## ON THE USE OF MINERAL WATERS IN THE TREAT-MENT OF THE DISEASES OF WOMEN.

BY THE LATE A. REEVES JACKSON, A. M., M, D.

PRESIDENT AND PROFESSOR OF GYNECOLOGY IN THE COLLEGE OF PHYSICIANS AND SURGEONS OF CHICAGO, ETC., ETC.

Sancho Panza said, "Too much water killed the miller." This should not create a prejudice against water. Whatever may have been the details connected with the death of the miller he evidently had too much of what is and ought to be considered a good thing.

A great deal might be said in support of this proposition, but I do not intend to say it, at least I do not intend to say much of it. Indeed concerning the uses of and necessities for water in the economy of nature and in the preservation of health and life in animated beings I shall say nothing. I intend to speak of water only as a health restoring agent, and shall still further limit the scope on my remarks by confining them to a consideration of its effects and supposed effects in the treatment of the special disorders of women. Nevertheless, in order that I may not be misunderstood it will probably be well to clear away in the outset some of the more common erroneous notions which have found a place in the minds of the laity as regards the alleged special character of this class of ailments. And beyond the benefit that may thus come to nonprofessional readers a few hints may not be wholly lost upon medical practioners, some of whom do not always bestow as much thought upon familiar things as the latter frequently deserve.

The fact that in recent years the practice of medicine has been divided up, as it was among the ancient Greeks, into almost as many branches or specialties as there are organs in the body, has led very many persons within and without the medical profession to lose sight of the fact, or at least to lessen the importance of it, that every part of the human body is connected more or less intimately with every other part, structurally and functionally, and that both in health and disease this intimacy is constantly asserting itself. So that while specialism in medical practice may lead to expertness in diagonsis by limiting the range within which the senses of touch and sight and hearing are cultivated and thus con-

A manuscript found in Dr. Jackson's desk, and probably his last written work.

Digitized by Google

duce to greater accuracy of result, yet it ought to be remembered that such comparatively exclusive study may, by giving undue prominence to the matters more constanly under consideration, produce the injurious effect of diverting attention from others equally important, and from the main fact, and one never to be ignored, namely, that the human body, sick or well, is to be considered a unit. The rational deduction from this is that when mineral waters or other non-surgical therapeutic means are beneficially employed in the treatment of the special diseases of women, the good result does not always, or even usually, come because the remedies act specifically upon the female generative organs, but rather because they stimulate the functional activity of associated organs likewise. The torpid liver, the deranged urinary functions, the inactivity of the digestive tract and skin, and the disorders of all the other organs engaged in nutrition and innervation are factors which must and do exert an unfavorable influence upon the female pelvic organs, and the removal of these many-caused influences must be and are correspondingly beneficial. The use of waters as remedial agents in the treatment of diseases of various kinds dates back to earliest historical times, and while doubtless there is very much that is fictitious and fanciful in many of the accounts which we have received concerning their remarkable efficacy there is a substratum of truth underlying them. As regards the use of water in the pelvic disorders of women it has been chiefly according to three methods, namely, general and partial baths, local internal applications, and drinking.

1. GENERAL BATHS. Except in certain extraordinary conditions the skin has but little power to absorb water, and in order that the organ may be stimulated to increased activity there must be elevation of temperature of the agent or it must be impregnated with a considerable amout of gas or salts. General baths, when used for their exciting or sedative effects according to their temperature are usually not medicated, but these effects may be greatly increased, especially when it is intended to produce stimulation, by adding alkalies or common salt to the water. Indeed, the stimulating influence of saline waters, and also of those which contain iron, has long been known, and they have been of distinct value in chlorosis, anemia, hysteria, and various nervous affectations of The application of douches and wetted cloths and sponges to various external parts of the body has been followed by marked benefit in some cases of pelvic disease associated with lumbago, sicatica and nervous affectations. Inasmuch as patients



are variously affected by the methods, a great deal of discrimination is necessary in the adjustment of the column of water, its force and temperature. Hence the remedy ought to be used under the guidance of a physician. This form of aqueous medication is especially useful in the case of unmarried women in whom vaginal injections are frequently not suitable. Irrigations or douches by spray or in a stream, warm or cold, or with alternating heat and cold, may be found useful when applied to the spine, about the hips and over the pubic region. The partial or sitz bath of varying degree of temperature and variously medicated has been very much used, especially in Germany and France, and is unquestionably beneficial in many cases, particularly in precuring relief in pruritis of vulva, vaginitis, excessive tenderness of the vaginal entrance, and in irritation of the external parts from acrid leucorrhea. But in many of the cases of this class the useful results have been dependent chiefly upon the temperature of the water or its medication, the water itself being only a vehicle for the conveyance of heat and of the salines or gases in solution.

2. LOCAL INTERNAL APPLICATION.—In various disorders of women, especially those attended by luecorrhea and congestion and inflammatory conditions of the pelvic organs, vaginal douches, or irrigations have been extensively used, and when the treatment is pursued intelligently and with discrimination it has been attended by very marked benefit. But because of the great advantage which has been observed in many cases, it has come to be considered almost a panacea in all conditions of pelvic derangement and in consequence of this unreasonable overestimate of its curative powers; it has been improperly used and sometimes with injurious result. Indeed, so universally has this form of douche been employed that many ladies in the United States, France and England consider some form of syringe for the purpose a necessary toilet appliance to be used even when no disorder whatever is present. Many of the French and German ladies' baths are so constructed that the patient many sit over an ascending vaginal douche, the injecting tube being introduced by the patient, but the method is an awkward one, not wholly free from danger, and quite inferior to the one in use in America in which the patient lies upon the back and permits the water to enter the vagina by means of a rubber tube and pipe connected with a reservoir placed two or three feet above the level of the body. In acute inflammation of the plevic structures, vaginitis, endometritis, peritonitis, the disease may frequently be aborted by the use of a hot



vaginal irrigation of a temperature from 105° to 120° continued six or eight hours and resumed after a rest of two or three hours in bed. The employment of the hot douche is usually almost if not quite useless in these cases, for the reason that it is used only for fifteen or twenty minutes, and perhaps repeated at most once or twice in twenty-four hours. Such improper and inefficient use of the douche as this is more likely to do harm than good.

3 Drinking. The opinion is universal that a water suitable for drinking ought to be pure, and that such purity is synonymous with wholesomeness. This is an error. Similarly it is a matter of common belief that a water which is colorless and transparent is therefore both pure and wholesome. This notion is likewise erroneous.

The fact is that a water may be chemically pure, that is it may not contain any foreign substance, and yet may be not wholesome. This is frequently observed in the case of distilled or condensed water, which is chemically pure, and which is known to be not only unpalatable, but to disagree with the stomach in many persons. On the other hand, a water which is chemically impure from the presence of inorganic salts may be of the most wholesome character. This is true of most spring waters, some of which like the chalybeate, sulphur, alkaline and lithia springs contain these and other ingredients in such quantity and such relative proportions, as to not only make them markedly wholesome as potable waters but to place them among the most efficient remedies in the treatment of disease. On the other hand a water may be turbid from the presence of various inorganic matters in suspension, and yet not at all unwholesome. So, too, a water which emits an unpleasant odor may not be necessarily either impure or unwholesome. But, notwithstanding these facts, it is decidedly more pleasant to have our drinking water clear, colorless and free from odor. Having cleared away some of these popular errors I desire to call attention to certain disordered conditions of the urinary organs in which the water containing the lithia salts have been found of distinct benefit.

- 1. Cases in which the urine is found to be scanty, excessively acid, of high sp. gr. with frequent urination and in which these evidences of urinary disorders are accompanied by various dyspeptic symptoms, as impairment of appetite, pyrosis, torpid bowels, irregular or intermittent pulse, and with mental depression. The urine when allowed to cool deposits a sediment which is found to consist of uric acid crystals and oxalate of lime.
  - 2. In a second class of cases there are found with the same



or similar disorders of the urinary function various neurasthenic symptoms such as sleeplessness, headache, vertigo, neuralgia, muscular twitchings, vasomotor disturbances, hysterical and epiliptiform seizures. Indeed I have the opinion that some of the most marked and intractable cases of neurasthenia in which months and even years have been spent in treating vague pelvic symptoms, as though the seat of trouble were there, are dependent really upon the lithic acid diathesis rather than any pelvic condition. If this fact were duly recognized it would I am sure remove some of the cases from the list of those which are an approbrium.

3. A third class of cases comprises those in which there is a gouty disposition, either hereditary or acquired, and in which the subjects are habitually overfed and under worked; in whom there occur frequent gastric and hepatic disturbances. In all of the foregoing classes of invalids there may be found in addition to pelvic conditions characterized especially by undue congestion usually of the passive kind, and which do not and will not yield to mere local treatment an underlying lithemia that must be corrected as an indispensable preliminary. No single article diatetic or medicinal, is more likely to be beneficial in cases marked by the characteristics mentioned than the lithia salts as found in the natural waters. Under their free and continual use the urine rapidly assumes its normal character and the improvement in the function of the kidneys is frequently accompanied by amelioration in the gastric, nervous and pelvic symptoms.

It is well understood that the chronic pelvic disorders of women, especially those of an inflammatory or congestive nature, rarely exist for any considerable period without influencing the organs concerned in general nutrition. And hence the great need of securing and maintaining a healthy performance of all functions necessary to blood making and innervation. Without these essentials health cannot long exist.

In regard to the use of mineral waters for health purposes the people of America have until within a very few years labored under the mistaken idea that in order to obtain the best results it was necessary for them to go abroad and visit foreign Spas and there use the baths and drink the waters. Undoubtedly many have been benefited by the adoption of this course; the error has not consisted in what they have done so much as in their supposed need for doing it, and in their interpretation of how the result was to be obtained. They have supposed that the benefit received was wholly or chiefly due to the use of a water of some particular



chemical composition containing perhaps a grain or two, more or less, of chloride of sodium or of sulphate of magnesia to the gallon, and they have left out of consideration other more potent factors comprising change of air, freedom from harrassing cares, wearing domestic and social duties, regulation of diet and exercise, and innumerable other circumstances that affect the welfare of even those who are healthy, and in a still greater degree those whose health has become impaired. It is largely this erroneous nation that usually fills annually with invalid guests such popular European watering places as Ems, Franzensbad, Carlsbad, Vichy, Kreuznach and others. They do not know that there is no country in the world that is so thoroughly supplied with gaseous and mineral waters of all grades and kinds as our own. There is no spring in France, Germany or Switzerland, that surpasses in remedial value the Waukesha-Lithia Spring of our own country at Waukesha, Wis. Various springs at Waukesha have attained popular favor and professional approval for their medicinal virtues as well as for their purity as table waters. The Waukesha Lithia Spring is preëminent because it has been found to combine the desirable features of the best Waukesha waters with the signal advantage that it alone contains lithia. From the analysis of the Waukesha-Lithia water and the chemists' comments thereon it can readily be seen that all the benefits may be expected from it that can accrue from the use of any natural water for the relief of the conditions already described as resulting from lithic acid retention.

