

THE PRACTICE OF GYNECOLOGY IN ANCIENT TIMES.

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THERE seems to be quite a prevalent belief that the present state of gynecological knowledge has been wholly acquired within the nineteenth century. The impulse which was given to practical gynecology by Recamier and his contemporaries was succeeded by such brilliant results that one might adopt the prevalent belief, if the history of medicine did not show that knowledge has been acquired and lost, to be after a lapse of time again acquired and again lost. As has been often said, history repeats itself, and it would seem that this is an assertion as applicable to gynecology as to any department of medicine. It is not the object of this paper, however, to attempt to prove the correctness of this assertion, although it is believed that it will be made apparent to some extent. The object of the writer is to direct attention to some of the features of ancient gynecology, in the belief that it will not be wholly profitless, and that in the writings of ancient medical authors there can be found much that is valuable and suggestive, even to the busy practitioner.

This paper will contain fragments of gynecological history, extracted and summarized from different authors, without extended comments and without any attempt to follow a strictly chronological order.

It seems to be quite generally believed that the earliest medical writers were the Greeks. It is true that they are among the earliest of whom we possess full accounts, and whose writings are still extant; but the Greek physicians



ALLEGORICAL PLATE FROM RUEFFUS, "DE CONCEPTU ET GENERATIONE HOMINES," REPRESENTING THE TEMPTATION.

The tree of knowledge of good and evil has a human skeleton for its stem and branches, the arms are fruit-bearing branches, with the serpent coiled among them.

derived much of their knowledge from the Egyptians. It was of them that Homer speaks "as skilled above all men and directly descended from Apollo." The history of the ancient Egyptians, long prior to Hippocrates, indicates that there existed among them specialists in the various departments of medicine and surgery, and that there was also an advanced knowledge of the diseases of women. Kendrick, on "Ancient Egypt," says: "The fame of its physicians was spread throughout the ancient world. Cambyses sent for an oculist from Egypt, and Darius kept Egyptian physicians around him." "Egypt," says Herodotus, "was full of physicians." They were required to practise according to certain precepts handed down from ancient times in the sacred books. Six of these are enumerated by Alexandrinus: one, on the structure of the body; another, its diseases; a third, on medical and surgical instruments; a fourth, on drugs; a fifth, upon eyes; and a sixth, on female diseases. This division and arrangement comprehended physiology, pathology, pharmaceuticals, and surgery,—indicating an advanced state of the science. The different branches of practice were minutely divided, and each practitioner confined himself to one.

Sir Gardner Wilkinson, in his interesting work on "The Manners and Customs of the Ancient Egyptians," like Kendrick, quotes from Herodotus concerning the state of medical knowledge, and writes that "Nothing can more clearly prove their advancement in the study of human diseases, than the fact that they assigned to each his own peculiar branch, under the heads of oculists, dentists, those who cured diseases of the head, those who confined themselves to internal complaints, and those who attended to secret or internal maladies." He also alludes to their dissections, and the now lost art of Egyptian embalmment of the dead. "In later ages," writes Kendrick, "Egyptian medicine was much contaminated by astrology."

It is impossible for us to tell how much medical knowledge has been gained and lost amid the various changes of the world's history. It is stated that the famous Alex-

andrian library, in which were many medical treatises, contained seven hundred thousand volumes when it was destroyed, A. D. 642. Here was an instance of substantial loss; but in the ages of darkness and superstition which followed there was a more deplorable loss,—the loss of knowledge. After the discovery of printing in the fifteenth century knowledge became more generally diffused, and the destruction of one or more large libraries could not again block the progress of the world's education.

Mention has been made of the state of medical knowledge, including the diseases of women, among the ancient Egyptians. But we have no literature fairly attainable on diseases of women earlier than the works of Hippocrates and those attributed to him, all of which were written four and a half centuries before Christ. Adams,¹ the learned commentator of the works of Hippocrates, says that "they furnish the most indubitable proofs that the obstetrical art has been cultivated with most extraordinary ability at an early period."

Beyond doubt the complaints of women and the accidents attending parturition must at that time have come under the jurisdiction of male practitioners, but later they were in the charge of women.

According to Wright,² *Celsus*, who lived in the first century, being a Roman, disliked the Greeks, and in manifesting it shows the fact that diseases of the genital organs were made a specialty among the latter, for he makes the Greek school the subject of a covert sarcasm.

Galen and *Aretæus*, among the distinguished early medical writers, unquestionably lived at the same time, as we are led to infer from the fact that neither one makes any allusion to the other. We have reason to believe that they flourished from the middle to the latter part of the second century of the Christian era. "Both of these authors studied at Alexandria and practiced at Rome."³ In Galen's

¹ *The Genuine Works of Hippocrates*, Sydenham Society, London, 1849.

² Wright on Uterine Diseases, London, 1867, p. 7.

³ Wright, *op. cit.*

writings occurs the earliest allusion to the vaginal speculum, while the description of ulcerations of the uterus and their treatment, by Aretæus, would indicate that he was equally familiar with its use.

Aëtius also studied in Alexandria, and spent his life there studying and compiling all that was known of medical literature up to the period in which he lived. In the famous library of his city he was unquestionably a faithful and diligent student. It was here that his great work, which is still extant, was prepared about one hundred and fifty years prior to the destruction of the library by the Saracens. It is a singular fact that the truly valuable work of *Aëtius* seems to have been so little known that subsequent writers made no allusion to it. Notwithstanding his sixteenth book treats principally of the diseases of women, yet *Wolphius* and *Spachius* claiming, in the sixteenth century, to have collated all that had been previously written of any value upon diseases of women, make no reference to him or his writings. In this book thirty-seven chapters treat of pregnancy, parturition, and suckling, there are six chapters on various kinds of ulceration of the womb, three on abscesses, two on displacements, two on obstructed and imperforate anus, seven on growths occurring in the vagina and uterus, and eighteen on menstruation and its disorders. He has special chapters on hysteria, fibrous tumors, pelvic abscesses, hematoma, displacements, etc., and also devotes one very long chapter to inflammation of different parts of the uterus and its treatment.

Aëtius seems to have been familiar with the speculum vaginæ or dioptra, as he mentions its use frequently. Quite a connected history of this instrument can be traced from the days of *Aëtius* to the present day, although at different times a knowledge of its use seems to have been lost or forgotten until a knowledge of its value was again revived in the early part of this century. That specula and many other surgical instruments, supposed by many to be of recent invention, were in use long anterior to the days of *Aëtius* we have uncontestable proof. In the exhumation

of Pompeii and Herculaneum, during the second decade of this century, trivalve and bivalve vaginal specula and other gynecological instruments of excellent workmanship were found and are still preserved. These instruments, as well as obstetric forceps, found in Pompeii, were probably in common use when the city was buried in the year 79 of the Christian era, or about four hundred years before the time of Aëtius.

In Aëtius's writings mention is made of medicated pessaries or suppositories, for which he gives many formulæ, the use of sponge tents and the manner of their introduction, also injections, hip baths, plain and medicated, the value of rectal manipulation for restoring a retroverted uterus, and the local treatment of ulceration of the neck of the womb by means of verdigris.

Oribasius was another Greek physician and author of eminence of the fourth century, who wrote much relating to diseases of women which will be alluded to later.

A century after Aëtius, *Paulus Ægineta* flourished and wrote. Of this author's works, an English translation was made by Adams for the old Sydenham Society, and is to be found in the libraries of many physicians. He does not always give credit to those authors who have preceded him; for instance, his directions for the treatment of abscesses of the womb, and many other sentences, are in almost the exact words of Aëtius. Paulus made frequent use of the speculum or dioptra, and describes it. It is believed that the speculum of Albucasis of the eleventh century was constructed in accordance with the description of Paulus.¹ The speculum figured in Scultetus is described by this author in the language of Paulus. The latter describes fissures and lacerations about the mouth of the uterus occurring in consequence of childbirth, how to recognize them, and their treatment. Also condylomata and

¹ Substantially this statement has been repeatedly made by writers in regard to the speculum of Albucasis, while in truth the speculum which is figured in his works is wholly unlike the description given by Paulus. See Plate.

hemorrhoids about the uterine neck which can be seen by means of the speculum, seized with forceps and cut off, or sometimes, he says, they may be cured by the application of dried pomegranate rind with galls, or something similar. This author, like Aëtius, has much to say about the intemperaments, particularly in reference to the treatment of sterility. Similar views are expressed by Serapion, an Arabian of the eleventh century. Other Arabians, as Avicenna, Rhazes, and Avenzoar, of the eleventh and twelfth centuries, are in accord with their predecessors.

Of the vaginal speculum for the diagnosis and treatment of women's diseases we have quite a perfect history. It was known before Aëtius, and described by him, showing the testimony of acknowledged authorities in its favor; still their teachings were disregarded for upwards of a thousand years. Wright,¹ in alluding to the loss of acquired knowledge of the diseases of women, of which the uses of the speculum formed a part, and to the disregard of the teachings of Aëtius and others for more than a thousand years, says that "it forms a somewhat curious and significant episode in professional history." He further says, "after the dispersion of the Alexandrian School, the professors, though scattered, were still received with honor by their Moslem captors; what they could teach was eagerly gathered, except when their instruction clashed with any tenet of the Mohammedan creed. The Arabian schools, when they arose, comprised equally industrious and equally accurate observers. But the study of the diseases of women was not cultivated among them; for there was an insuperable bar to the attainment of practical experience on the subject. It was against the Mahommedan creed that women, even in their suffering, should undergo personal examination, excepting by one of their own sex. Their degraded social position prevented their attaining any such position as that to which the women of Greece had vindicated their claims. Even an Hypatia or Agnodice could not have withstood the blighting influence of Moslem sensuality."

¹ On Uterine Diseases, London, 1867.

In the Arabian works of medicine there is only a very general mention made of the diseases of women, while their local treatment was left in the hands of the midwives. It is true that Albucasis, one of the latest writers of the Arabian School, refers at greater length to such disorders, but he appears by his writings to have been a Jew. He was the first to mention herpes of the uterus, and to recommend the use of an air pessary in the vagina. At that time, as at the present in the East, the midwives attended to the details of gynecological and obstetrical work, while the chief function, in these respects, of the male authors and physicians was to direct the midwives how to act. One of these midwives, in the thirteenth century, named Trotula, published a treatise on diseases of women, in which she expressly states that many Saracenic women practised at Salerno. The work of Trotula, and a shorter one by Cleopatra, Queen of Egypt, or at least attributed to her, antedating the first-named some four hundred years, are both included in the collated works of Wolphius and Spachius.

In 1587, Jacobus Rueffus published his work, "De Conceptu et Generatione Hominis," etc., in which is a drawing of a three-bladed speculum, which he calls the *speculum matricis*, and which he describes as useful in difficult parturition to dilate the uterus and aid in the delivery of the child; this work also contains the representation of an *apertorium*, for a similar purpose, and the first known engraving of a *smooth*-bladed obstetric forceps. The forceps previously mentioned by Albucasis and Avicenna were toothed, and manifestly for the destruction of the child or the delivery of dead children.

In the sixteenth century *Ambroise Paré* made use of the vaginal speculum, as did his pupil and successor *Guillemeau*. The speculum figured in *Scultetus'* "Armamentarium Chirurgicum," as before stated, is patterned after the description of *Paulus*. In *Scultetus* are the engravings of other gynecological instruments, but particularly worthy of notice is the *Scalpellus deceptorius*, as it closely resembles the hysterotome of *Simpson*.

About the time of the publication of the works mentioned in the last clause, there was a revival of learning to which the invention of printing in the fifteenth century gave an immense impetus. In connection with the grand revival of learning, medicine was a full participant. Surgeons began to rank higher than barbers, while the practice of obstetrics and gynecology was, much more than formerly, intrusted to educated and skilled men, instead of ignorant and gossipy midwives. European literature began to be more abundant, new works on medicine were written, while many writings of ancient physicians were printed with extensive commentaries. To the study of diseases of women a new impulse was given, and in 1586 Wolphius edited and had published in Basle the work before referred to, comprising three volumes, which was supposed to contain abridgments of all previous works of any value in diseases of women. In 1595 Spachius, of Strasburg, brought out a similar work to that of Wolphius, in folio form, with some additional matter. Yet it seems strange that both of these editors make no allusion to the writings of Aëtius.

In much of the gynecological literature of this period there were indications of familiarity with the vaginal speculum and the local treatment of uterine diseases which disappeared from later writings, as there seems to have been a long time when the work of former years by distinguished laborers was either lost or neglected in this department of medicine until Recamier and his contemporaries gave a fresh impulse to its study. We find in the writings of the early European physicians a certain amount of confusion apparent, which was doubtless due to their lack of pathological knowledge; for how could it be otherwise when physiology was so little understood? Astrology and alchemy were mixed up with medicine; the first principles of physiology were ignored when men were anxiously searching after the "philosopher's stone" and the "elixir of life." Of surgical gynecology we find but little in ancient medical works foreshadowing the brilliant exploits of the nineteenth century.

Clitoridectomy was practised by Paulus and Albucasis. Avicenna removed enlarged nymphæ by either the knife or caustic application. Rhazes treated polypi of the womb as follows: "If situated in the anterior part, and if it be round or long, and not attended with pain, some surgeons cut it off, but I prefer tying it." Paré treated many uterine disorders by fumigation. In his works are illustrations of a lamp and a perforated tube, shaped like a cow's horn, for that purpose. For very many years the actual cautery was one of the important and most frequently used surgical instruments. The breast was frequently amputated by transfixing it with two ligatures at right angles so as to pull the gland away from the chest wall, and then beneath the insertion of the ligatures the entire breast was cut away, and finally the cut surface of the chest was seared with a hot iron. An illustration of this mode of operating is found in Scultetus.¹

Paré was the first to suggest the operation of perineorrhaphy, but gives no description of his mode of proceeding. He did doubtless make the operation, for he refers to the fact, that in one instance after it had been made the perineum was badly lacerated at a subsequent labor. Guillemeau is really the first to describe the various steps of the operation, and reports a successful case, substantially as follows.² The recto-vaginal septum having been torn through he waited until six weeks after delivery, when, with a sharp, curved bistoury, he denuded first one side, and then the other, cutting through the cicatrix and skin. He then transfixed the two parts through the recto-vaginal septum with long needles, in a manner similar to the operation, as he distinctly states, for harelip, and, as in that operation, wound the ends of the needles with silk in a figure of eight, and lastly put in superficial sutures. This same operation, quite identical in every particular, has been published in some of the medical journals within the past ten years as a recently devised and successful mode of operating.

¹ *Armamentarium Chirurgicum*, Frankfort, 1666, Tabula xxxvi.

² *Les Œuvres de Guillemeau*, Paris, 1612.

Schenkius, in the "Observationes Medicæ Rariores," has many chapters devoted to the diseases of women, and reports of some unusual and peculiar instances of disease.

Still later we perceive in the writings of Mauriceau indications of great experience without much system or order in the arrangement of the book. In the justly celebrated work of Morgagni on "The Seats and Causes of Disease Investigated by Anatomy" is to be found very much of interest to the student of gynecology. In this last named is nothing of any special surgical importance, but there are many strange, unusual, and interesting instances of disease related, and accounts of many post-mortem examinations of the generative organs of women.

Many more authors might be named whose works I have consulted, and from which I have obtained material for this paper. I cannot forbear, however, alluding to the work of *Vigarous*,¹ for several reasons. So little has been said about it that it is almost unknown. It was written a few years prior to Recamier's period, and shows that its author was much in advance of his contemporaries. It deserves a better fate than it seems to have had. This author mentions electricity and describes the manner of its use as one of the modes of curing sterility. He also makes frequent allusion to the vaginal speculum and its value.

As early as 1718, *Dionis*² speaks of the speculum matricis in language indicating that during the eighteenth century the French physicians were more familiar with this instrument than the English physicians of the same date. The names of only a few of the early writers on diseases of women have thus far been mentioned, the object having been chiefly to show that at different times in the world's history there have been, as in our own day, brilliant writers and skillful practitioners. In the remaining portion of this paper the different modes of treatment of the various disorders of women, the peculiar views relating to disease and treatment, as found in the writings of medi

¹ Vigarous, *Maladies des femmes*, Paris, 1801, Tomes 2.

² Dionis, *Traité des accouchements*, Paris, 1718.

cal authors from the time of Hippocrates to the beginning of the present century, will be presented. Of course, all that can be given in a paper of the character of this one must be fragmentary. I have consequently selected only such fragments as I have thought might be of the greatest interest.

PESSARIES (OR SUPPOSITORIES).

One of the favorite means with the ancients of applying medicines to the uterus was by pessaries. These consisted often of medicated ointments or liniments which were generally received in a pledget of wool and were rounded to the shape of the finger. The ancients also used deer and beef marrow, goose fat, etc., to which, after being melted, medicines were added, and, after cooling, suppositories similar to those of the present day were made. Pessaries were used for a great variety of purposes, but perhaps most often to correct the menstrual discharge; very often, too, for the purpose of producing abortion, which was very common in Juvenal's time, and to produce which Avicenna describes various methods; pessaries of this description consisted of strong stimulants, such as cantharides, elaterium, colocynth, etc. The emmenagogue pessaries were formed of similar ingredients, weakened by the admixture of others less active. *Hippocrates* made use of pessaries to control hemorrhages from the uterus, especially those containing astringents in cases of sterility arising from displacement of the uterus,— he used them to contract the organ and draw it into its natural position; also in cases due to decomposition of the semen in the uterus, or in relaxed conditions of the organ, when stimulants were necessary to irritate the os and render it firmer. In sterility arising from menstrual suppression, he made use of a pessary of powdered alum incorporated with balm, to be followed by another made of powdered beef gall mixed with oil. He also employed these appliances in cases of fever following delivery, to promote the lochial discharge, to expel the placenta in prolapsus uteri, in scirrhus of the uterus, in dropsy of the uterus, with dysmenorrhea in tympanitic conditions of the uterus, etc.

Celsus gives a very distinct account of pessaries, and says that they are extremely useful in the treatment of diseases of women. They are treated of at great length by Oribasius, Aëtius, and Actuarius, and preparations are described for every imaginable condition of the uterus. Myrepsus describes the preparation of forty-five different kinds.

Antyllus describes pessaries of two kinds, emollient and aperient, the former being used in inflamed conditions of the uterus, the latter to overcome occlusion or contraction of the organ. The Arabians made great use of these appliances, which they employed on the principles laid down by the Grecian writers.

In this connection we may mention the fact that these same appliances, now so extensively employed, were reintroduced to the notice of the profession by Prof. Simpson, of Edinburgh, after their use had been for centuries forgotten.

VAGINAL AND UTERINE INJECTIONS.

Antyllus gives a description of the use of uterine injections. These were sufficiently various in kind, and were said to have the effect of softening, contracting, cooling, or warming the tissues, as well as being useful in dispelling gases and allaying pain. The fluid used was thrown into the uterus by means of an instrument especially adapted to this purpose or into the vagina by means of a pair of bellows. It has frequently been said that douches were unknown to the ancients, but it is rather the word which is new than the mode of treatment itself; the word is derived from the Italian *doccia*, which signified originally a "canal," but it does not appear that the word was used in its medical acceptance before the fourteenth century. But as in the olden times they did not use syringes, they must have generally made use of descending douches, such as *Celsus* describes, and which consisted simply of a falling stream of water.¹

¹ *Vide* Paulus' treatment of uterine hemorrhage, and foot-note, on page 381.

FUMIGATIONS.

Great reliance was formerly placed in the use of aromatics which were frequently administered by means of fumigations, fomentations, and pessaries, especially in the treatment of amenorrhea.

Hippocrates advises the use of aromatic fumigations in this disease, and says that they would be useful in many other cases, if it were not for the fact that they occasion heaviness of the head, as they certainly would do in the case of delicate women. The same writer also mentions a curious use of aromatic fumigations as a test for fertility in women: the woman who does not conceive is to be wrapped up in blankets and fumigated from beneath, and if it appears that the scent passes through the body to the nostrils and mouth, then it is known that she is not unfruitful. Galen quotes Plato as recommending this practice in his "Theætetus." Thus it will be seen that the practice of administering medicines in the form of vapor was in use for hundreds of years, and it will be readily understood that it was a powerful and ever efficacious means of treatment in certain diseases of the uterus, and might possibly be advantageously employed in the present day. Hippocrates recommends this form of treatment in the cure of sterility caused by mucus in the menstrual discharge or by obstruction of the uterus, in prolapsus uteri, in difficult labor, in leucorrhœa, in dropsy of the uterus; to excite the lochial discharge, to expel the placenta, to check various morbid discharges from the uterus, etc.

REVULSION.

It is very evident that the ancients were well acquainted with the employment of revulsant measures, if we may be guided in this belief by what *Oribasius* himself says on the subject. He says that by means of revulsants we may prevent the sudden afflux of humors to any particular part of the body. To check a determination to the breast or belly, bands may be applied to the limbs, or when there is

a determination toward the lower part of the belly emetics may be employed. To prevent vomiting revulsants of an acrid character are useful. When the secretion of either the sweat or urine is too abundant, it may be checked by stimulating the secretion of the other; to check the secretion of the urine, also, purgatives are found useful. Cupping forms an extremely valuable revulsant measure, and is frequently made use of in the mammary region. When applied in the hypochondriac region a very powerful revulsant effect may be produced which is often made use of to arrest hemorrhage from the nose or uterus. In general, he says, apply the revulsant so as to cause a flow of blood in the opposite direction from that toward which it is determining.

HYSTERIA.

Plato says that the uterus, being an animal desirous of generation, if unfruitful for a long time becomes indignant, and wandering all over the body stops the passages of the spirits and the respiration, occasioning thus the most extreme anxiety and all sorts of diseases." A similar belief to this prevailed from Aristotle's time to that of Actuarius and long afterwards. In connection with this singular belief concerning the cause of hysteria, is another remarkable belief regarding the conduct of the uterus when subjected to the influence of strong odors, agreeable or otherwise. These beliefs are expressed by *Aretæus* as follows: "In the middle of the flanks of women lies the uterus, a female viscus closely resembling an animal; for it is moved of itself hither and thither in the flanks, also upwards in a direct line to below the cartilage of the thorax, and also obliquely to the right and the left to the liver and the spleen; and it is likewise subject to prolapsus downwards, and, in a word, is altogether erratic. It delights, also, in fragrant smells, and advances toward them, and it has an aversion to fetid smells, and flees from them; and on the whole, the womb is like an animal within an animal." Taking advantage of this supposed esthetic discrimination on the part of the uterus, a large part of the treatment of

hysteria consisted in coaxing that susceptible creature from below with sweet perfumes, or repelling it from above with disagreeable odors.

Considerable attention is given in the Hippocratic treatises to the causes and treatment of hysteria, which is described something as follows: When the uterus moves toward the head the bad results produced are felt in that part of the body; the symptoms are heaviness of the head, pain under the eyes and in the nose, while the saliva becomes abundant and frothy. The treatment consists of bathing the head with hot and cold water, fumigation of the uterus, and the inhalation of fetid odors. When the uterus moves toward the hypochondrium the symptoms produced are vomiting of an acrid burning matter, which occasions temporary relief, and pains in the head and neck; to allay these moist fumigations are recommended. When the uterus moves downward the treatment is to fumigate the vagina with substances which are disagreeable to the uterus, and thus drive it back to its proper place. After the pain has ceased purgatives should be administered, unless the spleen is disordered or the patient be anemic. Emetics are unnecessary, and cause disturbance of sight and voice. When the uterus moves toward the liver the woman immediately loses the power of speech, her teeth are tightly clenched, and the skin becomes livid. Old maids are subject to this form of the disease, and those who have long been widows, as well as women who are sterile, and even those who become sterile after having previously borne children, for they are deprived of the advantage of the lochial discharge, and because, too, the uterus no longer passes through the variations in size which serve to keep it in a supple condition, and they are no longer eased by frequent vomiting. To relieve this condition, the uterus must be gently pushed away from the liver by the hand, and must be kept in position by means of a band about the waist. While the mouth of the uterus should be dilated and an injection of aromatic wine thrown in, fetid odors should be inhaled, and the uterus should be fumigated with aromatics

of agreeable odor. If the woman is a widow it would be advantageous for her to become pregnant; if she is a maiden, she should be advised to marry. If the uterus moves downward, after having left its place in the belly, it moves hither and thither, principally toward the flanks, and presses upon the bladder, causing ardor of the urine; it bears down also upon the fundament, producing tenesmus; under these latter conditions the menses may appear more or less frequently than usual. When the uterus moves to the sides there is a cough with side aches, and the uterus may be felt as a hard ball and is extremely painful on pressure; the woman never becomes pregnant while in this condition. When the uterus moves toward the loins or flanks respiration becomes difficult and suffocation ensues. When it returns toward the middle of the body the legs are convulsed, the woman suffers extreme pain, there is constipation, and wind issues forth from the bladder with the urine. In this case it is necessary to force warm oil through a tube into the uterus.

Paulus gives a very minute and careful description of hysteria or uterine suffocation, and mentions a great variety of remedies. The disease consists, he says, of a rising up of the uterus affecting sympathetically the most important parts of the body, as the carotid arteries, the heart, and the membranes of the brain. Among the numerous symptoms mentioned by this writer are languor of mind, fear, muscular relaxation, pallor of the countenance; and when the suffocation comes on, deep sleep, mental aberration, loss of the senses and of speech, with muscular contraction of the limbs; the cheeks then begin to redden, and the face becomes turgid with blood. As the attack passes off the uterus gradually relaxes, and the patient recovers her understanding and senses. The disease is described as coming on periodically, like epilepsy, and is said to be occasioned by the uterus being gorged with blood, or by the decomposition of semen or other matter within the uterus. Of those attacked with the disease the greater number speedily recover, but some die suddenly during the

paroxysms, the pulse becoming weak and irregular, and death taking place from asphyxia.

During the paroxysms ligatures should be applied around the extremities, and the whole body should be rubbed briskly with the hand. Among the other measures to be employed is the application of cupping instruments, the administration of carminatives, sternutatories, emetics, and purgatives, the use of clysters to evacuate the bowels and thus make room for the uterus to regain its normal position. Such is the treatment for the relief of the paroxysms, but for the recovery of the general system venesection should be resorted to, and much attention should be given to exercise, friction, and bathing.

Galen refuted the opinion regarding the displacements of the uterus, as taught by Hippocrates, Aretæus, Paulus, and others, but retained — as did Alexander Aphrodisiensis — the treatment based upon this theory of displacements, while Soranus rejected both the theory and the consequent treatment.

Alexander Aphrodisiensis, above referred to, expressed the opinion that the odorous substances used by some to restore the uterus to its proper position being endowed with subtle and warm properties exert a dissipating effect upon the humor, which he believed to be the cause of the disease, while substances of a fetid odor he thought were composed of thick particles which obstruct the passages and prevent the organ from rising.

Celsus thus marks the distinction between the epileptic and the hysterical convulsion: Hysteria, he says, sometimes abolishes consciousness and causes a person to fall, as does epilepsy, from which, however, it differs in this, that there is no rolling of the eyes, no foaming at the mouth, and no convulsions, but simply profound drowsiness. With some women it returns frequently and persists throughout life. If the patient is strong enough he advises bleeding, if she is not, the cupping. If the patient remains long unconscious, substances of disagreeable odor should be brought near the nostrils for the purpose of arousing her to con-

sciousness, for which purpose, also, the cold douche is recommended as equally efficacious ; fumigation of the uterus with sulphur is also advised, and the menstrual discharge, if too profuse, should be checked by scarification and cupping of the groins.

Aretæus surpasses all the other ancient authors in his description of this affection, but his treatment does not differ materially from that of Hippocrates, Galen, and Celsus. He makes mention of a disease allied to hysteria, but which attacks men ; he probably refers to epilepsy.

Ætius also gives a very minute account of the disease, which, in his opinion, is occasioned by a flatulent refrigeration, and not by inflammation, as Soranus had said.

Moschion disapproves entirely of the practice of applying fetid things to the nose, ligatures to the extremities, or fragrant pessaries to the uterus.

Leo observes that men are often seized with hysterical convulsions.

Oribasius, *Nonnus*, *Octavius*, *Actuarius*, *Eros*, and the principal Arabian writers, all treat of the disease, but in pretty much the same terms as the foregoing authors. *Rhazes*, however, seems to think that the ascent of the uterus is not real but only apparent ; and *Serapion*, while admitting that the uterus flies from fetid things, says that it does so not because it is an animal but from a natural property only.

Ambroise Paré gives a very interesting account of hysteria, which we will reproduce at some length, as it contains a number of ideas which were not entertained by the earlier writers on the subject : —

“Suffocation of the uterus,” he says, “is the interference of respiration which is occasioned by the swelling of the uterus, or by its being moved upwards by a convulsive movement due to distention of its vessels. The swelling may be caused by the decomposition within the uterus of semen, or some other substance, or by menstrual retention ; this condition may be recognized by vertigo, pain in the ovaries, nausea, belching, and rumbling in the intestines.

The semen of the woman, when retained in the vessels, may give rise to putrid vapors which find their way to the liver, heart, or brain, causing very serious disturbances, sometimes resembling the symptoms presented by people who have been bitten by mad dogs, or been stung by some venomous beast. The accidents which arise from uterine suffocation are much more serious when caused by retention of the semen than when arising from menstrual suppression, because as the semen is a more perfect fluid, when it becomes putrid it is more malignant, subtle, and penetrating, and the diseases which it occasions are more severe and dangerous: the better the wine the stronger and sharper the vinegar. The accidents referred to happen much less frequently with married women, but are more apt to occur with young widows of indolent habits. When decomposition of the retained fluids takes place in the uterus the organ moves from its natural position because of the distention of the vessels which run through it, for these becoming shorter by reason of their engorgement draw the uterus toward the point of their origin, which is the vena cava and the great artery; if they draw equally in all directions then the uterus rises toward the stomach and diaphragm, if they draw unequally, then it inclines forward, backward, or to the right or left; under these circumstances the bladder and intestines are attacked with pains and swell, as indeed does every other part toward which the uterus moves, yet suffocation is not so much produced by the pressure of the uterus against the neighboring organs as by the vapors which arise from its vessels. Other accidents also arise from retention of the semen and menses, and are various according to the quantity and quality of the retained substance; for, if the producing cause is of a cold nature it chills the entire body, so much so that the respiration and pulse can scarcely be perceived; if it be of a heavy nature it causes convulsions; while if of a melancholy nature it causes sadness. From this it appears that the uterus is first affected, then the stomach sympathizes with it, and lastly the heart, liver, and brain are affected.

Some women pass into the condition of profound sleep, called by the Greeks *caros*, in which they are deaf and mute, and answer only when called in a loud tone of voice; at other times they hear well, but are unable to reply; while the most extreme cases are sometimes followed by epilepsy, catalepsy, lethargy, apoplexy, and even death. In a word, the uterus has its own sensibility, being independent of the woman's volition in such a manner that one might say that it is an animal, for it increases or diminishes in size according to circumstances, and when it desires moves about causing the poor woman to lose all patience and reason, and causing her great disturbance. When the hysterical attack comes on, the patient is generally unable to maintain an erect position, but lies down in a cramped position, so as to experience less pain, placing her hand upon her chest and pressing as though to prevent the uterus from rising. At other times the patient suddenly falls to the ground and lies there as if dead, giving no evidence of consciousness, while the pulse becomes so small that it cannot be detected, and respiration, the inseparable action of life, may be imperceptible. If the heart is affected syncope is the result, while if the brain is affected there is either delirium or stupor. In some instances the attack is ushered in with uncontrollable fits of laughter, in other cases there is a condition of ecstasy in which the soul seems to be separated from the body."

The author deems it necessary to give various rules by which to determine whether the patient has died in one of these attacks, and cites a case in which Vesalius was about to make a post-mortem examination of a patient apparently dead, and had already made an incision when, to his astonishment, the patient gave signs of life to the great chagrin of the physician, who was so derided for his mistake that he went into a voluntary exile, and died soon afterwards.

Mention is also made of the frequent disposition on the part of the patient to cry, laugh, or talk incessantly while the attack lasts, and says that as the attack passes off the body gradually regains its accustomed strength, color re-

turns to the face, the jaws open, and there is found to be a discharge of humor from the uterus. At other times orgasm is said to occur, after which the uterus relaxes and all signs of the fit pass away.

For treatment, he recommends placing the patient in an easy posture, so that the breathing may be as unimpeded as possible, rubbing her violently with rough cloths, and the application of fragrant pessaries, while fetid things are applied to the nostrils.

In comparing these ancient ideas of the nature and cause of hysteria with the modern views on the same subject, we may briefly say that it is a subject which has been treated of from the earliest times, but never satisfactorily, and no theory that has ever been suggested is calculated to receive universal acceptation. In Dr. Reynolds' opinion, the essential character of hysteria is an exaggeration of involuntary mobility and a diminution of will power, so that reflex movements which, in health, are more or less under the control of the person in diseased conditions may pass beyond all bounds of healthy influences. It is also well established that it is a disease which is not confined to the female sex, but being merely an exalted state of reflex excitability may occur likewise in man, but not to an equal degree as in woman, who is much more liable to emotional disturbances, which are also more markedly manifested in her case.

MENSTRUATION AND ITS DISORDERS.

Aristotle held that the menses proceed from a sanguineous superfluity in the system, and it is interesting to observe that about the same opinion was held by Buffon, the naturalist.

In the Hippocratic treatises we find much to interest and amuse us on this subject, which we will set forth as briefly as possible.

Women who have never been pregnant are said to be much more subject to menstrual diseases than are those who have borne children. For when a woman has once borne children, her veins carry off the menstrual discharge more

readily than before, because the lochial discharge improves the circulation. If there is a determination of blood to the generative organs during pregnancy, the vessels of the viscera and mammary glands are distended, and nutrition is exaggerated throughout the entire body. The reason assigned for this is, that when the body develops more rapidly the veins are enlarged, so that the uterus may quickly develop in order to make room for the growing child. This being the case, the menstrual discharge flows much more readily after the lochial discharge which follows delivery. If, then, those who have borne children experience difficulty in menstruation, from whatever cause it be, they may be more easily relieved than those who have had no children ; in the former case the uterus is accustomed to discharges, and the body hastens to relieve itself of plethora. On the other hand, in the case of women who have not borne children, the vessels are unaccustomed to distention, which is always resisted. It is also remarked that the more delicate vessels of woman take up the fluids of the body much more readily than do the vessels of man, and her more delicate tissues become heated, causing her great pain if she is not relieved from this distention, hence it is that the temperature is higher in woman than in man ; but the losses of blood to which woman is subject prevent a too great rise of temperature. When, then, a woman who has never been pregnant is deprived of the advantages of the menstrual discharge, the blood finds no issue and a condition of disease results, as happens when the uterus is obstructed or distorted. Derangements of menstruation may also occasion vomiting and diarrhea, which occur oftener in young girls than in women. Whenever menstruation fails to take place at the accustomed period the woman suffers pain in the lower part of the belly, she feels as though a weight were resting on her loins, which discomforts her greatly. If menstruation entirely fails to appear the blood becomes thick and viscid within the body. The treatment for this condition consists of emetics, purgatives, and applications suitable for cleansing the uterus

Such drinks are also given as serve to improve the circulation. If, in spite of these measures, menstruation is not re-established, it may be expected that the woman is pregnant. After menstrual suppression has lasted for three months it sometimes happens that the flow suddenly reappears, and in great abundance, containing also certain clots resembling flesh, together with black blood. There are cases also where the woman believes herself to have been pregnant for several months, the abdominal distention giving apparent signs of pregnancy, when it is finally discovered that the tumefaction was due to retained menstrual blood; in other cases the pent-up fluid burrows toward the loins and appears in this locality; in other cases still the menstrual discharge takes place in a natural manner, but is of a purulent nature and causes ulceration of the parts. When the menstrual discharge is reduced in quantity, — because the orifice of the uterus is turned to one side, or the uterus is bent upon itself in such a manner that the discharge is not absolutely retained after reaching the uterus, but is prevented from flowing freely, and issues in small quantities, — there may be a gradual accumulation in the uterus month by month, preventing conception and often giving rise to a fever, especially at the menstrual periods. In the intervals between menstruation the woman will experience chills and fevers, and disturbances in the heart's action, and as the quantity of the retained fluid increases there will be pains in various parts of the body, especially in the loins, back, and articulations of the hands and feet, caused by the regurgitation of the confined blood; there is swelling in these parts, and finally convulsions are set up in the various members; if, now, the patient does not improve there may be loss of power in the members, or even paralysis, caused by the coagulation of blood around some nerve. When the menstrual flow is too abundant and frequent, either because the tissues are relaxed, or because the orifice of the uterus advances in the vagina, and to this be added a luxurious mode of life and excessive sexual indulgence, so that the blood, after it has commenced to flow,

continues to come in large quantities, the woman is rapidly debilitated by the exhaustive discharge; and if now some other malady comes upon her while her body is in this state of enfeeblement, the disease is readily aggravated, a slight cause now sufficing to give rise to a fever, loss of appetite and strength, and finally suppression of the menses. In time all these symptoms become graver, and the patient is likely to become sterile, or even to die of exhaustion.

AMENORRHEA.

In *Paulus'* works we find the following as regards menstrual retention: The menstrual evacuation is sometimes retained owing to a particular affection of the uterus itself, from local coldness, or from some injury sustained, but more often from abortion, or from some primary affection of one of the more important organs, such as the liver, which may be laboring under a chronic disease. When menstrual suppression occurs it becomes the cause of many, and frequently protracted, complaints. If, then, the suppression be owing to a primary affection of any of the internal parts we must first direct our particular attention to the cure of the part originally affected, and afterwards think of the uterus. If, however, there are no symptoms pointing to external lesions, it is clear that the uterus is the original seat of the complaint. Our first recourse in this case must be had to bleeding; but this should not be practised before the regular period of menstruation, but ten days after it is passed, and the quantity to be taken must not be more than two pounds and one half, nor less than one pound; at this time, too, we must purge the patient with hiera. After purging we must give recruiting things for a few days; the patient should also take plenty of exercise by walking, and the lower extremities of the body should be thoroughly rubbed. The most proper food will be that which is easy of digestion and humid. It is also advisable to apply ligatures to the lower extremities for three or four days, to be removed just before the usual menstrual period, at which time the patient should take frequent draughts of myrrh.

When the menstrual period has passed and no discharge, or at least none of any consequence, has taken place, we must open a vein at the ankle and abstract blood ; it is well, also, to apply calefacient plasters over the abdomen, loins, and thighs. Various medicines are recommended which should be applied per vaginam, including some which are to be administered by fumigation.

Galen has treated very fully of this disease in different parts of his works, and has explained satisfactorily the nature of emmenagogues ; but his writings on this subject are greatly inferior to those of *Aëtius*, who advanced many excellent views on the subject, some of which we will give in this place.

Aëtius says that barren and pregnant women, singers, and dancers do not menstruate, the menstrual superfluity in the last two classes being consumed by too much exercise. It is undoubtedly true, as the author remarks, that those who take very active exercise have less discharge than women who lead an indolent life. Sometimes, too, he says a fat or lean state of the body will occasion suppression of the menses, because fat persons have too little blood in their veins, it being consumed in forming the fat, and hence also they seldom conceive, or if they do their offspring is puny. The menses may also be checked by disease and by loss of blood, profuse perspiration, vomiting, purging, or cutaneous eruptions.

Paulus' treatment is judiciously varied according to the cause of the complaint. Suppression, he says, brings on heaviness, torpor, pains of the loins, head, and especially at the root of the eyes. When the suppression arises from a hot temperament it is to be treated by giving the patient cooling and diluent food, such as lettuce, fish, fowls, grapes, cucumbers, etc. When the disease is connected with a cold temperament the countenance assumes a pale leaden color, and the urine is found to be watery. Such a patient must live upon food of a heating nature, with a generous wine, and must take active exercise, while the suitable medicines are those of a calefacient nature. Pessaries may be used, but the more acrid substances, such

as elaterium, cantharides, and white hellebore, must be rejected, as they are apt to occasion irritation and inflammation. When amenorrhea is occasioned by corpulency the principal reliance is to be placed in an attenuant diet, while guarded purging with drastic cathartics has often an excellent effect. When the patient is emaciated and feeble the system must be invigorated by attention to exercise and regimen. When bleeding at the nose is the cause of suppression it can be cured by sweating and vomiting.

Oribasius says that bleeding affords great relief to women in cases of amenorrhea, since it serves to evacuate the blood which menstruation fails to carry off. But we should wait for the menstrual period before operating thus, and then, when the blood fails to appear or comes in small quantities, depletion is made use of in such measure as the case demands. With some women this treatment contributes also to recall the normal menstrual flow, for the continual determination of blood to the lower parts of the body impresses upon it a tendency to flow in this direction. However, he says, "I relieve also by this treatment women who have already reached an advanced age, and with whom menstruation has long since ceased, when they experience some bodily discomfort, for this method is of especial efficacy provided it imitates the natural evacuation. I am accustomed to deplete sometimes with the aid of a knife and sometimes by applying leeches."

Antyllus mentions among other remedies hemagogues, diuretics, and the application of stimulant pessaries to the mouth of the uterus.

Galen gives us an extremely interesting account of his methods of exciting the menstrual flow and the reasons which lead him to their employment. He says that substances which are adapted to provoke or arrest the menstrual flow are analogous to those which exert a similar influence over the supply of milk; for the blood contained in the veins is the common source of both milk and the menstrual fluid. When the blood circulates freely it furnishes abundant material for both of these products. There

are veins which are common to the breast and the uterus, namely, the external mammary and the epigastric veins; if the blood moves to one of these the other becomes dry. But in administering remedies to control these secretions, we must observe that the uterine flow sometimes demands warmer and more powerful agents, because the veins of this region have greater need of being kept open than do those of the breast, and that they have also need of a more liquid blood, because the uterus does not at all contribute to the afflux of blood; in fact, the menstrual blood is forced into the veins of the uterus, but is not attracted thither; while, on the other hand, the blood is both forced and attracted toward the breast; hence, when the blood is not supplied in sufficient quantity to the breast, the medicines which are needed to increase the flow of blood need not be as powerful as those which must be administered to increase the menstrual discharge. Medicines, then, which excite the flow of milk are also beneficial in cases of menstrual deficiency, but when the uterine evacuation meets a serious obstacle, or is completely arrested, it is necessary to have recourse to the most powerful remedies.

The *Arabian writers* have given considerable attention to the subject of amenorrhœa, but there is great similarity in the character of their writings.

Avicenna approves of tight ligatures around the thighs, bleeding from the saphena, and emmenagogues, such as musk, castor, and myrrh, and this treatment comprises *Seraphion's* as well.

Haly Abbas recommends baths containing stimulating substances, also stimulating medicines to be taken internally, bleeding, and the application of cupping instruments to the thighs.

Alsaharavius treats fully of the subject upon nearly the same plan as *Aëtius*. To relieve the pains that sometimes precede menstruation, he recommends the tepid bath, moderate exercise, and attenuant food.

Rhazes and *Eros* advise bleeding at the ankle, hot baths, frictions, and purgatives.

UTERINE HEMORRHAGE.

On this subject we find very much to interest us in the ancient authors, especially as we readily discover that they were perfectly familiar with some of the fundamental principles of treatment as practised at the present day. Some of these principles were taught by *Hippocrates*, who considered them important enough to include in his aphorisms, some of which we will quote.

“If you wish to stop the menses in a woman apply as large a cupping instrument as possible to the breast.” This rule of practice of course related to the sympathetic relation existing between the uterus and mammæ, and upon this principle we may see the advantage of determining the blood toward the breasts in uterine hemorrhage after delivery. Usually the new-born child is applied to the breast, often with the result of producing a rush of fluids in that direction.

“If a woman who is not with child, nor has brought forth, have milk, her menses are obstructed.” Galen, as we have already observed, and Theophilus, discuss the reason of the fact here stated, and conclude that it is due to a vascular connection between the uterus and the mammæ. Whether Hippocrates was equally enlightened on the subject is not so obvious.

In relation to this same subject, *Oribasius* writes that there is a certain natural sympathy existing between the uterus and the breasts, so that when the uterus develops during pregnancy the breasts also swell, and while the uterus completes the development of the semen the breasts prepare the milk destined to nourish the child; furthermore, while the menses flow the milk is not secreted, and when the milk flows the menses do not appear. At the menopause the breasts atrophy and the uterus shrinks, and when the fetus is diseased both the breasts and the uterus atrophy. When, then, the breasts contract during pregnancy we predict a miscarriage.

Paulus describes uterine hemorrhage in this wise: im-

moderate discharges of blood in women take place sometimes from retention of the menses, which afterwards break out more copiously than usual; and sometimes after parturition at the full term, when they cease spontaneously in most instances; and frequently after miscarriages, when a violent hemorrhage often takes place, which sometimes proves dangerous. In treating these cases we must apply ligatures around the members at the armpits and groins. Such substances should also be introduced into the vagina as serve to check the flow of blood, such as the juice of hypocistis or acacia, together with vinegar. An excellent application is a sponge soaked in wine or liquid pitch, or the ashes of sponge or cork, and the external application of astringent epithemes. Pessaries containing powdered galls or rosemary often check the flow very quickly. The writer also describes various injections to be thrown into the uterus with a syringe.¹

Aëtius has written fully on this subject, and so has *Paulus*, who differs but very little from *Aëtius*. *Aëtius* condemns, however, the practice of applying cold things on sponges to the uterus as injurious to the organ.

Galen, *Oribasius*, *Actuarius*, *Soranus*, and *Moschion* furnish us with about the same details of treatment as above described.

Octavius Horatianus directs that the parts be subjected to vapors of astringent articles, and that sponges and wool be used to apply styptic juices.

Rhazes suggests venesection, astringent troches, cupping of the breasts, stuffing the vagina with wool containing a mixture of galls, antimony, acacia, alum, etc. He also advises pessaries made with escharotics, and in post-partum hemorrhage cold astringent applications to the extremities.

Haly Abbas correctly remarks that uterine hemorrhage

¹ Many of the ancient writers meant by the word womb the entire parturient canal; hence it has been questioned by some whether those ancient authors who are quoted as having advised and practised intra-uterine injections, really meant that mode of practice, as understood at the present time, or simply vaginal injections.

sometimes proceeds from plethora of the system, in which case he recommends bleeding. When connected with thinness of the blood he recommends fattening food. Serapion and Alsharavius make use of a similar course of treatment.

Avicenna, however, is the completest Arabian writer upon menorrhagia. Like Haly Abbas, he states that it sometimes proceeds from plethora and must be relieved by revulsion and bleeding. When connected with debility he prescribes astringents. When caused by ulcers he approves of a combination of agglutinative, astringent, and narcotic medicines. Some of his prescriptions contain opium, which is an anticipation of the modern practice in such cases.

The ancients perfectly understood the influence of position in arresting hemorrhages. This is a subject which has also attracted considerable attention of late years. There is no doubt that metrorrhagia, when abundant, cannot be arrested by any treatment if the patient maintains an erect position which leaves the uterus dependent; but repose and a horizontal position are generally necessary. In some cases even these measures do not suffice, and the hemorrhage continues in spite of cold applications and the administration of ergot, etc. Under such circumstances, the position indicated by Hippocrates, Antyllus, and other ancient writers, which consists in placing the patient in such a position that the feet are on a higher plane than the head, they claim, rarely fails of producing the desired result.

LEUCORRHEA.

Although very much has been written on this subject, there is but little among the ancient writings deserving of any special notice.

In the Hippocratic treatises a very good description is given of the symptoms which sometimes attend leucorrhœa, namely: swelling of the face, paleness of the countenance, enlargement of the abdomen, anasarca of the limbs in which the flesh pits on pressure, short breathing, debility, etc. He admits the difficulty of curing such complaints, but di-

rects that it be attempted with diuretic émithemes, a desiccative diet and exercise.

Aëtius mentions leucorrhœa as the "white flux," and recommends in its treatment exercise, friction, and the use of astringent and detersive applications.

Galen correctly remarks that women of a loose, phlegmatic habit of body are most subject to leucorrhœa.

Paré describes leucorrhœa as a continuous and painless flow which comes from the uterus, but one which gives rise to considerable discomfort if the uterus is in an ulcerated condition. His treatment consists of the employment of most of the measures used in controlling uterine hemorrhage, and also the use of mineral waters, which should be drunk freely, care being taken, however, not to check the flow too suddenly, in which case the corrupt discharge might affect the liver, causing dropsy, fever, brain diseases and uterine ulcers.

UTERINE DISPLACEMENTS AND DISEASES.

Prolapsus uteri is particularly well treated of by *Hippocrates*, who has also described a case of complete procidentia when he says: "The uterus hangs down like a scrotum." He directs us to make cold applications to the pudendum, to wash the part with astringent lotions and restore it to its place, then to make the woman lie upon her back with her legs crossed and tied together.

Paulus has it that prolapsus uteri is of rare occurrence, but may be caused by a variety of mishaps, such as falling from a height, whereby the ligaments are ruptured which keep the uterus in position; by the tearing away of the secundines which drag the uterus along with them when they adhere, by the awkward performance of embryotomy; by a blow; and by mental emotions of terror or grief which sometimes cause a relaxation of the whole system; or, finally, owing to paralysis and atony of the parts, which happens most especially in those whose health is declining. The prolapsus is toward the mouth of the uterus, and some, indeed, relate that the whole uterus has been prolapsed,

which is incredible; for how could it have been reduced and kept in place?

His treatment is first to evacuate the hardened feces and promote the discharge of the urine in order that the uterus may be freed from all compression. He then directs us to place the woman in a supine position with her hips well elevated, and to take a roll of wool rounded to the shape of the vagina, bind it with cloth dipped in acacia juice, apply it to the uterus and projecting parts, and push gently upwards till the whole is restored to the vagina. The subsequent treatment is to keep the woman's legs extended and crossed, apply cupping instruments to the navel, and on the third day give the woman a hip-bath containing astringent decoctions. After this the wool should be taken away and another fold be applied, and every third day repeat the same treatment until the cure is complete. But if the prolapsed part cannot be reduced, and mortifies, we may cut it away without apprehension of danger; for, as the writer remarks, "They relate that the whole uterus, having become mortified, has been taken away and yet the woman lived." Paulus takes this account from Aëtius, who in turn is indebted to Seranus for it. Paulus also quotes from Aspasia on the subject of uterine displacements.

Alsaharavius recommends about the same plan of treatment, and directs us, when the attempts at reduction fail, to extirpate the uterus by an operation.

Avenzoar relates a case in which he saw the whole uterus projecting externally. He also relates a similar case upon the authority of a friend.

Haly Abbas likewise mentions that the uterus sometimes projects fairly beyond the vulva.

It may be remarked here that the ancients do not appear to have used pessaries made of solid material, such as wood or iron.

Paré claims to have extirpated the uterus once and with good results. He makes mention of other similar cases, and relates one case in which there was prolapsus of the uterus where gangrene had set in and the uterus was spon-

taneously amputated and still the woman recovered her health.

Oribasius prescribes very similar treatment for these cases. He first directs warm baths in order to soften the feces and cause their discharge, and the evacuation of the bladder by means of the catheter, after which the uterus is to be gently pushed into place and retained for a number of days by means of a roll of wool pushed into the vagina. This writer also certifies that the uterus is not a very vital organ, and that it may be cut away without endangering the life of the patient, and also quotes *Themison* as saying the same thing.

MOLE.

According to *Hippocrates* moles are caused by a superabundance of menstrual blood together with a bad condition of the semen. The belly swells as during pregnancy, but there is no movement to be observed, and the breasts contain no milk although the throat swells. This condition lasts at least two years and sometimes three. If the mole is solid the woman dies, the uterus not being able to discharge so large a mass; but if the mole is composed of many pieces, or if it breaks up, there will be a discharge of blood from the vagina together with pieces of flesh. The diagnosis is made by observing the enlargement of the belly without any manifestation of movement; while an infant moves in the third month if a boy, and in the fourth if a girl; but when these periods are passed without any movement taking place in the belly, it is very probable that a mole is present. The absence of milk in the breasts is another sign of importance. The treatment consists of purgations and washes to determine the blood to the uterus; but it must be remembered that by these means it is also possible to excite movement in an embryo which might be present. A cure may be expected in some cases by producing emaciation of the body; for it is observed that when women lose flesh the tissues become relaxed and abortion is often produced.

Paulus gives a much better description of mole than the

above. The mole, he says, is a scirrhus tumor forming sometimes at the mouth and sometimes in the body of the uterus, conveying to the touch the sensation of stone, and being attended also with emaciation, paleness, loss of appetite, retention of the menses and swelling of the breasts, so as in certain cases to give rise at first to suspicions of pregnancy or dropsy, from the latter of which it can be distinguished by the hardness of the swelling and from there being no sound of water when tapped with the fingers; but in certain cases the disease actually does terminate in dropsy; in other cases it brings on a discharge of blood. In general, therefore, it is proper to place the patient in a cool, dark room, upon a couch with her feet raised, and perfect repose of the body must be enjoined, for motion provokes discharges of every kind. The treatment is directed to the swelling, dropsical effusions, and hemorrhages, and such remedies are prescribed as the writer deems adequate to meet each of these manifestations. Paulus also directs attention to the fact that some writers apply the term mole to an unorganized mass of flesh which forms on the walls of the uterus and is delivered like a fetus, and directs that such a formation be treated by relaxing measures to cause its discharge.

In the first species of mole described Paulus directs attention, no doubt, to fibrous tumors of the ovaries, and perhaps also scirrhus of the neck of the uterus. His other variety is probably the hydatid, such as has been described by many of the ancient writers, including Hippocrates, Aristotle, Plutarch, Pliny, Actuarius, Nonnus, Moschion, and Rhazes.

Galen and *Avicenna* regard the true mole as a corruption of the male semen, and consequently they believed that it never occurs in virgins. Some more modern authorities, including the names of Paré, Martinus, Akakia, Mercatus, and Ruysch, maintain a contrary opinion.

Aëtius mentions only the first of the two varieties described by Paulus.

It appears from the writings of Oribasius, Soranus, Aë-

tius, and Actuarius, that many of the ancients, in describing what they termed mole, referred only to extra-uterine pregnancy.

CANCER OF THE UTERUS.

Hippocrates, after a long account of cancer, pronounced it when fairly developed entirely incurable, and says that it is better not to apply any treatment for then the patient might die quickly, while if not treated they often hold out for a long time.

Paulus says that cancer of the uterus may be attended with ulceration or otherwise; in the former case a hard, callous tumor is found at the mouth of the uterus. When the cancer is ulcerated the ulcers are white and callous with ugly scabs on them, and a thin fetid discharge is always noticed. The disease, he says, is incurable, and all that can be done is to alleviate the attendant pain.

Oribasius pronounces this disease incurable, and says that all that can be done is to alleviate pain by the aid of baths containing decoctions of fenugrec, mauvec, etc., and by injecting woman's milk, or applying pessaries prepared with opium and saffron.

INFLAMMATION OF THE UTERUS.

Oribasius teaches that the uterus may be inflamed by a variety of causes, such as a blow, retention of the menses, abortion, by a sudden chill, by flatulence, and by ulceration. Women affected with this disease present the following symptoms: an acute burning fever, local pains in remote parts of the body, especially in the head, neck, eyes, and hands, and the pains in these parts reach their greatest intensity only when the uterus is in a diseased condition. In the uterus itself there are terebrating pains which give place to pulsation, the greatest pain being experienced in the particular part of the uterus in which the disease was first manifested. When the posterior part of the uterus is inflamed there is great pain in the loins, the rectum is compressed and pushed toward the side of the body, interfering with the excretion of fecal matter; if the anterior part of

the organ is affected there is difficulty in urination and the urine escapes drop by drop ; if there is inflammation at the mouth of the uterus there is pain in the pubes and vagina. In all these varieties of inflammation it is found on digital examination that the mouth of the uterus is closed ; but when the os especially is affected the lower part of the uterus is found to be harder and much warmer than usual. The treatment of these cases consists in rest and the application of wine and oil to the loins and pubes, but care must be taken not to produce pressure in making these applications. If the inflammation takes on an erysipelatous character cooling applications must be made. Hip baths should be made use of throughout the entire attack.

ABSCESS OF THE UTERUS (OR PELVIC ABSCESS).

According to *Oribasius*, when inflammation of the uterus terminates in suppuration this must be favored by applications of barley meal and by irritating and warming pessaries. When the abscess bursts the contents sometimes escape by the os uteri, sometimes by the bladder, but most often by the rectum.

Paulus' account is of greater length and is given with minuteness. He says that when the inflammation is converted into abscess all the symptoms become more intense ; there are also irregular attacks, accompanied with rigor, until suppuration has taken place. Just before the abscess breaks the pains become more severe again and a fever is developed, while obstruction of the urine and feces is occasioned by the pressure of the swollen uterus. Abscesses are discovered by means of the dioptra or the touch of the finger, and from the severity of the pain, which is due to the nervous nature of the neck of the uterus. By way of treatment, suppuration is to be favored by means of cataplasms, hip baths, and pessaries of turpentine and myrrh. If the abscess does not burst spontaneously it must be evacuated by a surgical operation.

ULCERATION OF THE UTERUS.

Paulus states that the uterus is ulcerated by difficult labor, forced abortion, acrid medicines, or appears as the result of abscesses which have burst. When the ulcerated part is within reach it is detected by means of the dioptra, or if deep-seated by the character of the discharges. The treatment consists in cleansing the parts and making soothing applications, especially such as contain poppy-heads. When the ulceration tends to spread, astringents should be applied. External applications should also be made of cataplasms which readily communicate their powers through the pores of the skin. This description, as given by *Paulus*, is taken from the compilations of *Aëtius*, who says he takes it from the writings of *Archigenes*, *Aspasia*, and *Asclepiades*.

FISSURES, CONDYLOMATA, AND HEMORRHOIDS OF THE UTERUS.

Paulus says that fissures occur about the mouth of the uterus from difficult parturition. At first they escape notice while the pains from the labor are recent, but afterwards they may be felt by the finger, or even during coition, when they bleed owing to the friction produced. They may also be seen distending the vagina. Surgical aid is said to be unnecessary, and a list of medicines is given which is said to be entirely adequate to produce a cure. It sometimes happens, *Paulus* says, that these fissures become permanent and give rise to condylomata, which are treated just the same as the fissures. Hemorrhoids form about the mouth and neck of the uterus, and may be discovered by the speculum; it is necessary to seize them with the forceps and cut them out, or they may simply be treated with astringent medicines. As the ancients have not described polypus uteri by name, it is quite possible that they have comprehended it and all other tumors about the uterus under the general appellation of hemorrhoids. *Aëtius* directs is not to interfere with those which are hard and varicose

and malignant ; those which are hard and do not bleed are to be seized with the forceps and ligated before they are cut. Celsus and Aëtius call any tubercle arising from inflammation by the name of condyloma, whereas Paulus applies the term only to callous tubercles of the uterus. Octavius Horatianus recommends troches containing arsenic, which might certainly prove efficacious. Other writers speak highly of the use of pessaries containing turpentine.

PHIMUS IN THE UTERUS (STENOSIS).

By this is meant an obstruction of the os uteri by a callous substance. It is said to be consequent upon ulceration, and is cured, according to Paulus, by emollient hip baths, and emollient pessaries. Aëtius makes mention of a more efficacious, but dangerous, application, namely, a piece of sponge spread with an ointment containing arsenic, alum, etc. Hippocrates recommends an application containing verdigris. Avicenna treats the disease only by surgical operation.

ATRESIA VAGINÆ ET UTERI.

As regards the cause of vaginal atresia we find the following in the Hippocratic treatises. "Sometimes the vagina becomes obstructed after parturition. I have seen a case when the parts were torn during delivery causing excoriations, after which the parts became seriously inflamed, so that the lips touched and became united as in wounds. After the subsidence of the inflammation, the lips, which had reunited, offered an obstacle to the menstrual discharge, preventing its free exit. It is necessary in such a case to dress the lacerated parts and cause cicatrization, but it is necessary that the cicatrix be firm and complete, while it is very difficult to secure this result. In the instance of which I speak all the results took place which occur when the menses are suppressed by malformation of the uterus, but the principal pain was felt in the vagina, which the woman found to be occluded. After suitable treatment the menstrual flow was reëstablished, the woman recovered her

health, and afterwards bore children. If the case had been neglected the wound would have increased in size, and a cancer would have been the final result."

Oribasius says, that in cases of imperforation of the female generative organs the membrane which closes the canal is situated sometimes between the labia majora, sometimes midway in the vagina, and sometimes at the mouth of the uterus.

According to *Paulus'* account, atresia is sometimes congenital, and at other times is the result of previous disease, while the obstruction itself is sometimes deep-seated, and is sometimes in the *alæ pudendi*, or in the intermediate parts, the obstruction consisting of a fleshy or membranous substance. The obstruction occasions impediment to coition or conception, and occasionally to menstruation. Having ascertained the location of the obstruction, from its being obvious to the sight, or by introducing the speculum, if it be a simple adhesion only it may be separated by a straight incision, but if of a more substantial character, it must be stretched by hooks and be divided by a scalpel; and having checked the hemorrhage by desiccative substances we must have recourse to such medicines as promote cicatrization, applying a priapus-shaped tent, in order that the parts may not reunite.

Soranus, Aëtius, and Celsus, also describe the operation. The last named recommends a crucial incision in case of a membrane, and then its entire excision, whereupon a tube of lead is inserted to prevent adhesion.

Albucasis recommends a singular substitute for the leaden pipe of *Celsus*: "*Coeat mulier omni die ut non consolidetur locus vice alia!*"¹

Alsaharavius directs the removal of the membrane by corrosive medicines, or by the knife.

Rhazes suggests that the obstructing substance be perforated by an iron instrument, and that a tent be introduced.

¹ Let the woman have intercourse every day, in order that the opening may not close again.

Aristotle also makes mention of imperforate vagina, and describes an operation for its removal.

LACERATION OF THE PERINEUM.

Paré tells us that laceration of the perineum is sometimes occasioned by parturition, and that it may be torn down as far as the anus, so that there is only one opening instead of two. It is then necessary, he says, to take a few stitches with the needle to unite the torn surfaces. This he describes as a very serious accident, because if the woman become pregnant after this the parts do not distend sufficiently to allow the passage of the child because of the cicatrix, therefore the physician is obliged to first cut and then tear the parts (so as to secure better union), otherwise delivery would be impossible. *Paré* was the first to suggest the secondary operation, but, as before stated, his pupil, *Guillemeau*, was the first to describe the operation in all of its details. The operation of the latter has been fully described.

STERILITY.

Hippocrates assigns the following causes for a woman's not conceiving: 1st. Because the os uteri is turned obliquely from the passage to it. 2d. Because the inside of the uterus being too smooth, either naturally or in consequence of the cicatrices and ulcers, it will not retain the semen. 3d. When, owing to suppression of the menses, any obstruction takes place about the os uteri, it is apt to prevent impregnation. 4th. When impregnation does not take place the veins of the uterus become so gorged with blood that they do not retain the semen; or, on the contrary, the same effect may arise from profuse menstruation, whereby the retentive faculty of the vessels is weakened and a return of the menstrual fluid in too great quantity may wash away the semen. 5th. Prolapsus uteri, by rendering the mouth of the uterus hard and callous, prevents impregnation.

Paulus, in treating of the cure of sterility, says that it is often due to imperfect nutrition on the one hand, or to plethora on the other; hence, one thing of prime importance

is to see to it that the system is in a good, healthy condition, to secure which great attention must be paid to the matter of diet ; and the writer mentions many things which should be especially avoided as tending to impair nutrition. Fat people are unfit for procreation, both because of the want of agreement in their genital organs and because they do not emit much semen, nor are those who are emaciated more so. Women must attend particularly to the condition of the uterus and see that the menstrual discharge be not obstructed, and they must be careful to eat such things as tend to promote this discharge. Sterility may be due to cold intemperament of the uterus, which is indicated by menstrual retention. In such cases aromatics and stimulating food are necessary to recall the natural heat, while friction of the lower part of the belly is no less proper. Warm intemperaments of the uterus are indicated by the whole body being warmer than usual, by the menses being voided in small quantity and with pain, and by the privy parts of the woman being ulcerated ; a cooling and moistening diet is here indicated as well as cooling application. If sterility is due to humidity of the uterus the menses will be thin and profuse ; a desiccative diet, therefore, suits with these cases. When the uterus is drier than usual sterility is to be cured by means of baths and unguents. If conception be prevented by thick humors, these must be purged away. When the fault is due to inflation of the uterus the treatment consists of aromatics and pessaries. When the mouth of the uterus is closed it must be opened by aromatic injections, and in addition to these we may use turpentine, nitre, elaterium, cassia, and tar water. When the mouth of the uterus gapes use astringents. Sterility is often due to distortions which must be rectified ; in such cases the author properly remarks, that coition *à posteriori* would seem to promote conception, for there are cases in which this plan has proved very fruitful.

Serapion, like Aëtius and Paulus, regulates his treatment of sterility upon the principle of correcting the intemperaments of the uterus.

Oribasius recommends the *à posteriori* mode of coition. He also says there are cases in which the os uteri must be dilated before conception can take place, and that there are other cases in which the os gapes, preventing conception until the orifice is narrowed by the use of astringents.

Haly Abbas recommends stimulating fumigations. One of his prescriptions contains arsenic, which would be a potent but dangerous application.

Plutarch enumerated the causes which were supposed to explain why a woman does not conceive after every act of coition. These were as follows: Diocles maintained that it is either because no semen had been emitted or less than necessary; or from a deficiency of heat, coldness, moisture, or dryness; or from relaxation of the uterus. The Stoics held that it is from the obliquity of the penis which does not project the semen straight forwards; or from the disproportion between the genital organs. Erasistratus taught that it is occasioned by callosities and fleshy excrescences, or from the uterus being more spongy or smaller than natural.¹

ABSCESS OF THE BREAST.

Oribasius says that if a mammary abscess demands a surgical operation the cavity must be evacuated of the fluid and filled with charpie; but care must be taken not to compress the parts, as this might cause a fistula. After the third day adhesive plasters must be used, and care should be taken to cleanse the wound well in order to favor granulation.

¹ Daremberg, in *La Médecine. Histoire et Doctrines*, Paris, 1865, alluding to some of the disgusting practices and superstitious teachings of Trotula and her women followers "*Médecine ou non médecins*," adds, "*En voici quelques-unes: Manger, elles-mêmes et faire manger à leurs maris des excréments d'âne frits dans la poêle, pour combattre la stérilité; manger de cœur de traie farci, pour oublier les amis morts*," etc., etc., p. 142.

CONCLUSION.

It seems needless to make further selections from the writings of the early authors on diseases of women to render it apparent that while they contain much that seems to moderns crude, and even absurd, they also exhibit many evidences of great skill and profound learning.

If one will peruse only a limited number of the works on ancient medicine, the truth of what Adams wrote in his preface to Paulus will be apparent. He says: "It seems to me that, at certain periods of ancient times, the standard of professional excellence was such as would not easily be attained at the present day with all our vaunted improvements in knowledge, and that many of those early masters of our art are distinguished for varied stores of erudition, an ardent love of truth, and an aptitude to detect the fallacies of error, such as few of us, even now, can lay claim to."

Hippocrates held that to become an eminent physician it was necessary not only to be well acquainted with the structure of the human frame, but also skilled in logic, astronomy and other sciences. *Galen* was, without doubt, the very "*beau ideal*" of an accomplished physician, skilled in all the sciences of the day. There can be no question but that *Aëtius* was a profound scholar. *Celsus* was not only well acquainted with medical literature, but was "minutely skilled in every elegant and useful science which was known and cultivated at that remarkable period."

Rhazes, the Arabian, requires of him who aspires to eminence in the medical profession, that "instead of wasting his earlier years in frequenting musical and dancing parties, he would have spent them in conning over the valuable records of ancient wisdom. But the sciolist who gives himself out as a proficient in the art, while he has scarcely a smattering of learning, will never be deserving of much confidence, or ever attain any great eminence in his profession. For it can never be that any individual, to whatever age he may reach, should be able to comprehend in his mind a subject so vast and diffuse, except by treading

upon the footsteps of the ancients." He further adds: "When an acquaintance with former authors is despised, what need be expected from the efforts of a single person?" For however much he may surpass others in abilities, how is it to be supposed that his private stock of knowledge should be at all worthy to compare with accumulated treasures of antiquity?"

It seems to me that these views of one of our distinguished predecessors, although written about six hundred years ago, are not wholly inapplicable to our own times.

Even the most progressive of our profession, those who aim to keep pace with the most rapid strides that are made by other progressive men, and are thus familiar with every new improvement and recent development, are unable to ignore knowledge of the past. There are none in our ranks more thoroughly appreciative of the fact that the present state of all pertaining to the art and science of medicine has been attained rather by the process of accretion than by any sudden growth or development. Medicine has sometimes been alluded to as a fair temple whose foundations were laid by the fathers. For the purpose of illustration we may liken the history of medicine to the construction of one. We know that in the building of a vast structure years are required, and the stones but cumber the ground till the architect puts them in place. A wing is built in one direction, a battlement in another; in one part from bad construction or poor material decay is manifest, even before completion; some portions have to be torn down on account of bad workmanship; the building for a time is neglected, the work of years is lost and the stones again cumber the ground; but the foundation remains the same, imperishable. After a time some skillful architect begins to direct how the disjointed parts are to be put in place, and the toil of laborers, under proper direction, again causes the edifice to grow into beautiful and admirable proportions.

So the unfinished temple in which we figuratively worship has been principally in the hands of master workmen. Bunglers have sometimes marred its beauty, and perhaps

for a time have built unwisely; a wall has had to be pulled down here and another repaired there; delays have occurred, and it has been sometimes partially destroyed; but the foundation, being deep and broad, has remained firm and imperishable. When this edifice is to be completed we know not. We only know that the work of its construction will continue until the human race has arrived at that happy period when there are no more lives to be saved and no more suffering to be relieved.

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