Editorial for the month of November 2009

Homoeopathy in Diabetic Nephropathy

Diabetic nephropathy (*nephropatia diabetica*), also known as Kimmelstiel-Wilson syndrome and intercapillary glomerulonephritis, is a progressive kidney disease caused by angiopathy of capillaries in the kidney glomeruli. It is characterized by nephrotic syndrome and diffuse glomerulosclerosis. It is due to longstanding diabetes mellitus, and is a prime cause for dialysis in India.

The syndrome was discovered by British physician Clifford Wilson (1906-1997) and German-born American physician Paul Kimmelstiel (1900-1970) and was published for the first time in 1936.

The syndrome is usually seen in patients with diabetes of longer duration; hence patients majority of patients are between 55 and 75 years. The disease is progressive and may cause death few years after the initial lesions, Men's are more affected then women. Diabetic nephropathy is the most common cause of chronic kidney failure and end-stage kidney disease in India. People with type 1 and type 2 diabetes are equally at risk to develop this complication. The risk is even higher if blood-glucose levels are poorly controlled. Further, once nephropathy develops, the greatest rate of progression is seen in patients with poor control of their blood pressure. Also people with high cholesterol level in their blood have much more risk than others.
The earliest detectable change in the course of diabetic nephropathy is a thickening in the glomerulus. At this stage, the kidney may start allowing more serum albumin (plasma protein) than normal in the urine (albuminuria), and this can be detected by sensitive medical tests for albumin. This stage is called "microalbuminuria". As diabetic nephropathy progresses, increasing numbers of glomeruli are destroyed by nodular glomerulosclerosis. Now the amounts of albumin being excreted in the urine increases, and may be detected by ordinary urinalysis techniques. At this stage, a kidney biopsy clearly shows diabetic nephropathy.

Signs and symptoms

Kidney failure provoked by glomerulosclerosis leads to fluid filtration deficits and other disorders of kidney function. There is an increase in blood pressure (hypertension) and fluid retention in the body plus a reduced plasma oncotic pressure causes oedema. Other complications may be arteriosclerosis of the renal artery and proteinuria.

Throughout its early course, diabetic nephropathy has no symptoms. They develop in late stages and may be a result of excretion of high amounts of protein in the urine or due to renal failure:

- Oedema: swelling, usually around the eyes in the mornings; later, general body swelling may result, such as swelling of the legs
- foamy appearance or excessive frothing of the urine (caused by the proteinuria)
- unintentional weight gain (from fluid accumulation)
- anorexia (poor appetite)
- nausea and vomiting
- malaise (general ill feeling)
- fatigue
- headache
- frequent hiccups
- generalized itching

The first laboratory abnormality is a positive microalbuminuria test. Most often, the diagnosis is suspected when a routine urinalysis of a person with diabetes shows too much protein in the urine (proteinuria). The urinalysis may also show glucose in the urine, especially if blood glucose is poorly controlled. Serum creatinine and BUN may increase as kidney damage progresses.

A kidney biopsy confirms the diagnosis, although it is not always necessary if the case is straightforward, with a documented progression of proteinuria over time and presence of diabetic retinopathy on examination of the retina of the eyes.
Homoeopathic Management

The goals of treatment are to slow the progression of kidney damage and control related complications. The main treatment, once proteinuria is established, is constitutional homoeopathic medicine.

Blood-glucose levels should be closely monitored every few months. This may slow the progression of the disorder, especially in the very early ("microalbuminuria") stages. Medicines to manage diabetes nephropathy should be used sometimes when constitutional medicine alone cannot affect the desired results.

Diet should be modified to help control blood-sugar levels. Modification of protein intake is a must if kidneys start leaking protein in the urine.

High blood pressure should be aggressively treated with repeated doses of constitutional medicines, in order to reduce the risks of kidney, eye, and blood vessel damage in the body. It is also very important to control lipid levels, maintain a healthy weight, and engage in regular physical activity.

Patients with diabetic nephropathy should avoid taking the following drugs:

- Contrast agents containing iodine
- Commonly used non-steroidal anti-inflammatory drugs (NSAIDs) like ibuprofen and naproxen, or COX-2
inhibitors like celecoxib, because they may injure the weakened kidney.

Urinary tract and other infections are common and can be treated with appropriate small remedies like methylene blue etc.

Dialysis may be necessary once end-stage renal disease develops. At this stage, kidney transplantation must be considered.

The first case that I would like to discuss is of an elderly man who was a known case of a diabetic nephropathy leading to chronic renal failure; his complaints were severe urinary tract infection characterized by high fever with rigors. The urine is
foamy, look is toxic, and he is thirsty. I started *Pyrogen 1M* with repeated doses.

His fever came under control but subsequently the urine output started getting less and less, he developed oedema on the dependent part, his face started getting bloated and his creatinine level became high.

Whenever an acute renal failure develops over a chronic renal failure especially in patients who suffer from diabetes mellitus the drug of choice is Aralia hispida.

*Aralia hispida* comes from Araliaceae family, it is commonly known as wild elder, and it’s a perennial plant. It is very useful remedy in cases of dropsy especially of renal origin where a person gets lot of urinary tract infection and the quantity of the urine becomes less and less until there can be even complete suppression of urine.

After giving Aralia hispida 30, repeatedly, the patient started passing urine, within 2 days his oedema became less, he came back to his original 1300 cc of urine output. Ever since then this remedy has a deep impression in my mind for such cases.

Another case is of a man with diabetic nephropathy who was very irregular in his diet and medication, develops in a span of 6 weeks, creatinine of 10.5 mg/dL, and urea of 260 mg/dL and potassium of 5.5 mEq/L.
He was advised hospitalization as he was suffering from uremia; the main complaint was severe loss of appetite, on attempt to drink or eat produces severe retching. He felt constant nausea, he had vomited at least 5-6 times before I saw him, and the vomiting was completely frothy and full of mucus.

What I remember seeing him was that he was having tachycardia, he was not comfortable in his breathing, the abdomen was distended, he also had a frequent dry cough, and he was chilly and extremely weak. His expression on the face was confused, the lips were dry and there was a collection of mucus on the tongue, this is a very peculiar rubric ‘Mucus-collection of mucus on the tongue’ that I many times take with different pathological conditions. I selected rubrics according to the symptoms and prescribed him Cuprum aceticum 200C.

*Cuprum aceticum* has been very useful remedy for me in uremia due to diabetic nephropathy. What I look in this remedy is basically the tongue which is coated with lot of mucus, the tongue is pale, the pulse is rapid, there is marked anemia, the person is chilly, and patient is usually breathless with dry cough, cannot eat or drink anything without retching. If this kind of symptomatology is present with the high creatinine and high urea then Cuprum aceticum is one remedy that you should not forget.

Exactly another case of diabetic nephropathy going into a uremia with high creatinine and high urea levels of an elderly gentleman but here the picture was that along with renal dropsy, there was no appetite, and the patient had severe
urging to pass loose motions accompanied by vomiting with lot of rumbling and gurgling, he also had excessive oedema in lower limbs with massive swelling on the face.

In the previous case the nausea and vomiting was more important factor and in this case it was the urging with vomiting and tenesmus. The combination of tenesmus, urging and vomiting with uremia and dropsical swelling is a very useful indication for a remedy *Ampelopsis quinquefolia*.

*Ampelopsis quinquefolia* is a remedy which is well given in Allen’s *Encyclopedia*; it comes from the natural order *Vitaceae*. It doesn’t have a very big proving but Pulford in his ‘Graphic Drug Pictures of Materia Medica’ has given a nice picture of how to use this remedy in uremia and even in uremic coma. But the guiding factors for this are vomiting, purging, tenesmus, cold sweat and collapse. This can resemble Cuprum Veratrum or Carbo veg also.
Ampelopsis quinquefolia