In this case there was no bad odor from the discharges, as in the former cases, and the effect of the injections in arresting the poison of the septic matter was prompt and striking.

Should antiseptics be used in every puerperal case? I believe so, especially as antiseptics has come to be considered as the use of every means of cleanliness, and the prevention of infectious or contagious matters. And just here let me record it as my fixed belief, that thousands of women have come to their deaths, from the dirt and other matters under the finger nails of their attendants. That dirt, the nest of infectious particles scraped from the body of himself, or possibly bathed in the infectious fluids of another person, is conveyed by means of the touch to the abraded surfaces in the puerperal patient, and she becomes inoculated with the virus that causes her death. I believe that any one suffering from a chronic skin disease, or who is afflicted with a chronic ulcer of any kind, should not attend upon puerperal patients, no more than he who is attending patients with scarlatina or erysipelas. In fact it is my deliberate judgment, that puerperal women should not be attended by the general practitioner at all, and for one I will gladly welcome the day, when I can turn over all such patients to well educated and thoroughly trained lady physicians who will make that their special calling.

Begging pardon for this digression I would say in conclusion that within twenty-four hours after confinement, the use of vaginal injections of carbolyzed water, affords the greatest comfort to the patient, bathing and soothing the neck of the uterus where there may be abrasions or lacerations, and cleansing and purifying the parts. If the discharges become foul in odor, and there is a marked rise in the temperature, then the injections should be *intra-uterine*. One precaution should be borne in mind, in prescribing vaginal injections, and that is to have the hole in the end of the pipe or syringe closed. I have in several cases seen a severe and dangerous uterine colic, caused by the injection passing into the uterus through the patulous and open os. In the rubber syringes that are sold for female use, I often prepare the pipe for such purposes by closing the central hole in the end, and enlarging the others in such a way that a backward current is given to the injection.

IMPORTANCE OF DIAGNOSIS IN OPHTHALMOLOGY.

BY E. WILLIAMS, M.D., CINCINNATI, O.

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If a man were seen firing in the air expecting ducks to fall without looking if any are flying over, he would be brought to court on a quest of lunacy. Why should shotgun practice in the medical profession, similarly aimless, be less criminal evidence of a fool? Rifle

practice in the healing art requires intelligence and skill. No surer proof of a quack can be asked than a prescription containing a great variety of romantic remedies. Quacks and nostrum venders can kill just as well at long range, and with a shotgun, as with an honest, scientific weapon. The honest, educated physician insists on a personal examination before risking an opinion or prescription. Diagnosis demands knowledge, to which there is no royal road.

The prime importance of intelligent diagnosis need not be argued. Narrow notions of specialties in medicine are a great professional misfortune. How often do expectant students propose to study the eye exclusively, without the labor of a regular course of study and a degree? The only antidote to this nonsense is to insist on a good preliminary education, and a thorough study of medicine, through three to five years. If then a specialty is chosen, the choice will be discriminating. In that way only can a foundation be laid in solid rock for a special structure.

The eye is the most exquisite part of the body, and more closely linked with the healthy flow of function in the organism than any other organ. No violinist, however gifted, can become preëminent except he begin the manual training in early years. Shall less be demanded of one who is to play upon the living harp of a thousand strings, with its mixed melody of earthly and heavenly vibrations? Light, nimble and delicate manipulations are eminently required in an oculist. These can only be achieved by handy hands, early, long, and faithfully trained.

But without intelligent diagnosis, even these accomplishments go for nothing. Thorough familiarity with optics, including mathematics, is demanded if anything but mediocrity is expected. No department of ophthalmology is of more practical importance than the anomalies of refraction and accommodation. To a thorough, clear diagnosis in these, the physician must be familiar with physiological optics. The flippant way that practitioners talk about "taking up a specialty," were it not for the tragical consequences, would be simply ludicrous.

The mercenary estimate placed by the public on the faithful army of Esculapius, is due largely to failures of diagnosis and their consequences. With few exceptions, the world don't know the difference between a decent physician and professional robbers. They call them all doctors together. The only way out of this "Slough of Despond" is for all educated, decent medical gentlemen to pool their issues against the bloody and thievish-fingered quacks of all colors and persuasions.

All honor to the American Medical Association for the lofty and only safe ground of its Code of Ethics! No one who lives up to its letter and spirit can ever fall into the dirty ways of irregulars and tradesmen in our noble profession. It is the mean, mercenary spirit that eats out all bowels of mercy and scruples of conscience in a medical man. Broad intelligence and thorough honesty are the qualifications of a true physician. I state a fact, that there are too many medical colleges in this country. It is too easy for the ignorant and unscrupulous to get into the motley ranks of our profession. According to

the *Record*, there are 14 chartered medical schools in the State of New York, graduating annually eleven or twelve hundred students. Some of these many mills must be small, and can grind out from the screenings of the others, dangerous and disgraceful doctors, who, as blacksmiths, would be safe members of society. What is true of New York applies equally to other States.

Reform of these crying evils is timidly seen in the general encouragement to lengthened terms of study, and more thorough preliminary education. But the progress is slow, and too closely watched by jealous and selfish eyes. So-called measures of reform are too often but tricks of the trade. I only speak of these evils, as they bear upon diagnosis and reputable practice, without attempting to suggest remedies. Fewer graduates, of a higher order, are what we need. No advanced step can eliminate *all* quackery, but it will leave behind much driftwood which gives force to the impression that medicine is a trade. Scientific accuracy of diagnosis, and intelligent practice, can best come through thoroughness of study, by educated young men. Correct diagnosis, so important in everything, is peculiarly demanded in ophthalmology. Recent studies of the anatomy, offices and diseases of the nervous system, have thrown a flood of light on some of the most obscure troubles of vision. Language read in the eye is often eloquent in differential diagnosis of diseases elsewhere. The oculist cannot afford to be ignorant of the influence of other diseased organs on the eye. Neither can the practitioner in medicine, surgery or obstetrics, longer get on, without serious knowledge of the settled facts and principles of ophthalmology. Broader investigations and higher knowledge come into demand, just as special studies extend the area of our territorial possessions. Territories belonging to the different branches overlap, and each must understand enough to see mutual relations and diagnostic bearings. A surgeon who cannot tell cataract from glaucoma, or strabismus from deviations following paralysis, will make unpardonable blunders. A cataract operation, where no capacity to see exists, is inexcusably stupid. Every one knows the mutual dependencies of internal pathology and many diseases of the eye. Certain general states, as syphilis, scrofula, anæmia, give rise to the most troublesome eye diseases. Depraved blood, the pabulum of all the bodily organs, is the explanation of many problems in the *ars medendi*. I need only refer to retinitis in albumenuria, diabetic cataract, intraocular hæmorrhages, toxic amblyopia, and all sorts of specific manifestations in the eye. How often does spontaneous extravasation of blood under the conjunctiva oculi tell the skilled physician of the danger of apoplexy? This, in itself trifling symptom, in advanced years portends grave danger, and ought to be heeded. Conscience cannot be satisfied with prescribing eye water in such cases.

But what has ophthalmology to do with obstetrics? To say nothing of the immediate and remote connections of derangements of menstruation, and other uterine diseases, with serious troubles of vision, I instance pregnancy. The occurrence of albumenuria,

in the period of gestation, involves the greatest danger. Puerperal convulsions, the horror of obstetricians, are imminent under such circumstances. Failure of sight from albumenuric retinitis is often the first warning. The retinal changes are so characteristic, that the diagnosis of kidney disease can often be made from them alone. The fatal effects of ophthalmia neonatorum on the eyes of infants, can be seen in all our blind asylums. Nearly half the inmates owe their condition to this disease. Let alone, or treated with old women's remedies, especially if aided by poultices, many of them will lose one or both eyes. This disease can nearly always be prevented. For twenty or more years, I have exhorted my students to wash the eyes thoroughly as soon as the infant is born. The eyes should be opened and clean tepid water made to flow through them, so as to remove all possible poison. This fatal disease is due to inoculation with the mother's secretions. If active gonorrhœa be present, or suspicious discharges, a few drops of a weak solution of nitrate of silver should follow the washing. One to two grains to the ounce is strong enough. This prompt attention will nearly always anticipate the disease. A large number of recent observations in lying-in hospitals, and in private practice, prove this beyond question. Even where the purulent disease has set in, prompt and proper treatment will save the eyes from damage.

The intimate connection of certain eye symptoms with disease of the brain and spinal cord, has long been known. The numerous books and monographs recently published on that subject are nearly all by ophthalmologists. They treat mostly of such phenomena about the eyes and vision, as help to locate the seat and nature of the lesion in the brain. These studies have led to remarkable results in cerebral physiology and pathology. A new field of vast reach has been opened to the study of cerebral localization. The wonderful results of these special inquiries are but beginning to show. A work in German, published in this year, by an oculist of Hamburg, brings together all the known clinical facts about the eye in hemiopia. He desires to show their importance in locating the seat of the brain lesion, be it in the optic tracts or in the visual centres in the cortex.

In the study of locomotor ataxia, much interest has always attached to the two most frequent manifestations in the eye, optic atrophy and extreme contraction of the pupil. The former results, usually, in total destruction of the sight. The latter, when present, persists when all perception of light is extinct. I recall one patient, totally blind for years, where the very small pupils are still the same. In such cases, even when vision is little, if at all impaired, the pupils do not respond to changes of light. But the moment the patient tries to focus for print, the pupils contract, dilating a little when accommodative tension relaxes. The small pupil, when present, indicates the cilio-spinal region of the chord as the chief seat of sclerosis.

Double optic neuritis, generally, means a serious lesion of the brain. If attended by paroxysms of severe head-ache, and sudden causeless vomiting, the

diagnosis of tumor of the brain is next to certain. The most striking symptoms of optic neuritis, are often seen where the sight is little impaired. Double optic neuritis often persists for years, before total blindness, or death, occurs. I recall a poor patient woman, whom I treated five and six years. At last she succumbed to acute pneumonia, never having become entirely blind. Other complications must be looked to in order to form a rational opinion of the seat of disease. But the diagnosis is not always certain, till explained by the autopsy. I have now under treatment a young lady of 18 years, with the most marked symptoms of double optic neuritis I ever saw. She is in fair health and at school. She has had imperfect sight since her third year, and says the defect of vision has been about the same for many years. Her father became blind at 25 and remained so till his death a few years ago. Cause of his trouble not known. The sight of the patient is 0.1 in both eyes. The mother and sister have perfect vision. She can read no $3\frac{1}{2}$ at 6 inches and keep up with her classes. No glasses help her at all. The optic papillæ are enormously swollen and present a woolly appearance. The veins, large and tortuous are less obscured by the opaque tissues, than the arteries. There are no retinal hæmorrhages. The periphery of the fundus oculi is much clearer than its central portion. Our first examination was Feb. 26, 1884. At the second, four weeks later, there was no change. There was absolutely no other symptom to explain this peculiar state of things, than the facts stated. It is quite probable that blindness from optic atrophy will be the final issue.

As showing the frequent dependence of serious ailments of sight upon uterine diseases, I refer to the following: A married lady 27 years old had a large patch of central choroiditis, with corresponding scotoma, in the left eye. The atrophied portion is white, and bounded by a ring of pigment, and she can only count fingers at 8 inches. In the right eye is a more recent choroiditis, with a patch near the macula but small. The vision in this eye is 0.3. She has never menstruated or borne children, on account of the complete closure of the os uteri. Since the catamenial period, she has always suffered with cramps and swelling of the abdomen, at the regular times.

In illustration of the effect of the menopause, in predisposing to bad troubles of vision, I will cite the case of a Miss K. at 55. She is stout and healthy but not plethoric. Seven weeks ago, while reading, she suddenly lost the sight of the left eye. When first seen she could only count fingers at six feet distance.

She has extensive retinal hæmorrhages, with blood coagulæ in the vitreous, but no pain or increased tension. The right eye has a manifest hyperopia of idioptrics. With this corrected the vision is perfect. Her age and pulse indicate some calcareous degeneration of the coats of the arteries. But without the fullness resulting from cessation of menstruation, this fatal trouble would not have occurred.

The sudden seriousness of detachment of the retina is well known. Different explanations of its pathology have been advocated, but that question is not settled. It frequently, but not always, occurs in

highly myopic subjects. Now and then eyes of normal refraction are attacked. A man of healthy appearance, 37 years of age, went suddenly blind in the right eye two years ago. The left is perfectly sound and vision normal. The detachment is extensive, and below. About the time this came on, partial hemianesthesia of right side of face and scalp was discovered, and still persists. The derangement of feeling is strictly confined to the distribution of the supra-orbital branch. Lately he has suffered with severe pain in the teeth of his left side. These are the only symptoms. What effect has irritation of the fifth nerve, if any, on the etiology of detachment of the retina?

In some cases of retinitis pigmentosa, a very peculiar disease, there are seen unusual and troublesome complications, that require explanation. I recall a maiden lady with this form of retinitis. One eye was already blind. In the other the concentric narrowing of the field of vision was slowly increasing. In the right eye, already blind, there was confirmed glaucoma. She came to me with an acute attack of the same disease in the left eye. I made at once a large iridectomy, which arrested the glaucoma. Seven or eight years have since passed, and she still sees a little. Final blindness is inevitable, but the evil day was put off by the operation.

Miss B., aged 16, was first seen March 16, 1883. She then had keratitis of fifteen months in the right eye, and three months in the left. The corneæ were hazy and vascular, and the deeper media turbid. With the ophthalmoscope glimpses of the fundus were seen, indicating retinitis pigmentosa. The right eye was convergent and amblyopic. She had experienced night blindness since childhood. The vision of the left eye was 0.3. She had Hutchison's teeth, and the peculiar physiognomy of inherited syphilis. When seen again, in one year, the corneæ were nearly clear, but vision about as at first visit, being able to read ordinary print at 8 inches. There was then contraction of the field of vision, advanced atrophy of both optic nerves, and the usual deposits of pigment in the retina. By this time the media were clear, and we saw the sharply defined, characteristic patches in the choroid, of choroiditis circumscriptæ, as well as the retinal pigment. This case goes to confirm the view that the so-called retinitis may be, primarily, a disease of the choroid. What connection the specific inheritance had with the latter diseases, I do not venture to conjecture.

An only child, 3 years old, born with syphilitic eruptions on the face and body, that were long in disappearing and left scars, was lately brought for advice. The child was rickety, and long in learning to walk and talk. The father has a clear, specific history. For several months the child had been somewhat intolerant of light, but for four weeks the photophobia has been intense. Both corneæ were cloudy and partially vascular from parenchymatous keratitis. It is a case of Hutchison's syphilitic inflammation of the cornea. The diagnosis is certain, though the peg teeth are not present. The result of treatment is yet undecided.

Take the following for its hopelessness and ob-

scurity: M. A., aged 9, a delicate-looking girl; has had marked divergence of the right eye from infancy. With the left she could see well till one year ago, when it began to fail. For the last three months she has lost rapidly in sight. In the right there is absolute blindness, with extinction of perception of light. She still reads Snellen No. 8 slowly, and objects in the outer half of her field are better seen than elsewhere. There is pronounced white atrophy of the optic papillæ. No cause can be detected in the brain or spinal cord to account for it. For two years the gradual failure of sight is the only symptom. Lesion in the nerve centres, not yet revealed by other symptoms, is certainly to be inferred.

For difficult diagnosis, let us describe the case of a German woman, 38 years old, well developed and healthy. About a year since she found that the vision of her left eye was defective. Three months ago the right began to fail. For the past year she has been much troubled with giddiness.

These attacks, with tendency to stagger and fall, have occurred at different intervals, but never oftener than once in two weeks. No nausea or vomiting, but numbness confined to the hands was often felt. She has not menstruated for four years. An enlargement of the abdomen resembles pregnancy, which does not exist. Within a year she has grown very fleshy but lost strength. The vision in right eye is 0.8. With the left she counts fingers only at 6 inches. In this eye the papilla is quite blanched, but in the other it is normal, and the color sense is perfect. The field of vision is quite clear in its inner half, but dim in the outer half. In the left eye, the outer half of the field of vision is totally abolished. She now has frequent and violent attacks of headache. We ordered moderate doses of iodide of potassium, and in two months she returned, quite relieved of the pain in the head. Vision with the right eye was now perfect, or nearly so. The left could count fingers at 6 feet. But the hemianopsia remained the same, as did the ophthalmoscopic appearances. The diagnosis was atrophy of the left papilla, and hemianopsia in the outer halves of the field of vision. This means loss of perception in the *inner half* of each retina. History and symptoms all indicate a brain lesion. The seat of the difficulty is conjectured. Time, and a post mortem may determine the seat and nature of the trouble.

Every surgeon of pretensions, and all mountebanks operate for strabismus, as though the problem of cure were entirely mechanical. The influence of associated convergence and accommodation, in causing strabismus, and the certain changes produced by the progress of years, are not thought of. Immediate results may be satisfactory and remunerative. But insufficiency of the divided muscle, and subsidence of accommodation, will probably lead slowly to great and unsightly divergence, a deformity far worse than the original, and vastly more difficult to relieve. Then again careless and ignorant operators often get no effect, because of inexact diagnosis, not knowing that the case was due to paralysis. Very recently I was asked to operate for squint on a delicate married lady of 36 years. Both eyes were

turned far inwards with no ability to rotate either outwards. When but three months old, sleeping in a draft between two open windows, she awoke with the eyes turned in from paralysis of both external recti. Complete paralysis, of 36 years, leads to atrophy of the inactive muscles and rigid contraction of the antagonists. She had never learned binocular vision. No hope can be entertained of restoration to a physiological condition. Hence, no satisfactory result could come from a simple tenotomy, and a tedious operation for advancement, might only result in distressing and life-long double vision. This is the more to be apprehended, as the vision in both eyes was equal and perfect. For these reasons I refused to operate.

A CASE OF EXTRA-UTERINE PREGNANCY.

BY C. N. COOPER, M.D.

Mrs. C. consulted me in October, 1882, for what she supposed to be some uterine disease. She was English by birth, 39 years old, and the mother of four children. She had suffered three miscarriages. Her youngest child was four years old. I treated her nearly three months for subinvolution previous to her last pregnancy. For the past eight months her menstrual flow had been scant, and followed by a somewhat profuse leucorrhœa. She had no flow in September, but when she consulted me, had recently ceased from her October period, and was suffering from dragging pain, lassitude, etc. I found the os flabby and patulous, readily admitting the point of the index finger. The cervical canal seemed filled with tenacious mucus. The depth of the uterine cavity including the cervix was five inches. Three times each week for the first month, and twice each week for the second month, I applied equal parts of tincture iodine and fluid extract ergot to the cervix, within and without, and occasionally carried the treatment to the fundus; also, ordered free, hot vaginal injections at bed time. After two months treatment the uterus had increased to 6½ inches in depth, and the os was still patulous, but the leucorrhœa had ceased. A tumor could readily be felt either within the wall of the uterus or attached immediately to it upon the right side. It did not seem to encroach upon the uterine cavity.

By the first of January the tumor was as large as a pregnant uterus at the beginning of the fourth month. Its position was always on the right side, and freely movable with the uterus. The patient thought she could feel motion within the tumor, yet no foetal heartbeat could be detected, and the breasts were but slightly enlarged, if at all. The rapidity of the growth, and the fact that somewhat rough manipulation over the abdomen caused some degree of contraction, which was apparent to her as well as to myself, taken together with the supposed motion, led me to the conclusion that the case was one of tubal or interstitial pregnancy. There was considerable pain in the