Inaugural Dissertation

on

Bright's Disease of the Kidney

by

Charles Thomson

1850
ON
BRIGHT'S DISEASE
of the
KIDNEY

Various names have been applied to the
morbil conditions of the Kidney giving
rise to certain symptoms, first described
by Dr. Bright in 1824, but as they have
been found objectionable, it seems more
pretty generally agreed, both in this count-
yy and Valbrond to designate these affections
by the generic name of Bright's disease of
the Kidney.

The importance of this malady is greatly
enhanced by the numerous secondary affec-
tions to which it gives rise, which when
occurring are often of a much more acute
than when they occur un-
connected with this disease. I have
not been able to procure any correct statis-
tics regarding the frequency of its occur-
rence, but a visit to our hospital would
be sufficient to prove the frequency
with which it occurs at least among
The lower orders of this city. The great futility and suffering attending it and the great obscurity in which its pathology Treatment are still enveloped demand the attention of the medical profession generally. The discovery of this affection of the Kidney by Dr. Bright has served to throw light upon many other morbid conditions of the system, which before were subject of great doubt and uncertainty. Nephritic affections were frequently occurring for which no cause whatever could be assigned, and thus their pathology & treatment were brought to a stand still.

Hence we find dropsies in former years were often attributed to a weak state of the system, from want of a knowledge of their true cause. Gentlemen, it is due to Dr. Bright for his brilliant discovery, falls for the unmerciful unwavering attention which he has paid to the investigation of this truly interesting and important disease. Since Dr. Bright's announcement of his discovery, others have investigated
This subject with considerable success.

Pathology of the Disease.

As the pathology of this disease is still involved in much obscurity, and as the opinions held respecting it are very various and contradictory, I shall not attempt to enter into minute details on the subject. It seems now pretty generally agreed that there are two principal forms of the disease—one depending on an abnormal development of the epithelial cells of the tubuli uriniferi, the other depending on an undue accumulation of oil globules in the epithelial cells of these tubes. The Kidney eliminates its impurities from the blood through the agency of these epithelial cells. One obvious form of the disease is that in which we have an abnormal development of them blocking up the tubuli uriniferi, thus preventing the free passage of the urine. But the morbid accumulation of the epithelial cells not only prevents the free passage of the urine, but also its due secretion, thus causing an accumulation of those matters in the system which are nor-
Mally eliminated through their agency.

In the healthy state of the kidney we
find oil globules existing to a certain ex-
tent in the epithelial cells of the tubuli
uriniferi. Yet is to the morbid accumulation
of these globules that we ascribe the second
form of degeneration. We may have also
these two primary forms existing together,
thus rendering it difficult to say how much
the disease depends upon the epithelial
degeneration. How much is dependent
on the fatty degeneration. It is now
pretty generally believed that we are able
by microscopic examination of the urine,
to better to determine whether one or
both of these degenerations exist. If the
degeneration be epithelial, we will ex-
pect to find broken down epithelial
cells, casts of tubes containing nuclei,
if fatty, we will detect oil globules.

The two forms occur in degenerated ep-
ithelial cells casts of tubes with nuclei of
d oil globules.
Of the Morbid appearances of the Kidney: These disorderd processes taking place, give rise to a great variety of morbid appearances in the Kidney. When these acute inflammatory forms proves early fatal, the Kidneys are found to present a flabby appearance. I am easily slipped out of their investing membrane. They are generally much increased in size, of a deep dark red or purplish colour. Exteriorly, of a dark red colour internally, it is sized more or less with blood which oozes out in considerable quantity when the Kidney is cut. The Kidneys of those who have died of the chronic inflammatory form, are generally found of normal size. The structure of the cortical portion of the Kidney appears confused, as if from the admixture of some amoral matter. The vasculariy of the organ is found to be increased. Sometimes the cortical portion becomes atrophied giving to the whole organ a contracted appearance. The pyramidal bodies generally
remaining unaffected. When the organ thus becomes atrophied it loses its muscular appearance. When the inflammatory form occurs along with fatty degeneration, the kidneys are generally found enlarged, their upper surface presenting a dark appearance, their lower surface mottled with yellow, no elevated granulations are to be seen externally, but many small yellow spots. Internally the organ in a pale aspect, it presents the appearance of a fatty substance with slight traces of granular matter throughout. In the last form of the disorder, true granular degeneration, the kidneys are some times of the natural size, at other times increased in size, but most generally of diminished size. The mortified deposit is found to pervade the medullary as well as the cortical substance. Their surface is pale, rough, irregular, frequently lobulated. Their internal surface presents on section generally a
yellow granulated appearance. Sometimes we find the Kidney totally deprived of its proper structure that we can neither see traces of the cortical nor medullary substance. By many these morbid appearances presented by the Kidneys have been considered as different stages of the same disease, but as the subject gets more and more investigated, so does opinion incline to a contrary belief.

Of the Symptoms.
It is now generally agreed that there are two distinct conditions which give rise to Bright’s disease of the Kidney. One, depending on inflammation of the Chronic or acute, another, depending on simple fatty degeneration. I also may have these two concurring.

The symptoms arising during the invasion & progress of the disease will differ considerably, as the Kidney may be the seat of either an acute or chronic affection.
The symptoms of the acute form of the disease are as follows: Fever often preceded by rigor, thirst, loss of appetite, lumbar pain, in the region of one or both kidneys, sometimes severe, more generally of a dull aching nature, pain across the epigastrie hypochondriac regions, painful and frequent micturition, nausea, vomiting, urine scanty, sometimes of a dark brown colour coagulable by heat of hydrochloric acid. Anasarca is also a very frequent symptom, generally showing itself two or three days after the invasion of the disease.

As regards the anasarca occurring in this form of the disease, it is worthy of remark, that an oedematous condition of the face, legs, lips is often observed, without any such appearance in the mouth or extremities. These symptoms are not always present to mark the acute form of Bright's disease. It may be found yet no lumbar pain, no painful micturition, no nausea or vomiting, indeed
There are very few of the above symptoms which are not liable to be occasionally absent. The urine may be redundant, or altogether suppressed. If there is entire suppression, death rapidly ensues by coma; but if not, the disorder proves frequently fatal by the occurrence of some of the other secondary affections. Many completely recover from this form of the disease, many appear to have recovered from it, but after a lapse of time, their recovery is proved only to have been apparent, by the manifestations of those symptoms which characterize the chronic form of the malady.

The symptoms characteristic of the chronic form of Bright's disease are not far different from those of the acute; they are however generally of a milder nature, sometimes giving the patient so little inconvenience, that the disease may be overlooked until the symptoms assume a more troublesome character.
or until some more severe one shows itself. We have in this form of the disease, occasionally, obscure lumbar pains, frequent micturition, emaciation, drowsiness, sometimes intense thirst, leucorrhoea, ataxic appearance, morning sickness nausea and vomiting, urine pale and springingly coagulable, with or without anuria. One of the most characteristic features of this form of the disease is the gradually increasing pallor, which almost always stamps the countenance of the patient of this form more especially when the affection has been of long standing.

Of the state of the Urine
The urine in Bright's disease assumes various appearances sometimes presenting the same colour as in health, occasionally it is of a pale straw colour, but most frequently it presents a dark, turbid peculiar muddied appearance. This latter appearance is very characteristic of the disease. Dr. Christianu
informed us in his lectures on Clinical Medicine that while passing round the wards of an hospital in Paris he was surprised at the Parian Medical's by the facility with which he diagnosed Bright's by mere inspection of the urine.

In the acute stage of the disease the urine generally presents a red appearance, but it may also be of a pale or natural colour. In this stage of the disease the urine is most generally scanty, in some instances it is altogether suppressed, in others it does not vary much from the natural standard. In most cases in the acute stage the specific gravity of the urine is not greatly affected, varying from 1.022 to 1.016. In the early stage of the chronic affection - the urine is generally of a clay or straw colour almost invariably of low specific gravity, the quantity passed is generally much above the natural standard. In the advanced stage of the chronic affection - the urine usually presents a dark red
Below the amount excreted daily is generally small, and its specific gravity is usually higher than in the acute stage or at the commencement of the chronic form. The most important condition of the urine in Bright's Disease is its impregnation with a greater or less quantity of albumen. This substance is not always present throughout the whole course of Bright's Disease sometimes it suddenly disappears and may be absent for weeks. This generally takes place as the disease advances. The urine contains albumen in most abundance in the acute yearly stage of the disease when it increases in quantity according as the disorder advances as some have believed; the contrary rule would be nearer the truth. The presence of albumen in the urine is not always to be ascribed to Bright's Disease for we have other conditions of the body giving rise to an albuminous state of the urine.
1. When we have blood present in the urine from hemorrhage in the kidney, bladder, or urinary canal, albumen will be detected. 2. Shortly before death from certain diseases, albumen may be detected in the urine, quite unconnected with disease of the kidney. 3. The presence of semen in the urine is sometimes a cause of albuminous urine. 4. Albumen will be detected in the urine from certain causes obstructing the return of venous blood through the renal canal, thus causing a congested state of the kidney. 5. At the period of resolution of acute diseases, the urine will be more or less impregnated with albumen. 6. At the period of convalescence from acute cholera, albumen has been found in the urine. Other causes have been alleged as giving rise to an albuminous condition of the urine, such as dyspepsia, a full meal of animal food, mercurial action, but careful observation tends to prove that these allegations are
fallacious. Cheese taken in large quan-
tity, if uncooked endulges in poesy,
have been regarded by some as capable
of giving rise to albuminous urine but
general opinion regards these excres-
cences as incapable of such an effect. E. Chri-
tson said of this when debating on the
subject, that he would have
soured suspicions of the soundness of a
porous kidney which would be made
to secrete albumen from such a slight
cause. The best method of determining
the presence of this abnormal ingredient
of the urine is by the combined tests of
heat and nitric acid, other tests have
been recommended: Perchlorate of Potash;
Bichloride of Mercury, Cresote, oxalic
acid, and various others but as they
are all rare or old subject to fallacy, as
they are now seldom employed. Heat
alone is not sufficient to determine the
presence of albumen as it may cause a
precipitate to urine not albuminous.
When phosphate of lime is present.
we have on the application of heat a precipitate very little that caused by the presence of albumen can easily distinguished from the latter by the addition of a little nitric acid, which will cause its immediate disappearance. Again if the urine is alkaline or neutral heat will fail to throw down albumen though it is present in large quantity. The employment of litmus paper will show us whether the urine is acid, alkaline or neutral. When alkaline or neutral, in addition to heat, we have only to acetylate the urine to obtain a precipitate. Nitric acid alone is not more than heat alone to be regarded as a sure test for the presence of albumen in the urine. The presence of lithiates in the urine will with this reagent give rise to a flaky precipitate when albumen is not present. When we have a precipitate formed on the application of nitric acid in order to ascertain whether it is caused by the presence of lithiates or albumen we have
Mere ly to apply heat when the precipitate, if due to the former, will entirely disappear, whereas if due to the latter it will remain unchanged. D. Christian mentions that sometimes nitric acid did not separate albumen which was present in large quantity, a circumstance which he ascribes to the probability that the albumen had undergone decomposition. Hence it will always be well to examine the urine before time has elapsed to allow of decay.

By the microscopic examination of the urine we are enabled to detect, along with these appearances already alluded to, mucous corpuscles, thus corpuscles resembling those latter generally showing in the more advanced stage of the malady. We may also expect to meet with any of the usual purerary deposits, the latter triple phosphates being the most frequently met with.
State of the Blood.

The albumen present in the urine, is derived from the blood. When blood is drawn in the early stage I subjected to examination, the specific gravity of its serum is found to be much higher than that of healthy serum. A healthy serum has a specific gravity of 1.030, while that of those afflicted with this malady is found to range from 1.015 to 1.028. Albumen is present in healthy blood to the amount of 1/69 parts by volume, while it has been found reduced in this disorder to as low as 1/8 parts by 1000. Dr. Christian has always found the specific gravity of the serum lowest in those cases where the urine was most loaded with albumen. It is in the earlier stages of the disorder that the blood the serum of lower specific gravity. As the disease advances the specific gravity is often found to return to its normal standard and rarely this found to exceed it.
The almost constant presence of urea in the blood is another characteristic of this disease. This substance is almost always to be detected in the blood in the early acute stage of the disease. It disappears as the disease advances, but usually reappears again towards the termination of the case, or even a larger quantity than previously. When blood is drawn in the acute stage of the malady, it is generally both thickened and escharified. In this stage the fibrine is increased but gradually diminishes as the disease advances until it arrives at its natural standard and does not again increase unless when some of the secondary inflammatory affections come on. The proportion of red corpuscles undergoes a marked change in Bright's disease. Generally they are much diminished in quantity. In the early stage, but as the disorder advances, they suffer great diminution.

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By this condition of the blood we are enabled to account for the phlegmoplectic appearance which is almost always presented by patients in the advanced stage of Bright's Disease. Dr. Christiano has observed that he was acquainted with no natural disease at least of a chronic nature which colloborates approximate homoeology in its power of porkerizing the red particles of the blood. In addition to these changes in the blood, we have sometimes a turbid, putrid, and even bloody appearance of the serum, which is generally to be ascribed to the presence of post. The presence of urine in the blood is not however to be regarded as peculiar to Bright's Disease as it has been in considerable quantity in Cholera, jaundice, and other diseases connected with suppression of urine. The fever bullets do not appear to elevate remarkably
from the normal standard, but are usually slightly below the healthy average.

Secondary Affections

The numerous and important secondary affections connected with Bright's disease are I think quite sufficiently accounted for by the important changes which we have seen to take place in the blood in the course of the malady. The functions of the kidney are so interfered with that instead of separating from the blood that copious excretion of fluid, they separate in its place an important natural ingredient of the blood, viz. albumen, the top of which causes a wateryness of the liquor saccharis which condition is well known to lead to a variety of secondary affections. The retention of water in the blood is also producible.
If a multitude of fuels. In the acute form of the disease, when we have the urine totally suppressed the substance secreted to hystoid symptoms, extreme depression and coma, which generally speedily ends in death and on examinination afterwards the poison is found to be present in some of the tissues of the body. In the chronic form of the disease when instead of complete suppression of the urine we do not attained to a considerable extent the poison is more slow in its action giving rise to affections of a less fatal nature, such as dyspepsia chronicity, diarrhoea, etc. The secondary affections occurring along with Bright's disease not only demand our attention on account of the danger threatening which they cause but also because when occurring and generally one or more of them are present it is to them that our treatment is
mostly to be checked. They are also important in another point of view. It is generally by some of these showing themselves that we are led to the detection of the mischief existing in the kidney, upon which they depend. The natural termination of the disease is to suffer death preceded by coma which is generally caused by the poisonous influence of urea in the blood. When coma has once fairly set in, death generally supervenes in four or five days afterwards. The coma may or may not be preceded by convulsions. Some writers regard it as due to anachnites but post mortem examinations have disproved that it is always so, generally due to that cause.

1st Stage
This is a very important secondary affection and of all by far the
Most frequently present, but it is not to be regarded as an essential accompaniment of Bright's disease. This symptom is peculiar, the pain being most liable to the suspicion, and detection of the diseased state of the kidney, and it may occur and be present throughout the course of the disease without any of the other secondary affections showing themselves. When it occurs to any great extent it contributes much to the patient's suffering and danger. In this country and in England it usually occurs in the form of an abscess, sometimes putting out a pressure ulcerative, flaccid bladder, its elasticity depending on the rapidity with which the effusion has taken place. It occurs on every part of the body, sometimes occurring in the free tendons, without any appearance of it in the truncheo
Edema. Sometimes the oedema of the face, and especially of the lower extremities is very obvious in the morning. At night, more especially if the patient has been sitting or walking during the day. During the course of the renal malady, we find the serous membranes as well as the cellular tissue become infiltrated with serum, and effusions of a fibrinous nature, occasionally take place into them. Sometimes we have ascites, hydrothorax, and hydropericardium, but these seldom occur to any great extent, unless disease of the viscera of abdomen or thorax accompanies the renal affection. When these effusions do occur, they contribute considerably to the external appearance of the patient.
Scurvy and danger of the patient, whose life is generally cut short through the inconvenience occasioned by the mechanical pressure of the fluid. Adama of the stools has been observed to take place in Bright's disease, which when occurring is generally of a rapidly fatal nature, but fortunately the complication of rare occurrence.

Arrangements of the stomach and bowels are often met with in these suffering from Bright's disease.

Transferred is very frequently found and it seems to be more frequent in this country than in England or in France. In a work recently published by Dr. Rees, it would appear that it is a more frequent complication of the renal malady, more than it was some years ago.

When it does occur it generally serves to obviate, and may even prove the sole cause of the death of the patient.
It depends on congestion, irritation, and sometimes alteration of the mucous membrane, and is attended with a copious mucous discharge, which is often very profuse. The diarrhoea, even when severe, does not always or generally affect the removal of the febrile effusion. Dyspepsia under its different forms is of very frequent occurrence, and is almost always very difficult to treat. Morning sickness with vomiting before meals is very often present at the commencement of the attack and when this symptom presents itself. The examination of the urine ought never to be neglected. Bronchitis as a secondary affection depending on the renal malady, could be point of fungus or meat to dropy. It may occur either in the acute or chronic form, and like the preceding affections, it is generally very difficult to cure. When dropy is present, along 
With the Bronchitis, its removal is attended with improvement and sometimes entire disappearance of the Bronchitic symptoms. This doubtless whether results from the kidney affection or whether it occurs only in those who have been exposed to cold. We have been able to establish a tendency to inflammatory action of the mucous membrane in other parts of the body, without any other obvious cause, but the conditions of the blood found consequent on the disorder, and I think we may as readily ascribe the Bronchitis to these same conditions. If this is not entirely so caused I certainly think that these conditions are a very strong predisposing cause for I have seen those suffering from Bright's disease suffer from a very severe Bronchitic attack on very slight exposure to cold.
Pneumonia pulmonalis has been observed by most writers to occur in connection with Bright's disease. Many are of opinion that there is no connection between the renal affection and Pneumonia pulmonalis. Others go still further and state that the renal affection is unfavourable to its development from the frequency with which the fatty kidney of Bright is found to coexist with Pneumonia. I think Pathologists are now pretty generally of opinion that, while some of the renal disease is of a pernicious nature, inflammations of the pleuric serous膜, Periurthritis, Pericarditis, and Pleurisy, are not at an frequency met with in those suffering from Bright's disease. According to Mr. Colon there is very little disposition to these complications in France. Their occurrence in this country is not at all rare and when they do happen they not unfrequently cause the
Death of the patient, they occur generally in the early stage of the disease, but may be induced at any time on very slight exposure to cold.

Of the three inflammations, Pneumonia is of most frequent occurrence. Pneumonia sometimes occurs during the course of the kidney disease, sometimes existing alone, in others along with pleurisy, but in either way it is a rare complication of Brights Disease.

Affections of the Liver and Heart. Most Pathologists have observed that some form or other of liver disease is a frequent accompaniment of the renal malady. Dr. Harlton states that his observations have led him to conclude that in by far the great majority of cases fatty degeneration of the kidney is associated with a similar fatty degeneration of the liver. Many are disinclined to believe that there is any connection between
The diseased conditions of the two organs when simultaneously affected further than that, intemperate habits, and bad living, are common causes of both disorders. Disease of the heart is not a secondary consequence but a very frequent accompaniment of Bright's disease of the kidneys. Dr. Christianou considers that with the exception of anaemia and perhaps pulmonary and pyogenic, no complication is more common. Where that no complication is more common than that of granular degeneration of the kidneys, with enlargement and obstruction of the heart. It is yet doubtful whether or not the kidney affection has anything to do with the development of the diseased condition of the heart, as cases have been recorded in which the heart affection appears to have existed before that of the kidney. The general
belief is that where the two affection exist together the kidney is generally first affected and that the renal malady thus a tendency by its effect on the blood to give rise to disease of the head.

Head Affections

The most important of the secondary diseases consequent on the renal disease are the different affections of the head such as encephalitis and cerebral affection come convolutional epilepsy and epileptic disorders. These affections of the brain generally follow any great diminution or complete suppression of tension. But this is not always the case. Dr. Christian had a patient who passed for more than two years off wine for a considerable time before his death and yet remained unaffected by head symptoms till death but a period to his existence by simple mania. The most frequent cause of the head symptoms would
appear to be passive effusion into the 
ventricles generally taking place con-
currently, with negligible increase of the 
thoracic when present in other parts of the 
body. J. Christian states that 
if the thoracic effusion be allowed 
freely to accumulate, drowsiness 
the first symptom of the affection 
of the head very soon makes itself 
appearance in the general character of 
Durer, and it will speedily pass 
into fatal course if not controlled 
but the removal of the trouble will 
usually remove the drowsiness 
sometimes may have fatal issue 
and on post mortem examination 
no thoracic effusion or any other 
apppreciable lesion of the brain is to 
be seen. In cases of this kind the 
coma is generally attributed to the 
Presence of venen in the blood. Venen 
may accumulate in the blood via lung 
without inducing any 
head symptoms.
Regarding convulsive affections in pregnancy. Dr. Christian informed us when
lecturing on Bright's disease, that Dr. Scipioon had observed, that con-
voluntary affections occurring during
pregnancy was generally to be traced
to this disorder. Dr. Rice on the other
hand states that few general convul-
sions attended with amnorrhea and
albuminous urine may exist without
death, if any disease of the kidney.
The former states that no urine is to
be found in the blood of those
suffering from cerebral convul-
sions, and those who have been the
subjects of true kidney disease, and
in whose blood urine has been ear-
cutings have gone through retro-
peristaltion without any convulsive
manifestations. This Author is rather in-
clined to the belief that the album-
unuria & the convulsions of pregna-
y are rather to be ascribed to an
excess of fibrin in the blood.
Rheumatism as a frequent accompaniment of Bright's disease, has been observed by most writers. It usually occurs in the chronic form, and is most frequent of a neuropathic character. When severe it is fatal, as any considerable extent of rheumatism is seldom present. It is generally very difficult to cure, proving very obstinate and troublesome.

Dyspepsia as a secondary affection consequent on Bright's disease has not been mentioned by any writers, as far as I am aware, and from that fact I think its occurrence must be rare.

Dr. Christie has observed it to occur during the progress of the renal disease in three or four different occasions. A well-marked case of the kind was admitted into the Clinical Hospital this session.
Causes of the Disease

The causes which give rise to Brights Disease in many instances are but very imperfectly known. The affection is much more common in large cities than in Country districts, more prevalent among the lower orders than among the higher classes of society. It is a disease of adult life, but has been met with in children who have suffered an attack of pleuralines, and it has also been seen in people of advanced age. Among the predisposing causes the herdulous constitution, intenseii hours habits, close confinement in dark ill ventilated apartments, the course diet, the unproper nourishment, and an attack of pleuritis may be regarded as the principal. The exciting causes are exposure to cold damp atmosphere, blows on the limbs
interruption to the proper functions of the skin, and also an attack of scarlatina.

Prognosis

That the inflammatory form is frequently recovered from is now not generally doubted. The chronic form is generally looked to be incurable, but its progress may for a time be prevented. In cases of little advance when the quantity and density of the urine is natural the prognosis will be favourable. But if the urine be diminished in quantity, and low in density, the prognosis is generally be unfavourable. If the corpuscles of the blood are much diminished the must make an unfavourable prognosis. Recurrence and tedium diarrhoea and dyspepsia are bad symptoms. When lead symptoms make their appearance, with the urine diminished in quantity, and low in density, the prognosis is very unfavourable. The dropsy is frequently removed. Serious inflammations and decay of liver and heart
Treatment

The treatment of Bright's disease will vary much according to the severity of the symptoms. The acute inflammatory form, is generally admitted to allow of perfect cure. In the chronic form of the disease, much can be done in the way of ameliorating the symptoms and retarding the progress of the malady, but as regards perfect cure, very little hopes of such a termination can be looked for.

In the acute inflammatory form, when uncomplicated, much benefit is derived from mild antiphlogistic measures, and depletion, in order to relieve the congested state of the kidney. General bloodletting is not often necessary and we must be very cautious in the use of the lancet, for the reason that the secondary affections liable to occur in the course of the disease are of such a nature as to be aggravated...
by the effects produced on the constitution by active defleteror measures. Capping the cause is often attended with much benefit, and is always to be pursued as long as there is a symptom, and also when there is a pain in the region of the kidney. Diaphorias and saline purgatives are often used with advantage in this stage of the complaint. Among the diaphorias that are employed for this purpose, the use of autotony is reckoned very valuable, so much so that some have gone so far as to advise to its specific influence over this disease. In the administration of this remedy, we must be careful not to induce vomiting, to which there is frequently in this disorder a morbid tendency. Should the autotony fail in its diaphoretic action, or there a tendency to excitatory vomiting, other means may be adopted to induce the action of
The skin. Dover's powder in another
favourite remedy in this form of the
disease, and when used alone, with
the warm, hot air, or a vapour bath,
is often attended with manifest
advantage. Mercury has been
resorted to in this disease in the hope
that it would be useful in removing
the inflammation, and congestion
of the kidney, but its physiological
action is so feeble and slowly
developed without any marked
benefit, but rather sometimes with
aggravation of the symptoms, that
it is now seldom had recourse to.

The treatment of the chronic form of
the disease differs considerably
from that of the acute. If occurring
without any of the secondary
affections, it is seldom necessary
to have recourse to the salatory plans
was either local or general or to
The use of the poisonous medicines.
We must recommend in this form
of the diseases at present, regular exercise, attention to the cleanliness, and temperateness of the skin, along with the administration of remedies which have the power of invigorating the system, and of restoring the deficient cells of the blood, which in this form of the disease we have been to be very deficient. We must be careful in laying down rules for the regulation of the diet of such patients, and enforce upon them the stubborn avoidance of fatty diet and also from excessive use of starch and sugar which are liable to be converted into fat in the process of digestion. Indulgence in stimulants, liquors, and exposure to cold must be carefully avoided. For restoring the red corpuscles of the blood. The preparations of iron are of great service, but they sometimes prove injurious by further impairing the debilitated power of
Kidney, and by rendering the urine more alkalineous. When such appears to be the effect of the iron it must be immediately abandoned. Hydropneumatic authorities exhibited mononormally are beneficious by removing the excess of water from the blood but we must be careful in the administration of such remedies and remember that in this disorder violent diuresis is apt to occur. Astringent remedies are now used in Brights disease, with the view of checking the discharge of albumen. Dr. Christian says that he has not seen any very good effects from the employment of such remedies, but is of opinion that they may be of service where there is no secondary disease present and where the kidney affection is chronic. Among the astringents which are used the principal are tannin, oleteed tannic and tannie acids.
Counter irritation, either in the form of return of ice or in the form of the disease, an ice, constant in the bones, has been known to retard the progress of the disease for years. When inflammatory affections occur in either the acute or chronic stage of the disease, it will be advisable not to have recourse to resection. In some cases the severity of these affections, especially those of the chest, strongly calls for the use of the stent. But even in these cases we ought not to fly hastily to resection but rather have recourse to the use of antimonypotherapeutico measures, which have a beneficial effect on the system.
Treatment of Secondary Affections

At the secondary affection concurrent on Bright's disease, are the principal sources of danger, a knowledge of the treatment suitable for these when occurring along with this disorder is of the greatest importance, for frequently we can by the removal of them restore the patient to the enjoyment of tolerable health for a time.

When dropsy occurs in the acute form of the disease, it is often benefited by local bloodletting. It may be removed by the administration of one of three classes of medicines, viz. Diaphoretics, Diuretics, and Purgatives. Considerable diversity of opinion exists regarding the class most suitable for its removal. Diaphoretics are considered by many as most effectual for its removal. J. Osborn of Buffalo strongly recom-
mends their employment and states
as the result of his experience that he
never failed to remove the dropsy
when the spleen was restored to a
prosperous state. Dr. Christianson on
the other hand states, as to the
efficacy of hypodermics in removing
the ascites, or effusions: "I cannot
deny that these remedies have produced
in my hands the good effects which
would have been expected from the
experience of others." In support of Dr.
Christianson's opinion, I may mention one
case which came under my own
observation, where the ascites was
produced by bowels powder, not so
much with the view of relieving the
dropsy, which was only partial to a
small extent, as to relieve the con-
striction of the kidneys. The patient
was labouring under the inflammatory
form of Bright's disease, with no
other secondary affection but slight
edema of the face, and slight
ascites. He was ordered 10 grains of
Dover's powder every night, and on the morning after the first administration of the powder he perspired very freely, and in consequence the dose was reduced to 5 grains very night. Notwithstanding the decrease in the dose of the powder for two days more he continued to perspire so profusely, that it was ordered to be discontinued. After the withdrawal of the Dover's powder he continued for some days to perspire very freely, more especially during the night. On the 8th day after the deep chorea had been induced, the following report was made by the Clinical Clerk: "Still presents slight appearance of pulse, not as poor to-day. Complaints of great general weakness. Ascites considerably increase. limbs flaccid." In this case chorea was attended with marked vicissitudes, and death to the patient without removal
but rather with aggravation of the dropsical effusion. Inquiries into the treatment of dropsy consequent on Bright's disease have been much objected to for the reason that the kidney is often perhaps always in a state of congestion, and by the administration of stimulants the stimulus, had irritate the organ, and thereby accelerate the accompanying process. D. Christian states that this has never been proved theoretically or practically, and that stimuli are employed in other inflammatory affections and that there is no reason why they should not be employed, and further that the employment of purities is the surest mode by which we can get rid of the dropsy. Removal of dropsical effusion by means of purgatives is not now so often recommended as formerly. But they are still employed
and often with benefit where other means have failed. Their use is contra-
indicated where there is much ten-
dency to diathesis. In the removal
of the drupical effusions, perhaps
the best mode is by the embolism
of diuretics; and of that class of me-
dicines those most generally found
useful are the 15th root of Potass
and digitalis. These two remedies
were originally recommended by Dr. Bright
and have since then been employed
by Dr. Christian and others with
considerable success. If both these
remedies fail we may employ the
acetate, carburate, & nitrate of Potass
or the diureta. Acetarsic. This latter
remedy according to some is a most
certain diuretic. Dr. Parrot states
that it never fails to act on the Kid-
neys, and that it is the most sure
in all diurétics in dropsies. Dr.
Christian has not found it to be
a Never Failing Remedial Diuretic.
but admits that he has been of great
energetic properties. When duerities
have failed in producing duerities and
in removing the abdominal effusion
we must have recourse to purga-
tives. Dr. Christian has recommended
Farina as the most certain and
most easily managed purgative
for the purpose. He also used
collectorium with success. Dr. Thes
has been the employment of this
Remedy attended with great
success. All these remedies will
sometimes fail in the removal
of the abdominal effusions, more
especially when the kidney dis-
ease is complicated either with
increased heart or liver, and when
such is the case we have still another
way by which we may get rid of
the abdominal effusion by
acupuncture. Both from the
hunger attending this sensible
operation it is seldom that we
Course to multiple when effusion has taken place to such an extent as to render the skin so tense, and stretched that it threatens to pull away.

Treatment of Disorders of Stomach and Bowels.

In ordinary dyspepsia benefit will be derived from the employment of bitters and antacids. Chronic vomiting is generally very obstinate and often baffles all our attempts at cure. Opium, Morphine, Bismuth, Mixture, Bismuth Hydrocyanic Acid, and Morphine, have all been found useful in alleviating the symptoms. Dr. Christiane Metzner holds the latter remedy is the most efficacious. Scarcely is best treated by the combination of tincture of astringents. The ful of acetate of lead and opium is the best preparation seen our use. Dr. Allison is of opinion that the mean treatment ought not to be
Suddenly arrested, and the course of the symptoms, when it is observed to be carefully watched, the cause it is likely that much of the wear which is circulating in the blood may be discharged in this way, and because those who have much of this, accompanied by the mental disease have seldom much of the Comatose. Therefore, the inflammatory affections of the chest and vascular membranes occurring along with Bright's disease are to be treated much in the same manner, as when they occur unconnected with this disorder. With one exception that blood, letting generally is seldom admirable. In the treatment of the term affections, we have to deal with the most formidable and most dangerous of all the secondary affections attending on Bright's disease. The Comatose tendency has often been observed to them.
itself in the sudden suppression of 
mine, and also when an anaemia is 
present, with its possible increase 
and would seem therefore to be 
the latter to the poisonous in- 
fluence of excretaitious matters 
retained in the blood, or to the 
contamination of the serum of the blood 
into the ventricles. Such being 
frequently the cause of the serum 
on the symptoms of coma, first 
phlegmish themselves, the unstable 
measures to try and cleanse from 
the blood the men, and also to 
remove the effusion. This is best 
accomplished by local bloodletting, 
expiring, or leading the head or 
back of the neck, and by the 
employment of purgatives and 
diuretics, the latter class of an- 
edics have by some been found 
more successful than the for- 
mer. When the symptoms 
supervene in the early stage
Of the disease the only sometimes expect to remove them by the employment of these remedies but when the coma lasts one family return they little can be done.

Rheumatism occurring during Bright's disease is as before stated an untreatable affection and not generally amenable to ordinary treatment. Phrens sometimes to be benefitted by the employment of the warm bath. In the case of Cryptipelas which I have mentioned as having occurred along with Bright's disease, the ordinary treatment was adopted antiphlogistic regimens purgatives and the local application of a paste of lead, asthma water and under the use of these the Cryptipelas disappeared in a very few days.