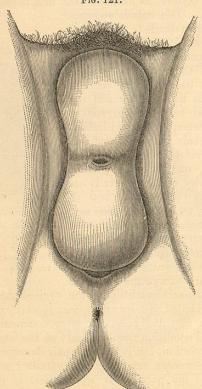
This growth or extension of the cervix takes place from within outwards, and involves a process of eversion. That is, the hyperplasia is most active at the inner and lower part of the cervix. Growth being in excess at this part, eversion and elongation downwards necessarily follow. Then the increased bulk and weight of the organ favor descent, which is imperfectly opposed by the attendant relaxed state of the vagina, and the other supports of the uterus. The presence of the lower part of the cervix near the vulva then excites reflex action, and the consequent straining efforts increase the protrusion and the congestion. In this prolapse the two opposing forces of downward pressure upon the fundus uteri, aided by the increased weight of the cervix, and of pulling up upon the cervix by the fundus of the vagina and the attachments to the bladder, tend still further to promote eversion and downward growth.

Fig. 121.

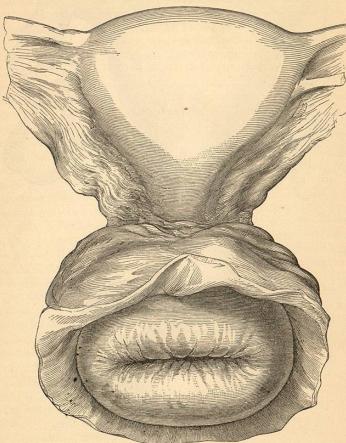


Form of Advanced hypertrophic Elongation of the Cervix Uteri. The two Lips being extruded outside the Vulva, diverge (R. B.). (Half-size.)

In some cases the two lips elongate separately, so that when a bivalve speculum is introduced, and the blades are expanded, the two lips are made to diverge, exposing the cervical cavity between them. I have represented this condition, which I believe is frequent, in Figs. 120, 121. The os gapes like an alligator's mouth.

In the earlier stages, whilst the os is still in the vagina, the lips are flattened together by the walls of the vagina closing upon them. When opened by the speculum, endometritis is always seen. When the part has grown outside the vulva, the two lips freed from outward compression diverge and expose the interior of the cervix, just as the bivalve speculum caused the lips to diverge whilst the part was still intra-vaginal. This eversion is also favored by the compression exerted by the vulva above the os.





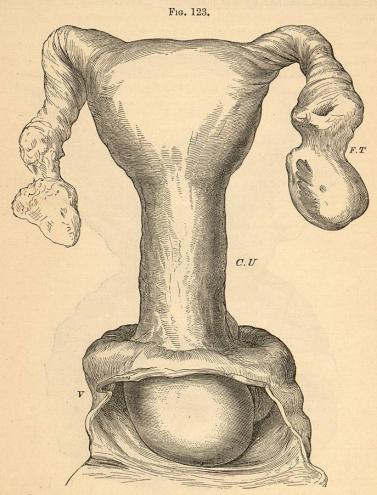
Hypertrophic Elongation of both Supra and Infra-vaginal-portions of the Cervix Uteri, with Atrophy from Pressure and Dragging of the Cervix, and Tumefaction from Strangulation at the Os Internum. (King's College Museum, No. 9902. Nat. size.)

In a memoir on "Hypertrophic Polypi," I directed attention to a circumstance which marks the extreme activity of the growth of the lower segment of the vaginal-portion. This is the frequent association of small

¹ St. Thomas's Hospital Reports, 1872.

polypi at the os uteri with this hypertrophy. They are identical in structure with the hypertrophied cervix from which they spring. (See

The hypertrophic polypus of the cervix uteri, then, is simply an accidental outgrowth from the hypertrophic cervix. It differs in this respect from the fibroid or myoma of the body of the uterus. The latter begins



Great Hypertrophic Elongation of the Supra-vaginal-portion of the Cervix Uteri. F. T. Fallopian tubes also diseased. v. Vagina containing spherical infra-vaginal-portion of cervix uteri. C. U. Cervix uteri elongated. (Bartholomew's Museum, No. 32.30. Nat. size.)

from what may be called an aberrant nucleus in the muscular wall, and by its own growth causes hypertrophy of the uterus. But they are met with occasionally in association with fibroid of the body of the uterus.

These polypi sometimes form at a comparatively early period in the history of hypertrophy of the cervix. But they are more frequent in the advanced stages, and especially when the elongated cervix has protruded beyond the vulva.

I may here call attention to a noteworthy fact in the history of hypertrophic elongation of the cervix uteri. When this condition has reached its extreme limit, the cervix and uterus most frequently measure exactly 5 in.—that is, just double the normal length. This I have demonstrated so frequently to my classes by the sound that I have come to regard it as a law. The cases in which this length is much exceeded are rare.

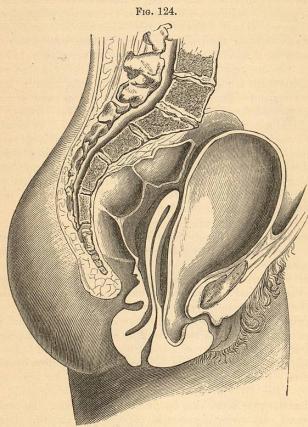
There are other conditions which appear to cause hypertrophic elongation of the uterus. These I have observed under various conditions where the uterus was exposed to displacement and pressure, and to stretching. In some cases the first factor in the process was pregnancy. For example, in extra-uterine gestation, the uterus, feeling the stimulus, enlarges; and the enlargement is maintained perhaps for some months by the advancing development of the embryo; then if the uterus becomes displaced, as by being pushed forwards, or to one side, adhesions forming between it and the fœtal sac, elongation is pretty sure to occur. A similar effect is produced sometimes when involution of the uterus is prevented by pressure upon it from the masses of plastic matter resulting from perimetritis. Fibroid tumors not uncommonly cause hypertrophic elongation by a combined process of interstitial growth, stretching, and pressure. Ascitic fluid distending Douglas's pouch, and thus causing a kind of vaginal rectocele, may induce prolapsus.

Another form of hypertrophic elongation is seen in Fig. 123.

In this case the elongation chiefly affects the supra-vaginal-portion of the cervix. Looking at the part below the reflection of the vagina, there is little appearance of hypertrophy. The long thinned cylindrical appearance of the cervix above the reflection of the vagina suggests the conjecture that the body of the uterus has been dragged upwards, whilst the cervix has been grasped by the surrounding structures.

The drawing (Fig. 124) accurately taken from a unique and valuable preparation in St. Thomas's Museum, illustrates many of the most interesting features in the history of hypertrophic elongation. An especial value of this preparation consists in the relative position of the parts being perfectly preserved. The changes undergone by the uterus are remarkable. The body of the uterus is decidedly elongated; it looks as if it had undergone stretching by pulling downwards. Its walls are a little thickened; its cavity is enlarged, especially in length. The demarcation between the canal of the cervix and that of the body is scarcely distinguishable. This may be partly due to senility. The cervix has undergone enormous elongation; and the part between the sacculation of the bladder and the rectum is remarkably thinned; it looks as if it had been drawn out, so that its length had been acquired by pulling, as when we stretch an elastic tube.

What is the cause of this elongation and thinning of the cervix? In the first place, it must be observed that these two conditions do not always coincide. If we examine a case of comparatively recent formation, before the subject has entered the climacteric, we shall not find the substance of the cervix thinned. It is a thick, firm cylinder throughout its length. On the other hand, if we examine a case of long standing in an old woman, we do find this thinning. The conclusion seems to be legitimate that the thinning is consecutive. It is a process of atrophy, partly senile, partly the result of continual stretching which bears upon the weakest point of the canal, and partly from constant pressure between the distended sac of the bladder and the loaded rectum. I believe the thinning is also caused by the constriction to which the elongated cervix is subjected where it is embraced by the vulva.



Hypertrophic Elongation of the Uterus (R. B.). (From a specimen in St. Thomas's Museum. One-third size.)

The entire length of the uterus in this specimen is about seven inches. The fundus and body are somewhat lower in the pelvis than natural; the body has undergone apparently very little elongation, the chief excess of longitudinal growth being spent upon the cervix. The two lips of the os uteri are much hypertrophied and somewhat everted. They form a mass covered by the everted vagina outside the vulva. That this is the result of downward growth, not of simple prolapsus or stretching, is seen in the condition of the bladder and of the ante-uterine and retro-uterine peritoneal pouches. The base of the bladder is carried down along with the

down-growing anterior wall of the cervix uteri, forming a sacculated pouch below the level of the urethra and therefore below the symphysis pubis. The urethra is also distorted into a curve, of which the convexity looks upwards, the bladder-end of it being carried downwards along with the base, so that a catheter to pass would have to be directed, first a little upwards, then backwards and downwards. The body of the bladder is enormously enlarged; that is, its capacity is greatly increased, but its walls are not materially thickened. The change seems to be simply distension, probably the consequence, not of actual obstruction to the passage of urine, but to a habit of long voluntary retention acquired through the desire to avoid the irritation caused by the dribbling of urine over the protruding mucous membrane of the everted vagina. The fundus rose as high as the umbilicus, and considerably higher than the fundus of the uterus. The peritoneum, descending behind the abdominal wall, is reflected upwards over the bladder at a point about two inches above the symphysis pubis. It descends behind the bladder quite down to a point on a level with the sacculated pouch of the bladder; that is, below the level of the lower margin of the symphysis pubis. Rising over the fundus uteri, the membrane descends behind, forming a Douglas's pouch quite below the vulva. The only part not much disturbed is the rectum. Of course there is no apparent vagina, since the down-growing os and cervix uteri have carried the vagina before them, completely everting it and turning it into an investment of the protruded parts.

The specimen and the drawing exhibit very clearly the danger of amputating the hypertrophied cervix. It would not be possible to remove more than a portion of the os without opening the retro-uterine peritoneal pouch. It also explains the difficulty commonly encountered in keeping the protruded parts inside the pelvis by pessaries. The drawing exhibits the relations of the bladder, uterus, and rectum, exactly as they were found; that is, in apposition with each other. There were no folds of intestine descending between them in the anterior or posterior peritoneal pouches. In most cases probably when prolapse has begun, the vagina contracting upon it tends to cause elongation. This constricting influence is most conspicuously seen when a part protrudes beyond the vulva, where a ring of muscle embraces the protruded part.

In some cases the elongation is not uniform. It affects the two lips of the os unequally. The anterior lip may be almost alone affected. This is thought to be explained by its being directly within the influence of the traction made on it by the prolapsed bladder. This produces the singular appearance termed by Ricord the "col tapiroide." The inner surface of the lengthened lip has sometimes a channelled appearance, the continuation of the cervical canal.

I think this special elongation of one lip is to be explained as follows: In several cases, where the tongue-shaped elongation of the anterior lip was very marked, the posterior one remaining short, there was strong retroflexion of the uterus with enlargement of the body of the uterus. The consequence of this condition was that the vaginal-portion was subjected to protracted compression against the symphysis pubis. In some cases the compression was brought into evidence by retention of urine. Under this compression, the anterior lip becomes flattened and elongated.

A similar change does not take place in the case of simple retroversion in which the vaginal-portion is tilted up above the symphysis. Nor does it commonly take place in ordinary cases of retroflexion in which the uterus, not greatly exceeding the normal bulk, finds ample room in the

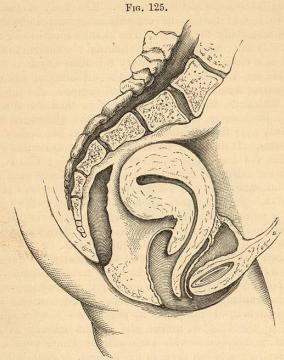


Diagram showing how Hypertrophic Elongation of the Anterior Lip of the Os Uteri is caused by Pressure under Retroflexion (R. B.).

pelvis, and thus does not jam the vaginal-portion against the symphysis. When this elongation has become pronounced, it causes irritation of the vagina, and leucorrhœa. I have cured it by amputating the redundant portion, and maintaining the uterus in its due relations. (See Fig. 125.)

The Etiology of Prolapsus, Procidentia, and Hypertrophic Elongation of the Uterus.

In further studying this subject, it is desirable to start with an enumeration of the different circumstances under which these conditions have been observed.

I have seen prolapsus uteri in virgins caused, 1, by attacks of epilepsy; 2, by violent coughing; 3, by the dragging of a polypus; 4, by succussion, as from a fall upon the nates, and from railway collisions. In the first, second and fourth cases the prolapsus may be called acute. It is produced by sudden violence, tending to drive the uterus and other pelvic

contents out through the vulva. It is liable to be attended by acute inflammation, and is commonly marked by excessive local pain. 5, by the pressure of an ovarian or other tumor upon the uterus; 6, by habitual over-exertion during menstruation, when the local conditions resemble those of parturition; 7, by straining at stool.

Roberton and Whitehead, of Manchester, were consulted respecting a girl, aged fifteen, who had just received a sudden fright. The entire uterus was beyond the vulva and external to an intact hymen. It was replaced, and no future inconvenience resulted. McClintock has seen three cases where the displacement resulted solely from the violent efforts required in defecation to overcome an organic stricture of the rectum. I have seen prolapsus in a virgin produced I think in the following manner: habitual loading of the rectum by scybala below the level of the os uteri tilted the cervix forward, and consequently the fundus backwards. These efforts at defecation throwing the expulsive force more upon the anterior wall of the uterus would produce retroversion and prolapsus.

But it is during the exercise of the child-bearing function that prolapsus is most common. To the accidental causes which produce it in virgins, are now added causes springing from sexual relations attended or not by pregnancy. The dominant feature of these causes is increase of bulk arising from physiological or morbid congestion, from inflammation, from imperfect involution after labor; this is primarily or secondarily attended by relaxation of the structures which support the uterus, including the ligaments, the vagina, and the connective tissue of the pelvis. The vagina alone, if in a state of healthy contractility, will maintain the uterus in sitû; but when its contractility is impaired, the uterus squats down, or sinks in it, producing a minor degree of vaginal depression or inversion. The close attachment of the anterior wall of the cervix uteri to the bladder, making the point of union the most fixed point or centre of movement of the uterus, renders it impossible for the cervix to fall without dragging the base of the bladder down with it.

In discussing the etiology of prolapsus great importance is usually laid upon the study of the mechanism by which the uterus is suspended in its place. The attachments of the uterus have been described. (See Chapter I.) We have seen that it is slung or suspended in the folds of the broad ligaments to the sides of the pelvis, and steadied to a certain extent by the round ligaments in front, and the utero-sacral ligaments behind; that it is in a manner balanced upon the vagina, which, in its healthy state, forms an elastic muscular column of considerable strength; that it is attached by its anterior wall to the base of the bladder; and that it is further supported by what may be called the padding of the pelvis, constituted by the connective tissue between the peritoneal folds, the vessels, nerves, and other organs. No doubt the proper preservation of the position of the uterus is due to the integrity of all these structures. The power of the vagina as a support to the uterus, and as an agent in restoring it to its place, is capable of demonstration. When the speculum is introduced, the widening of the vagina produced by it, shortens the canal and brings the uterus down; as the speculum is being withdrawn, the vagina is seen to contract strongly behind it, and the consequent restoration of the organ to the normal columnar state carries the uterus up again. And we may at any time by strong astringents restore

the vagina, partly at least, to its original condition. West further insists that the curved direction of the vagina, and the angle at which the uterus is inserted into it, afford a further obstacle to prolapsus; whilst at either extremity the vagina is strengthened by its connection through the medium of the pelvic fascia with the bladder and rectum above, and by the sphincter which surrounds it below, as well as by the other muscles of the pelvic floor and by the perineal fascia between the two layers of which those musclei lie.

The value of experiments on the dead body designed to show how the uterus maintained its position, notwithstanding that the vagina was cut away, as by Hohl and others, or after division of the ligaments, seems to me to be exaggerated. It is clearly, indeed, proved that the uterus cannot be dragged out of the vulva, unless considerable force, amounting, says Le Gendre, to from thirty to one hundred pounds be used. But it is also certain that the broad ligaments must at the same time undergo great stretching or be severed. The conditions of the living body are widely different. In the dead body there is no turgescence from vascular fulness, elasticity of tissue, muscular contractility, constant movements from respiration and the varying states of the bladder and rectum; indeed, all the conditions as we meet them in practice are wanting. Deductions drawn from experiments upon the dead body can only be applied with great caution and reserve. For solution of the main questions we must rely upon clinical observations. In the great majority of cases prolapsus is accomplished by small forces acting continuously or with brief intermissions over long periods of time.

The fact that prolapsus does not occur in healthy structures, except under the influence of direct force, points to the necessary conclusion that the sustaining tissues of the uterus lose their power of resisting a down-bearing force through changes wrought in them by disease. With the knowledge of these two factors: force acting upon tissues weakened by disease, the explanation of the mechanism of prolapsus is not far to seek. The downward force is always acting. It is exerted at every expiratory effort, and is exaggerated by coughing, or by straining at stool; by every exertion, in short, which fixes the chest. If the resistance be diminished, the pelvic organs will be carried down, the ligaments will undergo gradual stretching, and the vagina, wanting tone and contractility, squats down under the pressure, the uterus sinking into it. Then the force of gravity is added, and is always at work when the body is in the upright posture.

The vagina, then, is a passive, not an active, factor in the production of prolapsus. It yields and permits prolapsus, because its contractility and power of resistance are weakened. It does not cause prolapsus, although when prolapsus has begun, it may aid the subsequent steps of the descent. This discussion is not without practical interest, because the knowledge of the mechanism by which prolapsus is brought about must govern the principle of treatment. In studying the conditions of treatment, the first thing that strikes us is, that we cannot act directly upon the broad and other ligaments. We cannot, in nautical phrase, brace up or tauten these. We must act from below. Hence we are reduced to two principal sets of mechanical expedients. The first set comprises the mechanical supports, as pessaries, which help to lift up the uterus and anterior wall of the vagina. The second set comprises the various methods of strengthening the vagina so as to restore its power of

supporting the uterus.

The efficacy of the vagina, especially of the muscular posterior wall which includes the perineum, in sustaining the uterus will be clear to any one who will remember the opposition it offers to the descent of the child's head in labor. Nor can any one who has felt the thick firm inclined plane in which muscle so largely enters, formed by the perineum and the posterior vaginal wall, doubt its power to support the anterior wall of the vagina and the uterus. We may, in fact, feel the uterus resting upon it. Thus, when this inferior support is lost, as when the perineum is lacerated, the tendency to prolapsus is greatly increased; and we find the use of an external perineal pad, which acts as a substitute for the perineum, of signal service in supporting the uterus. It must not, however, be concluded that prolapsus is a necessary consequence of laceration of the perineum. I have seen many cases in which the sphincter ani was torn through, and yet the uterus was held in sitû by its other natural supports.

We see that in virgins, force alone exerted upon healthy structures is enough to cause prolapsus. This force obviously comes from above. It is produced by the pressure of the intestines upon the uterus, bladder, and broad ligaments propagated from the diaphragm and abdominal walls.

Now, this force which acts alone in a certain number of cases, enters as an important factor into every case. It acts, of course, with special advantage after labor, when the bulk and weight of the uterus are increased, and when all the tissues are relaxed. After labor at term, and after abortion, the mobility of the uterus is enormously increased. Any one who has frequently been called upon to remove a retained placenta in abortion, will have satisfied himself upon this point. The uterus is, in the first place, at a lower level than usual; and in the next, the most moderate traction will draw it down to the vulva with a facility unknown at other times. This implies that the broad and other ligaments are elongated and more yielding, and that the vagina is relaxed.

For the above reasons I am of opinion that, in the majority of cases, prolapsus of the uterus is a primary affection. But there are facts which favor the view more prevalent in Germany, which is, that prolapsus is secondary upon prolapsus of the vagina. For example, if we examine a woman the subject of procidentia when the mass is within the vulva, and tell her to bear down, we see the anterior wall of the vagina appear first; that is, there is apparent vaginal cystocele preceding the appearance of the uterus. It is inferred that the vagina drags down the uterus. The vaginal cystocele is also, it is said, the first condition. I suspect there is a fallacy in some of these observations. If by the hand in the vagina we watch the course of events during an expulsive effort, we feel the uterus borne bodily down under the force of the superincumbent pressure. Of course the uterus and bladder, being intimately adherent, must descend together. The vagina can only be forced downwards through pressure exerted upon the uterus, or bladder, or both. It is possible, of course, that frequent pressure exerted by the distended bladder may push down the anterior wall of the vagina, which in its turn will drag down the uterus. But that such a process is not frequent, seems to be proved by the fact that one almost constant factor in prolapsus uteri is enlargement and increased weight of the uterus, which must necessarily destroy the balance between the forces that suspend the uterus and those that tend to drive it down. This correlation being destroyed, the uterus cannot but fall, and it is unnecessary to invoke an independent or superfluous force, such as the downward dragging of the vagina.

DISPLACEMENTS OF UTERUS.

I have frequently made the observation with such care that I am sure of the fact, namely, that the earlier stages of hypertrophic elongation of the cervix are accomplished whilst there is no perceptible descent of the bladder, no bladder distress, and no prolapsus of the anterior vaginal wall. I have even seen cases of marked hypertrophy of the lips without perceptible prolapse. I have also seen the converse, that is, decided vaginal cystocele, the anterior vaginal wall relling out under straining, without any hypertrophic elongation of the cervix. There is not, therefore, any necessary connection between the two conditions, since each may exist without the other. I go further, and affirm that hypertrophy of the vaginal-portion may take place independently of prolapsus of the

Symptoms, Effects, and Course of Prolapsus.—When prolapsus is produced suddenly, the symptoms attending are generally complicated with the effects of the accident which caused the displacement. This may be called acute prolapsus. Thus, when produced by a fall or concussion, there may be other injury besides the prolapsus, and there is always more or less shock. Then, the sudden succussion occasions violent stretching of the uterine supports. As these are all connected with the peritoneum, inflammation of this membrane is very likely to follow; there will be severe pain over the whole abdomen, especially acute in the pelvis, tenesmus, or bearing-down, perhaps uterine hemorrhage, and severe febrile symptoms; and bladder and bowel distress.

Sometimes the parts quickly resume their normal position, especially if rest in the horizontal posture be duly observed. But this will not always be the case. The uterus may have been driven through the pelvis with such force as to break through the hymen; and the uterine ligaments, once stretched, do not quickly recover their pristine condition. Moreover, the general health may be so affected by the shock and local injury, that the recovery of tone of the muscles and other tissues will be retarded by impaired nutrition.

When prolapsus takes place slowly—chronic prolapsus—the symptoms are less urgent. As prolapsus is surely attended by antecedent or consequent engorgement, or other morbid state of tissue, the symptoms of course are a complication of effects depending upon the tissue changes, and of mechanical effects due to the displacement. The first class of symptoms will be described in their appropriate place. The mechanical conditions are traced to dragging and to pressure. The uterus having lost the support of the vagina, and of what may be called the padding of the pelvis, drags upon the utero-sacral and broad ligaments, which are stretched and elongated. In the upright posture, especially, and under bodily exertion, the prolapsus is necessarily increased; the sense of

dragging and bearing-down is then aggravated. At stool and during micturition, some additional difficulty being felt from the pressure of the uterus, greater straining is exerted to empty the bladder and rectum. The uterus itself being larger and pressing upon the lower part of the vagina and near the anus, excites reflex irritation, the response to which is seen in increased bearing-down or expulsive efforts. The uterus, in fact, acts now as a foreign body. Its presence in a situation not accustomed to receive it, is resented, and the effort at ejection increases the displacement, and constitutes a main difficulty in treatment. The dysuria and dyschezia1 increase in proportion as the patient continues in an upright posture, and as the uterus descends nearer to the vulva. Besides these reflex effects upon the motor nerves, the patient feels pain from the congested state of the uterus, from its pressure upon surrounding organs, from dragging upon the peritoneum. These pains are intra-pelvic, sacral, dorsal, and lumbar, partly from indirect pressure upon the pelvic nerves and sacral plexus, partly from irritation of the ganglionic nerves, and partly from the spinal exhaustion, resulting from continual irritation.

The congestion often leads to menorrhagia, or even to hemorrhages in the intermenstrual periods; and leucorrhœa is hardly ever absent.

When the uterus in its descent comes to press upon the vulva, the muscles, the elastic tissue, and mucous membrane, and skin which surround and constitute the walls of this opening, undergo distension. Under continual pressure the opening enlarges, the perineum especially is thinned out, it dilates, is partially everted, and rounded. The contractility of the vulva is greatly impaired; the floor of the pelvis no longer gives adequate support to the structures above it. Prolapsus then easily passes into procidentia. The inverted vagina becomes virtually a hernial sac, which receives the uterus and often a mass of small intestines. Although the peritoneum is drawn down so low that Douglas's pouch is outside the vulva, the stretching of the ligaments having been very gradual and slow, a degree of accommodation and tolerance has been acquired, so that the pain of dragging may be even less than during the early stages of prolapsus. The uterus being now outside the range of the sphincters, the reflex expulsive efforts and pains may also be less troublesome. The subjective symptoms change in character. The local symptoms are different. Under great exertions in the upright posture, the dragging upon the peritoneum may be very severe.

Procidentia Uteri.—The swelling protruding between the thighs is at first of an oblong, nearly cylindrical form, and terminates below in a narrow extremity, in which a transverse opening, the os tincæ, may be discerned. At a later period it has a pyriform appearance. The vagina turned inside out, which forms the investment of the swelling, changes its character and appearance. From exposure to the air, the most villous character of mucous membrane is lost; the surface becomes dry, in places shining. There is, as Virchow describes it, a histological transformation. The soft epithelium gives way to epidermis, the histological equivalent. Often there are patches of inflammation and ulceration. These patches get covered with a thin pellicle resembling cuticle. It is a kind of scab.

¹ Difficult defecation, from δυσ- and χέζω.

If peeled off, the surface easily bleeds. Sometimes ulcerations occur where they are easily overlooked, namely, in the fold at the base of the prolapsus, especially at the posterior part. I have seen nodular irritable ulcerations here which disappeared under rest.

The patches are usually described as being the result of friction, of chafing against the thighs and dress, and of urinous irritation. I have certainly seen sores formed on the most depending part of the tumor where it was exposed to chafing on sitting down: and on either side where it came into contact with the thighs. The vaginal-portion is no longer conical; the cervical portion swells from stasis; and the vagina on the stretch pulls open the os, exposing the inside of the cervix.

The walls of the vagina get thickened partly from hypertrophy, partly from infiltration and retention of serum in the connective tissue. This is an effect of the dependent position; the vessels can with difficulty return the blood poured into them. The stretching smooths out the rugæ. The mass has often a dark-red or even a purple color, but is often pale.

The friction of the mass against the clitoris is at times a source of distress.

Chronic inflammation of the uterus is a frequent concomitant. The uterus becomes painful to pressure. Its situation exposes it to violence, which may induce acute inflammation. This may also be induced by the use of improper pessaries, and the inflammation may extend to the surrounding tissues. Inflammation of Bartholini's glands is not uncommon.

The mass outside may be seized with gangrene, the result of strangulation at the vulva. After prolonged exertion in the upright posture, the parts get full of blood, the return being impeded by the attendant swelling of the labiæ vulvæ. I do not think this event is common. But we have seen a remarkable example in St. Thomas's Hospital. A very large part of the surface of the procident mass fell into sphacelus. The labia vulvæ were tumid, showing the dull-red of erysipelas or threatening gangrene. The patient sank in a few days. The autopsy was performed by Dr. Payne. The sphacelus had involved nearly the whole surface of the inverted vagina, and in some places perforation had almost been accomplished. The uterus had undergone no marked hypertrophic elongation. Nearly the whole of the organ had been contained in the inverted protruded vaginal sac. The bladder was greatly enlarged; there was retrograde dilatation of the ureters and of the pelves of both kidneys.

Another danger to be borne in mind is that of rupture or laceration of the vagina. Dr. Fehling relates (Arch. für Gynäk., 1874) the case of a woman, aged 63, who had long suffered from procidentia, forming a mass as big as a child's head. After carrying a bucket of water up some steps, she found she was unable to return the mass as she had done before. Using some force, she felt as if something had given way, and intestines came through. Collapse set in. Dr. Fehling found a mass of small intestines as big as a man's head protruding, cold, without movement. He in vain endeavored to return it. He punctured the intestines, and still failed. The woman died in eleven hours. This history suggests the necessity of using the utmost gentleness in attempting to return a procident uterus. The structures have undergone changes that impair their tenacity, making them more lacerable.

As a general fact, it may be stated that the tendency of prolapsus is towards aggravation. The cases of spontaneous cure are rare. The only qualification of this proposition applies to the minor degrees of prolapsus. Some cases have been cured by sloughing of the vaginal walls, and the consequent cicatricial contraction of the canal. Prolapsus may also be said to be removed when, cancer supervening, the spreading disease seizes the surrounding parts, and keeps the uterus fixed in the pelvis.

The changes induced in the organs concerned in procidentia are well described by Scanzoni. The vagina, uterus, and broad ligaments, bladder and rectum being removed from the pelvis, we are struck with the size of the uterus, and with the expansion, relaxation, and want of elasticity of the vagina. The vagina has lost its rugæ; its surface is usually smooth, often livid, and if the prolapsus has lasted long in an extreme degree, it is very dry, covered with a thick layer of pavement-epithelium, which gives to the mucous membrane the aspect of epidermis. The vaginalportion, commonly hypertrophied, often indurated, but sometimes very swollen and softened, is of bluish-red or slate-gray color; around the orifice it is deprived of epithelium and covered with erosions and ulcerations. Often, after a long persistence of the disease, a true inversion of the cervix is produced; the orifice begins by being sensibly dilated; its borders form a circle an inch or more in diameter through which the cervix is inverted, so that the mucous membrane peculiar to the neck, covered by its vitreous secretion, is seen. A section of the uterus displays considerable hypertrophy with engorgement. The cavity is always much dilated, especially lengthwise, and the mucous membrane shows

There is also frequently follicular inflammation at the os uteri in the younger women. But in the more aged the follicles have commonly undergone atrophy after bursting.

Three conditions may exist in apparent procidentia uteri: 1. Hypertrophic elongation of the cervical portion of the uterus. This, of course, is attended by eversion of the vagina, the fundal portion of which is drawn down by the advancing os uteri. 2. The case may be one of eversion of the vagina, the pouch formed by which, projecting, somewhat in the form of a sausage, contains the uterus at the bottom perhaps of normal size, or, as in aged women, atrophied. 3. There is equally inversion of the vagina; the pouch outside the vulva containing the uterus retroflexed or doubled up.

The distinction between these three cases is easily demonstrated. 1. In the case of hypertrophic elongation, if we pinch the tumor upwards from the os uteri, we may trace the elongated cervix as a hard cord up into the pelvis as far as the finger and thumb will reach. If we then introduce the sound, we find this instrument will pass up along the uterine canal quite into the pelvis, until its point is arrested about on a level with the pelvic brim—that is, the sound will usually run a length of five inches. If we turn the point of the sound when thus arrested towards the anterior abdominal wall, we may generally feel the fundus of the uterus by pressing a hand in to meet it above the pubes. We also know when the point of the sound has reached the fundus uteri by the sense of