

## THE ABUSE OF DRUGS.\*

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All drugs which are potent for good contain the possibilities of evil. This statement applies with equal truth to most, if not all, of those natural agencies which we employ—not as generally as we should, perhaps—in our struggle with disease. A superabundance of food, indigestible or illy prepared viands, create digestive disorders which are liable to eventuate in chronic and incurable lesions. Excessive exercise in the form of athletics may lay the foundation of organic heart disease. We must study minutely the proper methods of applying electricity if we would derive the benefits inherent in that powerful agent. In the same manner might be pointed out the reverse side of the influence of every drug or agency employed in medicine.

Nothing is more distinctive of modern methods of teaching therapeutics than the preliminary attention given to the physiologic action of drugs. We seek to understand the action of medicaments on normal organisms with a view to deducing and explaining their action in disease. Let us not, as physicians, forget for an instant, therefore, to recognize their untoward effects. Theoretically, indeed, we will usually acknowledge the defects of our instruments of warfare but in the exactions of daily practice we are apt to lose sight of the fact. Medicinal substances are often used too freely, too long, or in too strong doses in cases which could be more speedily, decidedly, and permanently relieved by the natural agencies which we possess but of which we make too little use. It is natural and easy to fall into a routine of drug-prescribing, but it is our duty, as reasoning and scientific physicians, to strive against this tendency. We must study when to withhold, as well as when to give, drugs.

People at large—our patients—very generally expect more of drugs than is within the power of those substances. They look for specific effects. To their conceptions the name of a disease should suggest a remedy. They are necessarily ignorant of the fact that effects differ according to the dose given and the condition of the patient's tissues, organs and secretions. The aim of the therapist should be to handle his remedial agents, of all kinds and as far as possible, as instruments of precision. This object he will best achieve by studying not the name of the disease but the disease itself, in all its varying phases, not forgetting the personality of the patient. In the management of the sick let us attend, with at least equal care, to the nursing, the diet, ventilation, hygienic surroundings, exercise, where that is possible, passive exercise, where that is suitable, the therapeutic properties of water, massage, and electricity. These agencies, intelligently managed, can often accomplish more lasting good than drugs. I believe that we, as physicians, should rely more on natural agencies and less on medicinal substances than, perhaps, we have been in the habit of doing in order that we should not ourselves encourage an abuse of drugs and that we should be able to set a consistent example to the public on this subject.

For, as we all admit when our attention is directed to the matter, there is, on the part of the general public, a widespread habit of drug-taking, which is always

injurious in the end, and often ruinous. Large numbers of people exhibit a strange fondness for taking medicine on their own responsibility. Many have favorite remedies, to which they have recourse when troubled by certain symptoms. In some instances a belief in these substances has been inherited. Some traditional knowledge of the properties of herbs is acquired by country people who, moreover, are not infrequently obliged to depend to a certain extent on their own resources, especially in the more sparsely settled districts. In the cities a great fountain head of the habit of self-prescribing is the advertising quack with his space in the daily sheets, his testimonials and his "little book." Again, the practice is well nigh universal of offering advice to friends. The man or woman who knows "what is good for" any symptom or collection of symptoms is always with us, like the poor. Thus a mass of imperfect information or false knowledge regarding the treatment of disease is always in circulation. It passes from mouth to mouth.

Another prolific source of indiscriminate drug-taking is the prescribing druggist. I am sorry to say that this class includes many druggists throughout the land. In addition to the patent medicines which they carry in stock they seldom, if ever, hesitate to prescribe for any customer who comes to them complaining of any symptoms. I have the utmost respect for the scientific pharmacist and pharmaceutical chemistry. Pharmacists have aided the progress of medicine in various ways. They have isolated active principles; they have suggested improved preparations; they have, to a large extent, replaced the crude and nauseous doses of our forefathers by articles, fluid or solid, which are equally effective and far more palatable. They are not instructed, however, in diagnosis, prognosis or therapeutics. Therefore, they appear to have no adequate conception of the fact that the most trivial symptoms may spring from some insidious and serious disease.

I was once, many years ago, called in haste to see a woman who had been seized with uremic convulsions. A large quantity of albumin was present in the urine. The convulsions were succeeded by coma and the woman died. She was *in extremis* when I first saw her, and the condition offered little prospect of successful treatment. The woman was in humble circumstances, and, like many of her class, had borne up as long as possible and had not complained much of her distress. She had, however, been lately troubled by a cough which she, of course, attributed to a "cold" and had sent to a neighboring druggist. Without seeing the sick woman, knowing nothing of the nature of her ailment, hearing of a cough, he sent a cough mixture. If this woman had in time been placed on proper treatment there is no question but that her life would have been prolonged.

The druggists generally reason that the preparations they send in response to such calls are harmless, at least, but this is not the sole, or chief, point. There are many cases where a preparation, harmless in itself, satisfies the patient for awhile and causes a delay in obtaining competent advice, which may entail injurious or even fatal consequences. Pharmacists should not assume responsibilities for which their education has not fitted them and which may place them in a very uncomfortable position.

Furthermore, nearly every pharmacist has a class of preparations of "his own make". These are always ready at hand to sell to whomsoever will buy. Ready-made preparations of every kind are offered for the chief ail-

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ments of humanity. Indigestion, kidney disease, rheumatism, insomnia, headache and catarrh are among the affections which are most exploited.

One of the most common forms of drug abuse is the constant reliance on purgatives. The saline cathartics are so well known and so easily procured that every man considers himself capable of prescribing for his constipation. The waters of various saline springs are bottled and put on the market for public sale. Many people form a habit of relying on these salts instead of regulating their habits as regards exercise and diet and overcoming the sluggish condition of the bowel by natural means. The dependence upon cathartics adds to the difficulty it was intended to overcome. The muscular fibers of the intestine become weakened and relaxed. Disease of the mucus membrane may be established or aggravated as a result of the continual irritation. It must be remembered also that the alkaline bases are capable of exerting a depressing influence on the action and force of the heart. Their continued use is productive of anemia.

Another very popular and much abused class of preparations comprises those sold under the generic titles of bitters or stomachics. These are, to all intents and purposes, alcoholic drinks. Different preparations exhibit different degrees of strength, but many are equal to strong wines or whiskey. The whiskey which they contain is flavored with some aromatics or tonics and they are recommended as sovereign remedies for indigestion. The man—or woman—who announces himself as a total abstainer thinks that he is justified in using these bitters in order to stimulate appetite and digestive power. The mixtures are purposely made palatable. The presence of some vegetable matter does not detract from the flavor of the alcoholic beverage entering into their composition. It follows that their effect is principally that of alcohol itself, a primary stimulation succeeded by depression, a false sense of improvement followed by aggravation, a necessity of increasing the frequency and the amount of the dose. The advocate of temperance may become as devoted to his bitters as the ordinary drinker to his whiskey. Indeed, the mixtures of which I speak very often inspire a taste for drink which can only be satisfied in the usual way across the bar. I have no doubt that in very many instances the alcohol habit has grown out directly from the constant tipping of so-called bitters. An analogous custom is that of drinking preparations containing ginger. Either because the ordinary alcoholic beverages are not procurable or because a taste has been acquired for the fiery quality of the ginger, there are those who take their tipple in this form. In addition to the ill effects which a constant recourse to so strong an irritant as ginger must produce upon the mucous membrane it exposes its consumers to the danger of losing their sight; several cases of the kind have been reported originating in this habit.

The malt preparations are likewise often abused. This line of products is manufactured very extensively and largely used. They contain a percentage of alcohol which renders them a species of beer and some of them are, in fact, considerably stronger than the beers ordinarily sold in the usual way of the liquor trade. Some of the breweries now make malt preparations "for the use of the medical profession." They are recommended for their nutritious and gently stimulant properties, are extensively sold and their effect is almost, if not quite, identical with that of beer. Those persons who

habitually, and on their own responsibility, consume preparations of malt might just as well go frankly to the beer saloon and drink in public. It is generally believed that of the two evils drinking in companionship is less injurious than "secret drinking," as it has been termed.

Two great evils of life are pain and sleeplessness. Headache is one of the commonest forms of pain, and for its relief there has grown up of late years, and especially since the coal tar products have been introduced, a class of preparations known popularly as headache powders or tablets. To a man almost, if not quite, the pharmacist puts up his own headache cure. In addition to these products there are many advertised in the street cars and sold by druggists and department stores. They are advertised as "instantaneous relief," "cures while you take," and other similar phrases. Not infrequently samples are thrown in at the door. These powders are principally composed of coal tar products, and the power which they possess of alleviating headache and other forms of pain makes them exceedingly dangerous unless prescribed in proper doses and used under the supervision of a physician. These agents are capable of depressing both the sensory and the motor nerve tracts. Excessive doses, or ordinary doses in susceptible individuals, may have a weakening action upon the heart, reduce the temperature of the body and injuriously affect the composition of the blood. I am personally cognizant of a number of cases in which very serious symptoms resulted from taking headache powders.

These evil consequences are particularly rife among anemic and neurotic persons, especially women. One such individual of whom I have knowledge had bought headache powders and taken them for the relief of distressing headache until, upon one occasion, she was seriously attacked. The pain in the head was assuaged, indeed, but in its stead she was prostrated to the verge of syncope, was nauseated, sweated profusely, her face became cyanotic, the action of the heart and pulse exceedingly feeble. That young woman had a lesson which will perhaps last her the remainder of her life. These are some of the typical manifestations which are produced by the class of substances which enter into the composition of these headache powders or tablets. Other signs of toxic influence which may occur are: Salivation, discharge from the nose and eyes, vertigo and depression of the temperature to a subnormal degree. Convulsions and vomiting of blood have also been witnessed.

Furthermore, the people who acquire the habit of lulling pain with headache powders are exposed to danger in another direction. They may limit themselves at first to a single powder, but the invariable tendency is to increase the dose and shorten the intervals. This was, in fact, the case with the young woman of whom I have made casual mention. She imagined she could take augmented doses with impunity. We observe the same feature appearing in reports which are given of intoxication by coal tar derivatives. Of a man we read that "he took a dram and a half within four hours." A woman "took one dram in two portions within a short time of each other."

Many such instances can be collected from the literature. A great many cases, no doubt, occur which never find their way into print. From time to time fatalities from this cause have been reported in medical journals and in the daily newspapers. We have all read of such instances.

Dr. J. Ashburton Cutter<sup>1</sup> published an account of a case of poisoning from migraine tablets, which was made the basis of a suit for damages. On the recommendation of a drug clerk a healthy young man had taken two tablets of "Quick Headache Cure" and two hours later a third. Very soon after the third dose the man became unconscious, perspired profusely, the heart was feeble and irregular, respirations shallow, lips blue, and the face presented a death-like aspect. The patient was revived from the attack but his nervous system suffered a shock from which, eighteen months later, it had not recovered. It was shown by analysis that each tablet contained 3 grains of acetanilid, 2 grains of monobromated camphor and 1 grain of citrated caffeine. As acetanilid is slowly soluble it was supposed that the patient received the effect of the entire 9 grains, dissolved at about the same time by some hot coffee which he drank.

The United States Dispensatory notes one case of death from 5 grains of acetanilid. A powder of similar composition, in which salicylic acid was substituted for the acetanilid was once naively described to me by its maker, who appeared to have no idea that salicylic acid was capable of producing any ill consequences. Similar objections are to be made to the "rheumatism cures" which are so abundant in the stores. Many of these contain sodium salicylate, others potassium iodid. Neither of these substances can be taken indiscriminately or for a considerable period without mischief. Salicylic acid may depress the heart and injure the nervous system. It is much more effective in acute than in chronic rheumatism and is an agent which should never be taken upon the advice of irresponsible persons. The phenomena of iodism are familiar to us all and are not infrequently excited by comparatively few doses. The continual use of alkalis weakens the heart and impoverishes the blood.

All the analgesic remedies, anodynes and hypnotics, are susceptible of abuse, and it is by this class that the worst human wrecks—physical, mental and moral—are produced. Opium and cocain are the favorite drugs of habitués in this country. Chloral is abused by not a few individuals. Cannabis indica has its victims but is less extensively used in this country than in the East.

Opium, one of our oldest and best remedies, when used with circumspection, is also the one which from ancient times has been extensively used, or rather misused, by large numbers and for the purpose of producing pleasurable intoxication. The train of symptoms which the habitual consumption of opium or morphin induces, the gradual enslavement of the will and deterioration of morals which it causes, are so well known that I need not rehearse them, especially in this place and this company. Opium addiction has been studied from every point of view. Like other great problems which the medical profession must face the habit has an important sociologic side. The unrestricted sale and use of cough mixtures containing preparations of opium is to be deprecated, as it may lead to the formation of a habit. All kinds of cough mixtures are indirectly injurious when taken without medical advice. Nauseating syrups disturb and lessen the digestive capacity. It is pitiful to think how much harm they may accomplish when taken without advice or supervision in the first stage of pulmonary tuberculosis.

The great source of opium addiction, however, must

be an experience of its effects in relieving pain. In addition to this cause, in our large cities, and especially where Chinese congregate, many acquire the habit from going out of curiosity to some den and smoking the opium pipe. There is a certain class of young people who are weak enough to look on such experiences as an evidence of their knowledge of the world. These are precisely the individuals who fall victims. They go to opium dens exactly as they first go to the liquor saloons.

Cocain is a recent addition to our list of intoxicants. Already, however, it has established a wide sway. As with morphin, the hypodermic syringe has provided a way of acquiring speedily the effects of the drug. It is not exactly germane to my subject, but I would simply note that in my judgment the hypodermic injection for the relief of pain may be abused and may suggest to the patient the capabilities of intoxication by morphin or cocain. The effects of cocainism are deplorable. The people who are enslaved by these unfortunate habits are for the most part neurotic and in a certain proportion they inherit a predisposition to insanity or the readiness with which they fall a prey to a pernicious habit is in itself a precursor of mental alienation. A peculiar complication of some of the cases of cocainism is that its victims had formerly been addicted to opium, and, indeed, may combine the use of the two narcotics. Nay, alcoholism also may be included in the lamentable pathologic combination.

Sleeplessness is truly a great ill. In addition to the deprivation of natural rest, which is a debilitating factor, it is a source of actual distress. The active mind creates a sort of torture for the sleepless. It is no wonder, therefore, that the victim of insomnia should prize the power of chloral. It is characteristic of these patients that they have a species of superstitious dread that they cannot sleep, and this feeling in itself increases the difficulty. Consequently, one who has derived a refreshing slumber from a dose of chloral is very likely to take another dose the next night, and in this manner lay the foundation of a habit which will cause more injury than the insomnia. If 10 grains lose their effect the quantity will be raised to 15, and if one dose will not cause sleep it will be repeated. Chloral is not a substance which can thus be used with impunity. It weakens the functional activity of the brain and spinal cord, it enfeebles the heart both by an influence upon its muscular tissue and the cardiac ganglia, reduces arterial pressure and has a deleterious effect upon the composition of the blood. The constant use of chloral engenders muscular debility, may occasion epileptiform convulsions, and even a condition akin to that of delirium tremens. Sudden death may take place from failure of the respiration or circulation.

The abuse of drugs may legitimately include a consideration of alcoholism. This is another of those broad themes which is of interest and importance from many other points of view than the medical. The name of Dr. T. D. Crothers is identified with the scientific study of chronic inebriety. The excessive use of alcoholic liquors is not regarded with the social tolerance, or even approbation, that it was in the days of our ancestors. Still we have among us innumerable men who esteem it an admirable joke to entice their fellows to gross drunkenness. Social drinking habits are all too prevalent. We, as physicians, are often brought in contact with all phases of alcoholic intoxication. The physical and mental outcome of drink are particularly evident

1. Medical Bulletin, March, 1903.

in such an institution as Walnut Lodge Hospital. We all meet constantly with the grave structural mischief which chronic alcoholism has wrought. Perhaps each of us has numbered among his acquaintance or clientele some of those unfortunate individuals who are victims of imperative impulse, known popularly as periodical spreers. According to my observation, most such persons have been of decided and resolute character. During their intervals of sobriety they are usually men of influence and industry.

The advocates of total abstinence, and especially of prohibition, have often injured their cause by the extravagant claims and assertions which they have advanced. Scientific temperance, if I may use such an expression, is now the most promising factor in the suppression of alcoholism. In Europe, where drinking habits have been far more universal than in the United States, the medical profession has been forward in instructing the populace as regards the destructive influence of alcohol. France, formerly regarded as a temperate country, seems to have become demoralized and has taken to strong spirituous beverages instead of light wines and *eau sucrée* (sugared water). Germany is awakening to the doubt whether unlimited beer is an unlimited blessing.

There is one duty which members of the medical profession should realize, not only as regards alcohol but also respecting those drugs which are capable of forming habits, such as opium, chloral, cocaine and others which I have enumerated. We should be wary in our recommendations and prescriptions. We should discountenance counter-prescribing and self-prescribing. It is my custom in ordering alcohol to indicate the exact liquor, dose and time of taking the article. In this manner it is my intention to preclude, as far as possible, the danger of abuse. When I prescribe alcohol it is as a medicine and not as a beverage. I deprecate the loose way in which I have been told that some physicians permit themselves to recommend drink. One man related as an instance of this practice that, consulting a physician for a "cold", he was advised to go out and "get a load on", and, he added, "it brought me around all right". I have been told of others who advise patients to take, for instance, six or eight glasses of whiskey. The amount of a drink of whiskey is a very variable quantity. We cannot realize our responsibilities too keenly in these matters.

It is not within our power to prevent individuals from dosing themselves with all kinds of drugs and nostrums, but we can, at least, in prescribing for the sick, endeavor to have a reason, based upon its physiologic action, for every article which we employ. We can watch the effects of our remedies and discontinue them when signs of danger or abuse are exhibited. We can be careful in ordering narcotics and especially in injecting them beneath the skin. In my own practice I rely much on hygiene, diet, massage and electricity. With the aid of such powerful agencies we can minimize our use of drugs.

I would not be understood as uttering a word against the intelligent use of drugs, based on a knowledge of their physiologic action and their indications in given cases. We must remember, however, that temperance is a word not restricted to the subject of alcoholic drinks. We should be temperate in eating as well, and it behooves physicians to be discreet in the employment of drugs.

## PROSTATECTOMY.

REPORT OF 51 CASES OPERATED ON FROM MAY 6, 1901. TO  
FEBRUARY 26, 1904.

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The surgery of the prostate is rapidly approaching that of the appendix and gall bladder in its significance to the surgeon and patient. Until very recently the prostate was not treated in the masterful and efficient manner in which other organs, as the uterus, tubes and stomach were handled surgically.

In considering this subject to-day I trust I will be permitted to omit the details of anatomic relations and physiologic functions of the prostate, described in full in my recent article on the subject. I will, however, go more into the details of the clinical aspects of the

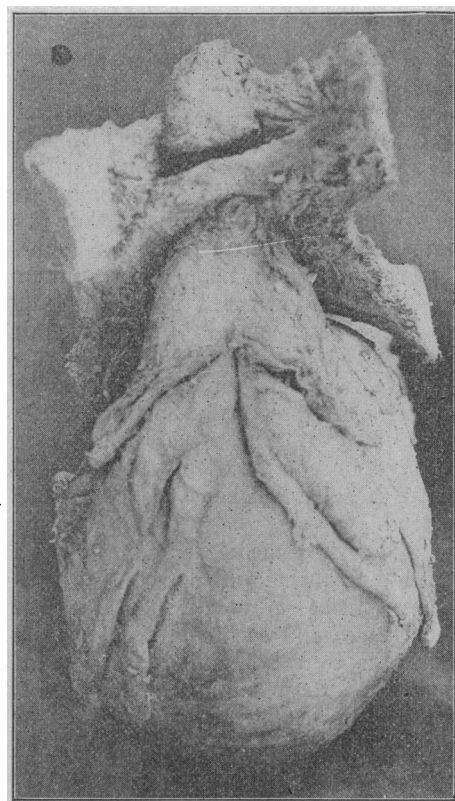


Fig. 1.—Shows relation of the prostate to the deep perineal fascia, the bladder, the seminal vesicles and ureters. (Photographed from dissection by Prof. W. T. Eckley.)

cases. The etiologic factors, the pathologic conditions of the bladder and kidneys at the time of the operation, and the patient's general condition will be more carefully treated.

Experience has produced a number of changes in the technic of the operation and as time advances we are able to procure more speedy and complete recoveries than in our earlier cases. It is very gratifying to be able to report 51 consecutive cases of prostatectomy with but a single death due directly to the operation. In this one case the operation of prostatectomy would not have been undertaken had it not been for the urgent symptoms produced by the large stone in the bladder. The ultimate results have been far more gratifying than I expected, as will be shown by a perusal of the individual histories with the later reports of the patients.

Since I called attention to the enlargement of the