I found a contraction at the membranous portion of the urethra; but that it was simply spasmodic, seemed probable from the fact that it had become occasionally spontaneously improved. With a little care I managed to pass a No. 5 silver catheter without pain, but after it was introduced it was firmly grasped by the urethra. Next day the spasm was nearly gone, and the urethra easily admitted an instrument of moderate size. The passage of bougies was continued daily till all tendency to contraction seemed removed, and the symptoms abated somewhat. Triticum repens in infusion was used for many weeks, without much influence on the appearance of the urine. Subsequently, I tried the effect of washing the bladder every two or three days with astringents, with some temporary benefit, but without any decided result. In the spring Mr. C. went into the country for a few weeks, and returned improved in general health, but with all the urinary symptoms much the same as when I desisted from active treatment. He then went abroad to try once more the effect of some of the German waters.

In September last, in the course of a continental holiday, I visited Baden Baden, and happened to meet my patient, Mr. C. I was surprised to find him very much improved in every way, the urinary symptoms having entirely disappeared, so that he now enjoyed a refreshing sleep during the night without requiring to rise; and that he was free from any uneasiness was obvious to me, for he was two or three hours with me taking his ice, and listening to the music in front of the Kursaal. On questioning him as to how this came about, he informed me that he had been to Wildbad, where he had taken a course of water and baths. But the crisis of his complaint happened when one day he felt unusual difficulty in passing urine, and, after considerable effort, expelled a white membranous substance, which he described as being like a little bag just of the size of the bladder. This he preserved, and shewed to his medical man, who declared it to be an exfoliation of the mucous membrane of the bladder expelled entire.

Since the discharge of this membranous cast of the bladder Mr. C. has had neither difficulty nor pain in micturition; the urine remains free from mucus and sediment; in fact, all the symptoms of cystorrhœa have disappeared.

ON INTEMPERANCE AS A CAUSE OF CHRONIC BRIGHT'S DISEASE.*

By WILLIAM ROBERTS, M.D., F.R.C.P.,
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DR. DICKINSON, in his recent able work on *Albuminuria*, has called in question the generally received opinion that the abuse of ardent spirits is, either alone or as reinforcing other etiological conditions, one of the most important causes of chronic Bright's disease. In an elaborate chapter he adduces a considerable array of statements and figures which have led him to the conclusion that, setting aside the cases associated with gout, alcohol has but a slight and remote effect in producing degeneration of the kidneys. This opinion, coming from such a quarter, and apparently supported strongly by facts, is likely to have a considerable influence on the minds of the next generation of practitioners, and, if it be an unsound opinion, is sure to lead to serious mischief in practice. This is the reason why I have considered it desirable to examine the evidence on which this opinion is grounded, and to bring the results of my inquiries under the notice of the Section.

The evidence hitherto relied on by writers on renal disease, in proof of the evil effects of alcohol on the kidneys, is of the same kind as that which is held sufficient to establish the connexion between intemperance and cirrhosis of the liver—namely, the fact that a large number of drunkards and intemperate persons are found among the subjects of chronic Bright's disease. Not only has this connexion been recognised by all writers on Bright's disease in this country and America, where intemperance is rife, but even in Germany and France, where the vice, at least in the form of spirit-drinking, is less prevalent than with us. The morbus Brightii of drunkards is a well understood type of disease among German writers. The impression that has grown on my own mind from an experience of several years both in public and private practice—much of which has been among patients suffering from renal disorders—is very strong that the intemperate, if they escape the earlier perils of delirium tremens, cirrhosis, and alcoholic phthisis, fall victims in large numbers, in their later years, to renal degeneration.

My present purpose, however, is not to set forth the facts which support the old opinion, but to show the inadequacy of the arguments brought forward by Dr. Dickinson in support of the contrary and new one.

The first kind of evidence adduced by Dr. Dickinson is based on the results of *post mortem* examinations of persons who had died of delirium tremens, or of individuals who, having been notorious drunkards, met with a violent death.

From the records of St. George's Hospital, he obtained the details of the *post mortem* examinations of fifty-two adult males who had died of delirium tremens. From the same sources he took, for comparison, the same number of examinations of adult males who had met with accidental death, excluding such as had been notoriously drunken. The state of the kidneys in these two sets of cases is shown in the following table.

	Delirium tremens (average age, 38).	Accident (average age, 41).
Natural	28	32
Congested	14	5
Slight or uncertain changes in the cortex ..	3	1
Large, smooth, mottled	3	1
Granular surfaces	3	6
Cysts, without other changes	1	7

The first thing that strikes one in examining this table is, not the slightness of the alterations in the delirium tremens cases, but the enormous proportion of serious organic disease in the accident cases. Is it to be believed that one in every seven or eight presumably healthy persons of the average age of 41 is the subject of granular kidney, or of the large smooth mottled kidney? This point alone would seem sufficient to fatally vitiate these observations. If the delirium tremens cases be taken by themselves, they present a sufficiently strong indication of the evil effects of alcohol on the kidneys. In nine cases, serious changes, either advanced or incipient, existed in the kidneys; in fourteen cases, there was congestion; and a perfectly natural state existed only in a little more than one-half. It is to be borne in mind that renal degeneration is usually a late event in the life of the intemperate; and that, consequently, the signs of renal disease in those who die at an average age of 41 might be expected to be found, for the most part, only in an incipient stage.

Dr. Dickinson next refers to the papers of Dr. Ogston of Aberdeen, who has minutely recorded the *post mortem* appearances of a chronic kind met with in the bodies—first, of seventy-three persons who were notoriously intemperate, and who had perished suddenly from the effects of accident, suicide, or homicide, and while apparently in ordinary health and activity; and, secondly, of forty-four additional persons of the same habits, who had also perished suddenly while apparently in ordinary health, but whose death was more directly traceable to the abuse of stimuli. The changes found in the kidneys are thus tabulated by Dr. Ogston.

First Series—73 cases, average age about 43 years.

General fatty degeneration in 1 case.

Hyperæmia in 4 cases.

Hypertrophy in 13 cases (in 5, lobulated; in 2, the cortices pale and attenuated; in 2, with yellow patches of fatty degeneration over the cortices; in 1, with partial obliteration of the tubuli; in 2, with granular surfaces; in 1, with (12) pus-depôts in one kidney; coincidentally in 1, with albuminous urine).

Atrophy in 1 case (kidneys attenuated, pale, with yellow fatty deposits in their cortices, serous cysts on their surfaces, and albuminous urine).

Buff-coloured, and cortices attenuated, in 4 cases (in 2, with albuminous urine).

Abnormal appearances in the kidneys, in all, in 23 cases, or in 31.5 per cent of the whole.

Second Series—44 cases, average age about 48 years.

Extensive fatty degeneration in 6 cases (surfaces granular in 3).

Hyperæmia in 9 cases (with albuminous urine in 1).

Hypertrophy in 14 cases (in 2, confined to the right kidney; in 2, kidneys lobulated; in 2, cortices pale and attenuated; in 1, tubuli obliterated; in 3, extensive fatty degeneration; in 4, marked hyperæmia; in 3, substance softened; in 2, atrophy of the left kidney; in 2, albuminous urine).

General atrophy in 3 cases (both kidneys in 1, right kidney in 1, left kidney in 1).

Partial atrophy in 6 cases (tubuli wasted in 2, cortices in 4).

Partial fatty degeneration in 5 cases (tubuli wasted in 1, surfaces granular in 1, cortices attenuated in 1, albuminous urine in 2).

Abnormal appearances in the kidneys, in all, in 28 cases, or in 63.6 per cent of the whole.

I am at a loss to understand how Dr. Dickinson could study these

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Plymouth, August 1871.

ables without coming to the conclusion that the abuse of alcohol is a powerful agent in inducing renal degeneration. Whether regard be had to the gravity of the changes recorded, or to the percentage of cases in which they were found, the evidence of these tables seems altogether unequivocal. In judging them, Dr. Dickinson seems to have been unconsciously biased by his individual views of the types of renal disease, and to have overlooked the fact that clinically these types, speaking of chronic cases, are in large numbers, if not in the majority of cases, mixed together so as to produce a composite anatomical state. It must also be remembered that the alterations here recorded occurred in the bodies of persons who perished suddenly, while apparently in the enjoyment of their ordinary health; and that, consequently, they might be expected to be, for the most part, only in an early stage of development.

Dr. Dickinson next refers to the paper of Dr. Peters of New York, who examined the bodies of nearly seventy persons who had died from the excessive use of ardent spirits. Dr. Peters thus describes the changes found in the kidneys: "The kidneys are generally somewhat enlarged, flabby, their cortical substances infiltrated in numerous small spots, with a whitish matter, either albuminous or fatty; occasionally they are granular." This description is too vague to found any argument upon; but it seems to indicate a not inconsiderable amount of disease. Dr. Dickinson remarks on the granular condition having been only found *occasionally*; but I find in the same paper that "granular liver was found in four or five cases only"; so that in that respect the kidneys and liver were not very differently situated.

In the last place, Dr. Dickinson appeals to the Reports of the Registrar-General, and founds an apparently cogent argument on the want of correspondence between the death-rate from Bright's disease and the degree of intemperance prevailing in different localities. I have carefully gone over this point, taking the proportional number of deaths entered under the headings Delirium Tremens and Intemperance as a gauge of the inebriety or sobriety of the contrasted localities, and comparing large numbers, or a series of years, in order to get at tolerably trustworthy averages. My surprise was great to find that the conclusion of Dr. Dickinson was substantially correct, and that the death-rate from Bright's disease was as high in the more sober districts as in the more intemperate districts, and frequently much higher. But my surprise was still increased when I found that the death-rate from diseases of the liver, and from those specially entered as hepatitis or cirrhosis, was no higher—often much lower—in the more drunken districts than in the more sober districts. Now there is nothing more certain in the whole range of etiology than that diseases of the liver, and especially cirrhosis, are produced by the abuse of ardent spirits; and yet the Registrar-General's Reports show no trace of this connexion; indeed, if they show anything, they show that intemperance is actually a protection against diseases of the liver. This is a manifest *reductio ad absurdum* of this part of Dr. Dickinson's argument.

The following table summarises some of the results which justify the above observations.

Comparison of the Proportional Number of Deaths from Intemperance, from Diseases of the Kidney, and from Diseases of the Liver, in different Districts.

	Deaths from intemperance.	Deaths from renal disease.	Deaths from liver-disease.
Town districts of Scotland, for the ten years 1855-64	1 in 402.	1 in 134.	1 in 105.
Mainland rural districts of Scotland, for the ten years 1855-64.....	1 in 533.	1 in 131.	1 in 80.
The five most intemperate registration districts of England, for 1867 (Nos. 1, 2, 8, 9, 10).....	1 in 512.	1 in 92.	1 in 86.
The five most temperate registration districts of England for 1867 (Nos. 3, 4, 5, 6, 7).....	1 in 926.	1 in 87.	1 in 79.

No further comment is necessary on this table. It shows conclusively that the Registrar-General's Reports cannot be safely relied on to determine the more delicate etiological problems.

I have now gone over *seriatim* the arguments advanced by Dr. Dickinson, and have, as I believe, succeeded in showing that they are inadequate to disturb the old opinion respecting the effect of alcohol on the kidneys; and that, in fact, the question remains just where it was before

he wrote his article. The only other point which he raises is regarding the proportionate number of granular kidneys in persons who have died of alcoholic cirrhosis of the liver. In forty cases of cirrhosis collected by himself, the kidneys were granular in eight. I may add that Frerichs found granular kidneys the same number of times in thirty-six cases of cirrhosis. In neither series is the proportion strikingly great, but it is certainly not inconsiderable. It must always be remembered that alcohol, like most other causes of disease, works along different lines in different persons, and that its effects vary according to the acuteness and chronicity of its poisonous action. How often does it not happen that we witness the production of cirrhosis from intemperance, without any of the nervous symptoms which usually characterise alcoholism; and, again, how often do we see the latter without the former?

Dr. Dickinson seems to have some difficulty in the *à priori* considerations regarding the way in which alcohol can reach the kidneys to do them injury. The kidneys are certainly less directly in the track of the absorbed alcohol than the liver and the lungs; but they are quite as much so as the brain and nervous system, which are the parts most surely and earliest affected by alcohol—always excepting the stomach.

The mode in which spirit-drinking affects the kidneys is probably twofold. In the first place, it is now well known that alcohol, taken in excess, is largely eliminated in an unchanged state by the kidneys. In the habitual tippler, a frequently reiterated stimulation of the kidneys must arise from this source. Such a stimulation, going on for years and years, can scarcely fail at length in inducing a strong preclivity to organic disease. Secondly, the blood of the intemperate becomes in process of time more or less vitiated, and inadequate to minister to the healthy nutrition of the tissues, and, among others, of the renal tissues.

I do not wish to represent the action of alcohol on the kidneys in too strong relief: the nervous system and the liver are undoubtedly more constantly and earlier affected. But next to these come, probably, the kidneys; and, among the later perils of the less violently intemperate—the steady but not drunken soakers, if I may use the phrase—a high place must, I believe, be given to certain types of Bright's disease.

NOTES AND OBSERVATIONS ON DISEASES OF THE HEART AND LUNGS.

By THOMAS SHAPTER, M.D., F.R.C.P.,
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IN the course of professional life, cases of abnormal conditions of the functions of the heart frequently present themselves. These may be classified as (1) errors of impulse; (2) errors of rhythm; (3) the occurrence of pain; and (4) a departure from the heart's usual or normal sounds. These abnormal conditions may exist separately or collectively, and may be due either to organic disease or to functional disorder; now indicative of fatal tendencies, now of only a passing disturbance in the animal economy. To arrive at a correct diagnosis and a safe method of treatment in these cases, it is absolutely necessary to fully, nicely, and accurately appreciate these several and special indications.

It is of the first importance to ascertain if these abnormal symptoms be due to, or in any way associated with, organic lesion. Seeing the book-certainty with which organic disease and its distinctive features are described, it might be assumed that this is a matter of no great difficulty. One of the most experienced observers of diseases of the heart, indeed, says: "The facility of making a correct diagnosis between functional and organic diseases of the heart is not so great as modern writers lead us to believe; and we more often arrive at a just conclusion by instinctive skill, the result of experience and judgment, than by communicable rules of diagnosis." (*Stokes On Diseases of the Heart*, p. 495.)

In the above, as it appears to me, Dr. Stokes begs the whole question of the difficulty of diagnosis in these cases; the accurate judgment of a man of vast experience being made to supersede the deficiency, to the inexperienced, of definite or even suggestive rules. There really is, however, great difficulty, not only in describing the means towards a correct diagnosis between functional and organic diseases of the heart, but the diagnosis itself, even to the most practised and able observers, is too often a conclusion not easily to be arrived at; and this Dr. Stokes himself, in a preceding page, fully acknowledges.

Supposing, however, we can positively and satisfactorily eliminate all