

CASE V. M. H., aged twenty-eight, married, nullipara. Has suffered from dysmenorrhœa since puberty. The pain precedes the flow, and is of an expulsive character. The blood escapes in clots. In the intervals she is well, except that she suffers from indigestion. The uterus was normal in position, and all the tissues were healthy. The cervix was of normal length, but the external os was so small that Sims's probe could not be introduced. The rest of the cervical canal was of normal size. November 7, 1877, five days after the cessation of the menses, patient was etherized, and the cervix slit up as far as the vaginal junction. The dressing of cotton and glycerine was applied, and the wound healed in twelve days. Patient menstruated eighteen days after the operation, with very slight pain. Since that time there has been no return of the dysmenorrhœa. She has not become pregnant.

CASE VI. A. G., aged thirty-four, single. This patient applied to me to obtain relief from an intense itching of the vulva and perinæum, which had troubled her for years, but had increased of late until it was almost unendurable. Examination showed hyperæmia of the parts and marks of the nails from scratching, but no other lesions of the skin, and no parasites to account for the itching. Inquiry elicited the statement that ever since puberty she had suffered intensely from dysmenorrhœa. The pain is of an expulsive character, and is so severe that she is obliged to go to bed and stupefy herself with opiates and gin. The pain precedes the flow by about twenty-four hours. The blood escapes in the form of large clots. In the intervals she is perfectly well, with the exception of the itching. A uterine examination revealed an abnormally small os and a sharp angle in the lower half of the cervix, so that the os pointed directly forward toward the bladder. In other respects the pelvic organs were in normal condition. As the menses were due in a day or two, I introduced a laminaria tent into the cervical canal and left it in for eight hours. At the end of that time

the itching had entirely ceased. Menstruation came on next day and proceeded without the usual amount of pain. Recognizing the fact that the relief obtained was only temporary, I proposed an operation. December 26, 1877, five days after the cessation of the menses, patient was etherized, and the posterior lip of the cervix was divided in the median line up to the vaginal junction, and the inner surface of the anterior wall of the cervix at the point of flexion was incised with a bistoury to the depth of about a quarter of an inch. The cotton and glycerine dressing was applied. The wound healed in a fortnight. Since that time the patient has menstruated with only a moderate amount of pain, not sufficient to keep her from her work or require the use of anodynes. The itching did not return.

All the above are typical cases of uncomplicated mechanical dysmenorrhœa. Such cases are the only ones which can be satisfactorily treated by surgical operation. If any complication exists, it is impossible to say how much of the dysmenorrhœa is due to mechanical obstruction and how much to the complicating disease. Consequently, it is impossible to predict a successful result of an operation in such cases. My cases illustrate very well the variety of malformations of the cervix which may produce mechanical obstruction. They may be classed under three heads, namely: (1) stenosis of the cervical canal; (2) flexion of the cervix upon itself; (3) abnormal length of the cervix. Each of these conditions is sometimes found by itself, but more frequently two, and sometimes all three, are present in the same case.

The manner of operating varies with the nature of the malformation: in stenosis of the canal, bilateral incision; in flexion of the cervix upon itself, incisions of such depth and direction as will furnish an unobstructed canal; in abnormal length of the cervix, amputation. These are the forms of treatment which are recommended by Sims,¹ and which have proved successful in my hands. Emmet² objects to the operation of bilateral incision on the ground that it leads to the same pernicious results which arise from lateral laceration of the cervix in labor, namely, eversion of the lips of the cervix and ulceration of the everted surfaces. But the cases upon which I have operated have remained under observation for periods varying from six months to three years after the operation, and in no one of them has there appeared at any time a trace of eversion or ulceration. These symptoms occur after laceration in labor from the fact that the womb is then in a state of fatty degeneration, and does not readily take on reparative action. Moreover, the increased weight of the womb at that time presses the cervix down against the posterior wall of the vagina, forces the lips apart, and causes them to roll out as far as the angle of lacera-

¹ Clinical Notes on Uterine Surgery.

² American Journal of Obstetrics, November, 1874.

tion. But in the non-puerperal uterus the conditions are very different, and after incision of the normal cervical tissues the wound heals quickly, the lips retain their natural position, and ulceration is much less likely to occur than if the operation had not been performed.

Various metrotomes have been devised to facilitate the performance of the operation, but the best instruments for the purpose are to be found in every physician's pocket case. They consist of a pair of scissors and a bistoury. The best and in fact the only permissible time for the operation is about five days after the cessation of the menses. This will give time for the wound caused by the operation to heal completely before the occurrence of the next menstrual period. In none of these operations will ether be absolutely necessary, as the pain is comparatively slight. But if the patient be nervous and excitable, we may gain a more complete control and operate more easily by the aid of an anæsthetic. The patient should be kept in bed until the wound is entirely healed, which in most cases will be no more than a fortnight. It will not be safe in any case to assure the patient of a cure of sterility as the result of this operation. In the majority of cases such a hope will prove delusive. But we may safely promise that the severe suffering which accompanies each performance of the menstrual function will be completely and permanently cured.

POISONOUS MUSHROOMS.

BY JULIUS A. PALMER, JR.

SINCE the JOURNAL published an account of poisoning by mushrooms, the daily papers have reported three such cases, of which two were fatal. An unknown hand has sent to the writer a copy of an essay by Dr. Isaac Ott, demonstrator of physiology, University of Pennsylvania. It is on the use of atropine as an antidote to muscarine. Many physicians may not have seen this article; therefore we quote from it the following experiment of Dr. Ott, which is very valuable:—

“Frog, sternum removed. 3.55 P. M.: heart-beat thirty-six per minute. 3.58: .0005 grain muscarine subcutaneously. 4.00: heart stopped in diastole; on pricking makes a contraction; the ventricle is distended with blood, bulbous. 4.03: .001 grain atropine subcutaneously. 4.05: it spontaneously began to beat twenty-eight per minute. 4.09: heart-beat thirty-six per minute. It continued beating till next morning, and animal had completely recovered from the paralysis induced by muscarine.”

A second experiment upon a toad gave almost identical results. It is remarkable that certain ideas are suggested to the minds of different men at almost exactly the same time. Thus we have contests over the