CHRONIC RENAL FAILURE: Prevention/treatment in diabetic patients

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In the article, researchers made the assessment of renal function and identification of chronic kidney disease in diabetes patient. The study basically identifies the kidney diseases caused due to diabetes. Researchers highlighted the renal damages. The research was analyzed on the basis of previous researches and their findings. During the initial stages, the fall in renal function is relatively slower than at the later stages. Due to this reason renal dysfunction usually identifies late in the progression of diabetic patients (McFarlane, Gilbert, MacCallum, & Senior, 2013). Studies indicate that the albuminuria is not acquired by half of the diabetic patients and within the major kidney function impairment. Renal disease is most commonly found in the patient with type 2 diabetes. The researchers made discussion over the serum creatinine for the measurement of kidney function. Researchers explained that the measure does not reflect renal function in an accurate manner. The most common measures are eGFR and modification of diet in renal disease (MDRD). eGFR is useful however it should be avoided when the renal function is changing rapidly. Conditions like dehydration and intravascular volume contraction can cause damages in renal function. The researchers explained the additional testing for the identification of kidney diseases. Urinalysis findings do not provide accurate findings related to renal disease. However, twenty percent of diabetic patients can be identified with microscopic nephropathy. For recommendation, it is presented that diabetes patient should go through annual screening whenever they find themselves not clinically stable or doubted of any no diabetic renal disease and severe kidney injury. The most efficient prevention and treatment is optimal glycemic control. It should be established whenever the patient is diagnosed with diabetes. It will reduce the risk of renal disease. Intensive glycemic control is best to slow down the progression of renal disease. The strategies to block the RAAS is also efficient to decrease the risk of renal failure. The researcher concluded that proper treatment and prevention are required just after the patient diagnosed with diabetes. Besides the above preventions, additional medication is required to control the renal dysfunction especially that can unsettle the renin-angiotensin-aldosterone system.

In the article, Gross discussed the diabetic nephropathy, its diagnosis, prevention, and treatment. Diabetic nephropathy is the main factor affecting kidney in patients' preliminary renal replacement. The stage in which renal involvement starts is termed as incipient nephropathy. The disease is more common within the people of Asians, African Americans, and Native Americans. However, the adoption of several practices is helping in the reduction of renal disease progression. Gross presented the pathology in which he explained that diabetes brings unique changes with the kidney function and structure (Gross et al., 2005). For instance, tabular and interstitial changes occur due to diabetes. The patients who diagnosed with diabetes should go for a comprehensive evaluation along with the assessment of function. The previous research also explained the importance of assessment for the prevention of renal disease. With the help of qualitative as well as quantitative data, the researcher explained that differential diagnosis is history based which requires examination, evaluations and images of the kidney. Renal biopsy is considered as a useful recommendation but in special situations. This is because renal biopsy criteria are not well recognized. However, it is significant for usage in type 1 diabetes. Another assessment is based on the monitoring of renal function. For the purpose, the patient can be referred to a nephrologist for assessment and evaluation but only when eGFR is high in patients or they get involved in renal replacement therapy. The comorbid association is also an investigation tool, especially for retinopathy. Diabetic patients should go for evaluation in routine to identify the cardiac symptom that can lead to renal disease. For prevention and treatment, gross explained that intensive blood pressure should be controlled. ACE inhibitors are significant for the prevention of Renin-angiotensin system blockade. The researchers concluded that a proper diet intervention along with the proper use of aspirin is efficient treatment. In addition, new potential therapeutic strategies are significant for the prevention and treatment of renal disease in diabetic patients.

In the article Parving discussed the diabetic nephropathy, its prevention and treatment. The research is based on the case study in which a girl of age 19 was studied. She was diagnosed with type 1 diabetes and was admitted to the hospital twenty four years ago due to lack of control over it. The assessment indicated that the urine culture was negative but urine sediment was positive. Renal biopsy was performed. During the treatment of her renal disease, she got pregnant. Due to the condition serum calcium increased which was controlled by surgery. The case study indicates that diabetes is one of the main cause of the complication in the renal system. In type 1 diabetes patient, last stage renal disease causes death in the number of cases. Hyperlipidemia, access intake of proteins, and D allele are some of the factors that enhance the diabetic nephropathy which further declines the renal function (Parving, 2001). In addition, poor glycemic control, arterial hypertension, and albuminuria are the crucial factors that decline the renal system in diabetes patients. Protein intake restriction, antihypertensive treatment, ACE inhibitors, modification of diet, cardiovascular intervention, and monitoring albuminuria are the prevention and treatment suggested by the researcher in order to reduce the impact of diabetes over the fall in the renal function. The previous researches also highlighted some of these methods for the patient of diabetes. The researcher concluded that proper dietary and randomized clinical trials are significant to control renal disease.

**References**

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