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Case Report on Chronic Kidney Disease in a Young Adult

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Abstract:

Introduction: Kidneys are damaged and incapable of properly filtering blood in chronic kidney disease (CKD). The illness is referred to as chronic because kidney impairment develops gradually over a protracted period.

Clinicalfindings: Patient reported oliguria, Anemia, Anorexia, high blood pressure, peripheral edema.

Diagnosis: chronic kidney disease [CKD]

Diagnosticevaluation: Blood test : Hb 8.4 gm% ,Total RBC count :4.73 million /cummWbc count : 13600 cumm , Total platelets count : 3.47 lac/cumm monocyte : 0.1 % Potassium 5.7 meq/L , Sodium :147 meq/L Urea : 27 mg/dl.Ultrasonography showedintestinal fibrosis.

Therapeutic intervention: tab pan 40, injle fin 500 mg, Inj.Lasix, tab folic acid, tab Amlodipine**.**

Outcomes: The patient has improved after starting therapy. His urea level dropped, and his abdominal discomfort subsided.

Conclusion: After receiving the necessary treatment, my patient's condition improved. He had been admitted to the hospital with a known case of chronic kidney disease and complaints of back and abdominal pain.

Keywords: Chronic kidney disease, Oliguria, Anorexia, Urea.

Introduction:

A kind of kidney illness called chronic kidney disease (CKD) is characterized by a slow deterioration in kidney function over months or years(1). Initially, there are frequently no symptoms, however, they might include leg edema, weariness, nausea, and disorientation(2). Complications include an elevated risk of heart disease, high blood pressure, bone disease, and anemia. Chronic kidney disease can be brought on by diabetes, hypertension, and polycystic kidney disease(3). One of the risk factors is a history of chronic renal illness in the family. During a urine test for diagnosis, albumin is examined with other blood components, such as a complete blood count, glomerular filtration rate, which demonstrates how rapidly the kidneys typically remove waste items, and a complete blood count(4). People who are at risk should be tested. The first line of treatment might be a medication that lowers cholesterol, blood sugar, and blood pressure(5). Other advised actions include keeping exercise routine and changing diet to include things like eating a low-sodium diet and receiving the right amount of protein. Anemia and bone disease require hemodialysis, peritoneal dialysis, or a kidney transplant to be treated(6).

Prevalence of CKD:

Worldwide, chronic kidney disease (CKD) has been identified as a major public health issue. The estimated global prevalence of CKD is 13.4 percent (11.7–15.1%), and the projected number of people with end-stage kidney disease (ESKD) who require renal replacement therapy ranges from 4.902 to 7.083 million(7). CKD directly influences the global burden of morbidity and death through its impact on cardiovascular risk and ESKD. The prevalence of diabetes mellitus, hypertension, obesity, and ageing are all on the rise globally, which is primarily contributing to the rise in this condition(8). However, in certain areas, additional reasons including infections, herbal poisons, and environmental toxins are still prevalent. .Even the wealthiest nations will have a significant financial burden because to the high death rate due to inadequate access to renal replacement therapy in underdeveloped nations and the massive growth of ESKD patients in the future(9).

In connection to the local economic growth and resource availability, the cost-effectiveness of preventive methods to lower the illness burden should be assessed. Large studies that include patients with advanced or end-stage renal

disease in particular need to continue evaluating methods for lowering the cardiovascular risk in CKD. An independent risk factor for cardiovascular disease, chronic kidney disease (CKD) is a major worldwide health concern with large financial costs to healthcare systems (CVD). A higher risk of cardiovascular morbidity, early death, and/or a worse standard of living are linked to CKD in all phases. Since precise prevalence data are unknown, CKD is frequently asymptomatic until later stages(9). In order to do this, we attempted to ascertain the prevalence of CKD worldwide, by stage, region, gender, and age. Using literature searches in 8 databases, a systematic review and meta-analysis of observational studies assessing the incidence of CKD in general populations was carried out(10).

A random effects model was used to evaluate pooled data. Out of 5,842 possible publications, 100 studies with varying degrees of quality and 6,908,440 patients were included(11). The global mean (95% CI) for the prevalence of CKD was 14% (117%-151%) for stages 1 through 5, and 10% (92%-122%) for stages 3 through 5. Estimates of prevalence were not affected by research quality weighting. Stage-1 CKD prevalence (eGFR>90+ACR>30): 35% (28%-42%); Stage-2 CKD prevalence (eGFR 60-89+ACR>30): 39% (27%-53%); Stage 3 CKD prevalence (eGFR 30-59): 76% (64%-89%); Stage 4 CKD prevalence (eGFR 29-15): 04% (03-05%); and Stage 5 CKD prevalence (eGFR15): 0% (0 With a steady estimated global CKD prevalence of between 11 and 13 percent, the majority of cases are stage 3, CKD has a significant prevalence worldwide. Future studies should assess therapeutic techniques that may be implemented on a large scale in order to slow the course of CKD and improve CVD outcomes.

Patient Details:

A 27-year-old male with known chronic renal illness was brought to the hospital. His weight is 60 kg and his height is 170 cm tall.

Medical History

A 27-year-old malewas admitted with complaints of back pain weakness vomiting and abdominal pain. **Past Medical History**: The patient has not had any significant past history of diabetes mellitus and tuberculosis. **Family History**: 27-year-old males lived in a nuclear family with 4 members. The patient belongs to a middle-class family. His family members are all in good physical and mental health. He is from a nuclear family and does not have any significant congenital health issues.

Clinical findings: Oliguria, Anemia, Anorexia, high blood pressure, peripheral edema.

Diagnostic assessment:

Blood test : Hemoglobin 8.5gm/dl ,Total RBC count : 4.73 million /cumm, Wbc count : 13600 cumm , Total platelets count : 3.47 lac/cumm, monocyte : 0.1 % ,Potassium 5.7 meq/L ,Sodium :147 meq/L ,Urea : 27 mg/dl

Therapeutic intervention:

Tab PAN 40 mg,Inj.Leoflex 500 mg, Inj.Lasix ,Tab folic acid ,Tab amlodipine.

Discussion:

A 27-year-old male patient from was admitted to the hospital with the complaints of abdominal pain, weakness, vomiting back pain, and oliguria. A reduction in glomerular filtration rate causes end-stage renal disease (ESRD), which calls for replacement therapy, dialysis, or transplantation. Chronic kidney disease (CKD) is divided into five phases of increasing severity. In the general population, CKD is common, gets worse with age, affects one in ten people, and only four people out of every 100,000 will develop end-stage renal disease (ESRD). (11-17)

CKD is linked to more cardiovascular concomitant problems as soon as it develops. Dialysis patients have a far greater mortality rate than people in general. The care of 0.11 percent of the population costs France's public health system more than 4 billion euros annually, or 2 percent of all health spending. Therefore, the efforts to screen for and prevent ESRD should be concentrated in the early stages of CKD. Although the precise causes of the expansion of the ESRD programme are unknown, demographic shifts in the population, disparities in disease burden among racial groups, and the under recognition of risk factors for CKD and early stages of CKD may all contribute to this rise disproportionate amount of resources are used by patients with ESRD. (18-25)

Nevertheless, despite the size of the resources. These patients continue to suffer from considerable mortality and morbidity as well as a worse quality of life despite their dedication to the treatment of ESRD and the tremendous advancements in the caliber of dialysis therapy. This subject examines the prevalence of CKD and the morbidity and death that go along with it. Separate discussions are made of the overviews of CKD care, its difficulties, and screening suggestions. (26-32)

Conclusion:

In this instance, the patient is quite successful in enhancing kidney function. Further research must be done to prove the facts with greater statistical and scientific rigor, although this therapeutic approach is secure and efficient in the case of CKD.

Source of finding: Self
Conflict of interest: Nil

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