of the advisability of operating, and then he had been overruled on both points by a strong consultation.

Allow me to recapitulate. The only evidence of pregnancy was three weeks' delay of menstruation. Authorities state that in cases of extra-uterine gestation, "it is universally admitted that the uterus undergoes sympathetic engorgement, the cervix softens, and decidua membrane forms." In this case the testimony of both Dr. Stedman and myself is that the cervix was long and firm. Of the formation of decidua we had no means of judging. There had been no morning sickness. It is also stated that in tubal pregnancy the rupture is generally determined by some accidental circumstance between the fourth and twelfth week, rarely later. In this case, to be sure, the onset was sudden and followed the act of defecation, in the eighth week since last menstruation, but similar attacks of intense abdominal pain had been the accustomed precursors of the menstrual flow.

The countenance is said to be deadly pale. Such was the appearance in the present case, but there was not "the threadly almost imperceptible pulse" usually found in such cases, and how many of us have not witnessed a deadly pale countenance in the subjects of intense abdominal pain at the inception of menstruation. Only two days after the occurrence of this death I was called to a simple case of delayed menstruation which presented these very features.

We are also told that accompanying rupture "there is perhaps vomiting," and that "the mental faculties remain clear." Such were the conditions in our case, but how does *this* differ from what is frequently seen in dysmenorrhœa?

After rupture, a few drops of blood are said to escape from the uterus, as in this case. But, again, how frequently the same thing occurs in dysmenorrhœa, and then ceases for a while before the flow becomes established.

Playfair sums up by saying that "too often death occurs without the slightest suspicion of its cause."

Again, gentlemen, let me ask you, can you throw any light upon the means of diagnosis, and, if the diagnosis is satisfactorily made out, what is the best course to pursue, either before or after rupture?

The autopsy presented nothing unusual beyond the accidental condition, except the caseous degeneration of the bronchial glands, and the studding of the external coat of the intestines with myriads of minute miliary tubercles. Upon opening the abdomen, liquid blood was found filling all the interstices between the intestines, and the pelvic cavity was completely filled with clotted blood. The clot was found to be firmer around the right ovary and extremity of the right Fallopian tube, which was completely encased with a still firmer clot. By carefully removing this, little by little, the tumor was found in the outer third of the tube, of ovoid shape, about one and a half inches long by three fourths inch in diameter. Upon incising the tube over it, the congested villi of the chorion were beautifully exposed, and, upon opening the sac, a seven weeks' fetus was seen snugly stowed away. The point of rupture seemed to have been where the funis was attached, and where the placenta would have formed, rupture having taken place, as usual in such cases, before the formation of the placenta. The Fallopian tube was found to be impervious from the site of the cyst to the uterus. This is stated by some authorities as one of the causes of

ectopic gestation, but Playfair says it is probably induced by the abnormal gestation.

Among the causes laid down are old adhesions or bands constricting the tube. None such were found at the autopsy, but adhesion bands were found connected with the ovaries, and may have been the cause of the severe pain accompanying menstruation. As these pains dated from the miscarriage, two years previous, perhaps it is reasonable to presume that the adhesion bands were the result of the inflammation accompanying that process.

The interior of the uterus showed a marked decidua membrane, and the right ovary clearly showed the recent corpus luteum of pregnancy, thus corresponding with the tube in which the fetus was found. One case is on record where the recent corpus luteum was found in the ovary of the opposite side from the tubal pregnancy, while the corresponding ovary furnished none.

A PEDICULATED TUMOR OF THE ANTERIOR LIP OF THE CERVIX UTERI.¹

BY EDWARD T. WILLIAMS, M. D.

THE tumor here shown possesses interest only from the diagnostic peculiarities of the case in which it oc-

Diagram representing uterus with tumor attached. Side view.

Diagram representing tumor and pedicle, rear view, showing os uteri.

curred. I was called to it in consultation by Drs. O'Connell and Mecuen, of Roxbury, January 24, 1880. The patient, a woman of about thirty-five years, married, but without children, had been suffering for fourteen months with profuse menstruation and a white, at times fetid, discharge. Sexual intercourse had been regularly indulged in and was not painful, though the husband had complained of some obstacle in connection. The night before the medical consultation she had been taken with bearing-down pains, followed by the protrusion of a solid body from the vulva.

The body as I saw it was about the size of a large apple. It was red in color, and had a firm, fleshy feel. In shape it was round, somewhat knobby, insensitive to the touch, and having a smooth, mucous surface. It grew from a stalk one and a half inches in diameter, four inches in length, perfectly round and smooth, and as it seemed springing directly from the roof of the vagina. It was suggested by one of the gentlemen present that it might be an inversion, but this was negated by its pediculated shape and the absence of any history of pregnancy. The question was, if it was a polypus, where was the *os uteri*? On the first examination no traces of the *os* could be found, the pedicle seeming to grow directly from the vaginal roof, the

¹ Read before the Norfolk District Society, January 9, 1883.

finger passing to the bottom of the *culs-de-sac* on all sides, and no *os*!

The patient being etherized and a finger inserted into the rectum, the tumor at the same time being drawn down, the body of the uterus was plainly felt in its natural position. Again, with the finger in the rectum and the hand over the pubes, the tumor being pushed up by a third party, the fundus uteri was clearly felt. A catheter in the bladder confirmed the fact still farther. This led to a more careful examination of the pedicle of the tumor, when, passing my finger carefully over its surface, I discovered on its posterior aspect about an inch from its upper end a small triangular depression, base upwards, about large enough to contain a split pea. On pushing the point of a sound into this depression I was heartily pleased to find it enter, proving it to be the *os uteri*. The sound passed upwards without obstruction to the depth of two and a quarter inches. The tumor was simply a prolongation with hypertrophy of the anterior lip of the cervix.

The diagnosis being established the treatment was clear. The pedicle was divided high up by Dr. Mecuen with the *écraseur*. There was no hæmorrhage, and examination less than a fortnight after showed nothing further than a certain thickening and slight elongation of the anterior lip.

RECENT PROGRESS IN OPHTHALMOLOGY.

BY O. F. WADSWORTH, M. D.

EYE SYMPTOMS IN SPINAL DISEASE.

IN a discussion on this subject in the Ophthalmological Society of the United Kingdom,¹ Dr. Gowers called attention to two classes of symptoms, optic nerve atrophy and intra-ocular palsies. Two general facts deserved mention at the outset. First, that these symptoms are associations and not effects of the spinal lesion. The evidence of this is, that disease of the cord of any nature may exist, in any degree, in any part, without the occurrence of these symptoms (if we except the rare paralysis of the dilators of the pupil in disease of the sympathetic tract in the cervical region of the cord); that the ocular symptoms, which may be absent when the cord disease is advanced, may exist in extreme degree when such disease is in an early stage; and that, with the exception of the sympathetic symptoms just mentioned, we know of no anatomical connection or functional mechanism by which the disease of the cord can produce the ocular symptoms. Secondly, that the ocular symptoms result from degenerative processes, and their presence shows that the cord disease is also degenerative, an indication of extreme value in cases in which acute processes mask the underlying degeneration.

Optic nerve atrophy is chiefly associated with locomotor ataxy; in other spinal diseases it is rare. As long as ataxy was believed to be a disease confined to the posterior columns of the spinal cord the concurrence of a peripheral degeneration in the optic nerve was an anomaly; but recent researches, chiefly of Pierret (confirmed in part by Déjerine), have demonstrated the frequency of degeneration in the peripheral cutaneous nerves, and its occasional occurrence in the optic centres, and our conception of the disease is thus enlarged from a mere affection of the spinal cord to a

wide sensory neurosis in which optic nerve atrophy falls into a definite place. But as the peripheral, spinal, and central optic changes cannot yet be detected during life, we must confine our clinical study to associations which can be recognized.

What proportion of cases are tabetic? or, putting the question practically, In what proportion is there neither absence of knee-jerk nor lightning pains, the two earliest symptoms? The question can only be answered by ophthalmic surgeons. If spinal symptoms are altogether absent at the time of examination we are not justified in assuming that they will occur later.

It is more difficult still to determine in what proportion of cases of tabes atrophy occurs, because the spinal and ocular symptoms tend to separate the patients. Probably the proportion does not exceed fifteen per cent. Dividing the course of tabes into three stages, (1) before affection of gait, (2) while the patient can still walk, (3) when he cannot walk except with the aid of another person, it is found that atrophy begins twice as frequently in the first stage as in the second, and very rarely in the third, and a combination of the observations of ophthalmic surgeons and of physicians would probably show the excess in the first stage to be still larger. Not only does atrophy commence, but it advances rapidly in the first stage, while the spinal symptoms often remain stationary; coming on in the later stages of the disease it often has a less progressive character.

The symptoms of the optic atrophy present more diversity than is generally admitted. While color-vision is often impaired early the field for white does not always contract before central vision fails. It may be unrestricted when there is considerable loss of acuity. The affection of sight probably varies in character just as does the impairment of sensation in the legs. Irregular defects in the fields bear upon the question of localizing the degeneration; initial temporal hemiopia has been twice observed, loss of the lower nasal quadrants once, the former suggesting that the chief lesion was at the chiasma. The occurrence of amblyopia without change in the optic disk bears upon the same question; in one case acuity was reduced to one tenth without any visible change in the disk. Rapid increase in the failure of sight is sometimes met with just as is sudden increase in the spinal symptoms. Is this attended with any variation in the appearance of the disk? Some disks are clear and excavated, others are occupied by a soft, gelatinous-looking tissue. Does any difference in course correspond with this difference in aspect? In one case with rapid failure the gray tissue in the disk was very abundant.

In other spinal diseases optic atrophy is very rare; it is occasionally seen in insular sclerosis, less frequently in lateral sclerosis, never in progressive muscular atrophy or myelitis. Probably this is due to the fact that these affect chiefly the motor, tabes the sensory, tracts. In general paralysis of the insane, which, though not strictly speaking a disease of the spinal cord, is often attended with spinal changes, atrophy is more common.

Intra-ocular paralysis comprises the second group of symptoms. Accommodation, associated contraction of the pupil, light-reflex contraction, and skin-reflex dilatation are all subserved by centres lying beneath the aqueduct of Sylvius; the path of the last is circuitous, comprehending the cervical part of the spinal cord and the cervical sympathetic. Like atrophy, the intra-ocu-

¹ Ophthalmic Review, July, 1883.