which was scant; but all our efforts were useless, for the stupor and convulsions were soon followed by coma and death. No autopsy was permitted.

C. I., aged 24 years, being in the seventh month of utero-gestation, was œdematous over the whole body, and had severe headache, for which she took bromide of potash and diuretics, which relieved her considerably. On January 16 she was seized with convulsions and became unconscious about midnight, when a neighboring physician was called in, who attempted to bleed her, but was unsuccessful. The convulsions occurred every few minutes; she would turn her head to the left side and bite her tongue, so that bloody froth was issuing from her mouth. Her pulse was full and hard, her breathing stertorous, and her face congested at times. She had been in this condition about two hours when I arrived. A leecher had been sent for, who applied leeches to both temples and the nucha, from which the blood flowed freely. Cold water cloths were placed on the head and warmth to the feet. Ether was given by inhalation, which controlled the fits somewhat; but several hours elapsed before they ceased and she became conscious. During all this time the os uteri was firmly contracted, and showed no signs of labor.

She was affected with dimness of vision for several days after, but under the use of diuretics and bromide of potash the dropsical effusion gradually subsided from her limbs and body, and by the help of quinine, iron, and generous diet she soon recovered, and resumed her household duties. Labor, however, did not occur until February 8, when "the waters broke," and a putrid fœtus was expelled from the uterus without any trouble, which was soon followed by the placenta.

H. Y., a primipara, of nervous temperament, was suddenly seized with eclampsia at the beginning of her labor. Her pulse was compressible and her face pallid; the jerking of the limbs and the twitching of the muscles of the face, with the turning of the head to one side, occurred frequently. There was no stertorous breathing, but she was unconscious.

An injection of ℈j hydrate of chloral in ℥iv of water immediately arrested the convulsions and she became quiet. An examination per vaginam showed the os dilatable, and a face presentation, which was changed to an occiput anterior of the vertex; but during my manipulation she became restless, and I was obliged to repeat the chloral. Feeling the necessity of a speedy delivery, and as the os was well dilated, I applied the forceps and brought the child's head through the bony pelvis quite easily; the body was born naturally without any help, and the placenta soon followed, but the child was dead. The mother was still unconscious, but being put comfortably in bed, rested quietly. There was no return of the convulsions. She was not aware of what had occurred until 24 hours had elapsed, when, feeling sore, she inquired of the nurse what had happened whilst she was asleep. Her recovery was rapid. This was an asthenic case, and relieved without depletion.

On considering the symptoms of eclampsia, and the conditions of the patients, the majority of obstetricians have concluded that depletion, either general or local, is the best treatment, followed by purgatives and opiates, with inhalations of ether and injections of chloral; that speedy delivery will often stop the convulsions. Post-mortem examinations have revealed nothing positive as to the cause or pathology of eclampsia.

TREATMENT OF CHRONIC SUPPURATIVE OTITIS MEDIA.

Read in the Section on Ophthalmology, Otology and Laryngology, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

BY SETH S. BISHOP, M.D.,
OF CHICAGO.

The object of this paper is two-fold: *First*, to elicit a discussion of the subject which shall set forth the latest and best methods of treatment; *Second*, to protest against a mode of treatment that has been highly lauded of late. I refer to what is called the dry treatment, in which the external meatus is filled and even packed, with a powder that is to remain from one visit to another. Although the principle involved did not recommend the practice as being in accord with good surgical doctrine, the favorable results reported induced me to try it, as I have a habit of trying all new methods which promise any improvement on the old.

The plan proposed was to remove all the pus from the drum-head and meatus with dry absorbent cotton, inflate the middle ear, again remove what discharge was forced through the perforation of the membrana tympani by the inflation, and then blow powder into the middle ear, and fill the external meatus with the same. It was even urged that the powder should be put in, a little at a time, and each layer packed, one upon the other, until the meatus was full. It was claimed that in this way the discharge was speedily stopped; and it was—that is, the exit was stopped as is a bottle with a stopper, so that the contents could not escape. But suppose you want the contents of the bottle to escape, as you probably do, how is this to happen unless you tap it at the bottom, as one does in the nasal douche? This is just the condition presented by an ear tamponed in this so-called dry method. The discharge can hardly escape through the solid packing of powder which the absorption of moisture converts into a dense plug. The purulent discharge does not dissolve it even if a soluble powder is employed, and when iodoform or bismuth is used solution is clearly out of the question. What results? The formation of pus does not often cease at once. It fills the middle ear and finds exit through the Eustachian tube, if the tumefaction is not too great. When the tube is not patulous the damming up of the sewerage of the tympanum will naturally force the pus through the mastoid antrum into the cells, after the middle ear has filled. A very serious aggravation of all the symptoms is likely to follow. That this method is contrary to a very important prin-

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ciple of surgery must be patent to all. An abscess should not only be opened, but should be kept open until the pyogenic process ceases. It is a fallacious doctrine that air can or should be excluded from the middle ear in this manner. Air will gain access to this cavity through the Eustachian tube and furnish pathogenic germs. Free drainage should be maintained through the canal built by Nature, in order to avoid a complication of the existing trouble with mastoid disease. Moreover, it is problematical whether one ever thoroughly cleanses the middle ear of pus by this dry method, even if the perforation be an unusually large one. The cotton is not likely to enter the tympanic cavity and it is not desirable to have it for there would be danger of entangling the ossicles in its meshes and dislocating or removing them.

The most rational and successful treatment I have tried is the following: Cleansing the external meatus and middle ear thoroughly with injections of a 1-10,000 solution of mercuric bichloride; inflation by the Politzer method, or catheterization; iodine vapor if stimulation is required; drying the part with absorbent cotton and dusting them with finely pulverized boracic acid containing ½ of 1 per cent. of mercuric bichloride, or if this should cause any unpleasant sensation, iodoform or boracic acid may be substituted.

Hydrogen peroxide is valuable for cleansing the ear when there is a large amount of debris present in the form of pus mixed with epithelial scales, or cheesy concretions. In addition to its excellent mechanical effect due to effervescence, the oxygen liberated destroys bacteria. The latter result is also effected by the sublimate solution which in one-half the strength mentioned will destroy bacteria in ten minutes. The inflation ought to expel the fluid contents of the middle ear. In cases of brief duration iodine is not required, but in very old cases, when the vital forces seem to have lost their powers of recuperation and resistance to pathogenic germs, tissue changes—the process of absorption and nutrition—may be favorably influenced by the judicious use of iodine vapor. Drying the parts before dusting them with the powder leaves the patient more comfortable than the chilling effect of evaporation does. The powder when slightly wet becomes hard and produces a feeling of stiffness, and sometimes of soreness. Then if the powder be left dry we are enabled to determine at once when the discharge ceases.

It is not necessary to fill the ear with powder. If enough be insufflated to barely cover the suppurating membrane, all is accomplished that can be expected from the remedy, and the functions of the ear are not materially interfered with—an important consideration with many patients. This treatment leaves no obstruction to free drainage, and in no manner invites mastoid trouble. When the disease has just passed from the acute to the chronic stage the boracic acid powder had better be used without the bichloride, for the latter may cause some disagreeable crackling sensations and even pain. But in the strength mentioned it is not likely to do so unless there is considerable inflammation.

At the meeting of the Illinois State Medical Society, held in this city three weeks ago, the efficacy of iodoform as an antiseptic was called in question. While the experiments of Heyn and Rovsing, of Copenhagen, show that iodoform is inert in the presence of bacteria while the remedy remains in a dry state, de Ruyter has proved that iodoform in the presence of the fluids of suppurating surfaces undergoes chemical decomposition during which new iodine compounds are formed. The splitting up of the iodoform, its partial solution and absorption, resulted in the destruction of the ptomaines, the product of pathogenic micro-organisms, and hence the arrest of pathological metamorphosis. The laboratory thus confirms the practical conclusions which years of experience have forced upon the profession. In conclusion, let me add in support of the method here outlined, that no routine treatment has ever yielded the uniformly satisfactory results in my hands that this has. Were there time to enter into more minute details it would be interesting to consider the variations of treatment required by necrosis, etc., but that would extend beyond the scope of this paper. Numerous illustrative cases might be adduced from my records, but I will mention but one that I have now under observation, in which the hearing was nil from chronic non-suppurative inflammation of the left middle ear, and the voice could be heard only by shouting in the right ear, in which chronic suppurative inflammation had existed for over forty-nine years. I removed from both nostrils large polypi, which had prevented nasal respiration for twelve years. The treatment I have described stopped the discharge in four days, and subsequent catheterization, etc., restored some hearing in the left ear, and so improved the right as to render conversation audible at a distance of fifteen inches.

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RESECTION OF THE INTESTINE FOR FÆCAL FISTULA.

Read before the Chicago Medical Society, October 3, 1887.

BY F. HENROTIN, M.D.,
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About five weeks ago I was called to Pullman, in this State, to see a patient. On my arrival I found the patient affected with fæcal fistula. The history of the case was this: The woman had been affected with an obstruction of the bowels about fifteen days before I saw her. The obstruction was evidently in the left inguinal region, as a mass was found there, which the physician in charge tried to reduce. Failing in reducing it, she called in consultation a physician from Chicago, who went out there, and by dint of manipulation they succeeded in reducing this hernia. Immediately succeeding the reduction of the mass in the groin, the patient complained of a great deal of pain, and a truss was fitted over the place where the hernia had existed. This truss being somewhat tight gave rise to a great deal of pain, and after two or three attempts at periodical times to wear the truss it was laid aside. The parts

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