Short Communication

Evaluation the Prevalence and Risk Factors of Chronic Kidney Disease among Amol Population; Metabolic Disease a Growing Risk Factor

Shokoufeh Savaj, Mohammad Amin Abbasi, Mansooreh Maadi and Farhad Zamani

ABSTRACT: How might I forestall CKD? Diabetes and hypertension are the most widely recognized reasons for CKD. On the off chance that you have diabetes or hypertension, working with your primary care physician to keep your glucose and pulse leveled out is the most ideal approach to forestall kidney sickness.

Carrying on with a sound way of life can help forestall diabetes, hypertension and kidney sickness, or help monitor them. Follow these tips to bring down your hazard for kidney sickness and the issues that cause it:

likewise cause hypertension. Some of the time hypertension is an indication that your kidneys are not functioning admirably.

For the vast majority an ordinary circulatory strain is under 120/80 (120 more than 80). Ask your primary care physician what your circulatory strain ought to be.

How is CKD rewarded?

Harm to your kidneys is normally lasting. In spite of the fact that the harm can't be fixed, you can find a way to save your kidneys as solid as feasible for as far as might be feasible. You may even have the option to prevent the harm from deteriorating.

INTRODUCTION

How would I know whether I have CKD?

CKD as a rule doesn't have any manifestations until your kidneys are severely harmed. The best way to know how well your kidneys are functioning is to get tried. Being tried for kidney illness is straightforward. Approach your primary care physician about these tests for kidney wellbeing:

eGFR (evaluated glomerular filtration rate)

The eGFR is an indication of how well your kidneys are cleaning your blood.

Your body makes burn through constantly. This waste goes into your blood. Solid kidneys remove the loss from your blood. One kind of waste is called creatinine. In the event that you have an excessive amount of creatinine in your blood, it may be an indication that your kidneys are experiencing difficulty separating your blood.

You will have a blood test to discover how much creatinine is in your blood. Your primary care physician will utilize this data to make sense of your eGFR. In the event that your eGFR is under 60 for a quarter of a year or more, you may have kidney illness.

Urine test

This test is done to check whether there is blood or protein in your (pee).

Your kidneys make your pee. On the off chance that you have blood or protein in your pee, it might be an indication that your kidneys are not functioning admirably.

Your primary care physician may approach you for an example of your pee in the center or request that you gather your pee at home and carry it to your arrangement.

Circulatory strain

This test is done to perceive how hard your heart is attempting to siphon your blood.

Hypertension can cause kidney ailment, yet kidney infection can

Control your glucose in the event that you have diabetes.

Keep a sound pulse.

Follow a low-salt, low-fat eating routine.

Exercise in any event 30 minutes on most days of the week.

Keep a sound weight.

Try not to smoke or use tobacco.

Breaking point liquor.

Converse with your primary care physician about drugs that can help secure your kidneys.

On the off chance that you come down with kidney malady early, you might have the option to forestall kidney disappointment. In the event that your kidneys fall flat, you will require dialysis or a kidney transplant to endure.

Background: During past decades, the epidemiology of chronic kidney disease (CKD) has changed from infectious disease to metabolic disorders. The aim of this study was to investigate prevalence and risk factors of CKD.

Methods:

We performed a large-scale cross-sectional study in 3359 participants on AMOL cohort in 2016. All demographic data, blood and urine samples were collected during the interview. Albumin to creatinine ratio was measured in all cases and if more than 30 mg/g, the results were confirmed by 24 hours urine for albumin. CKD definition was urine albumin more than 30 mg/24 hours or GFR less than 60 CC/minute based on CKD-EPI formula.

Results:

Patients were % 59.3 male and % 40.7 female. Patients' mean age was 44.8 (range: 14-90 y/o). CKD prevalence was 25.5%. The prevalence of BMI> 30kg/m2, smoking, diabetes mellitus, hypertension, elderly population (age>65 y/o), analgesic consumption, renal stone and ischemic heart disease were 32%, 24.9%, 10.1%, 20.8%, 13.3%, 6.3%, 1.3%, 7.1%, respectively. Microalbuminuria detected in 10.7%, eGFR < 60cc/min in 16.9%.

Discussions:

Univariate and logistic regression analyses showed significant relation between CKD and aging, DM, Hypertension, obesity, low HDL and renal stones.

Conclusion:

DM, hypertension, aging are well-known risk factors for CKD but the new fast-growing risk factor in our study was obesity. We found obesity prevalence of % 31.8 in our study population which has an important effect on

Gastrointestinal and liver research center, Iran University of Medical Sciences (IUMS) , Teharan, Iran

Corespondence: Amin Abbasi M. Gastrointestinal and liver research center, Iran University of Medical Sciences (IUMS) , Teharan, Iran, E-mail: amin.abbasi1314@gmail.com

increasing rate of CKD. Low HDL also had a significant correlation with CKD in our study. Increasing HDL level can be a treatment modality in management of CKD progression.

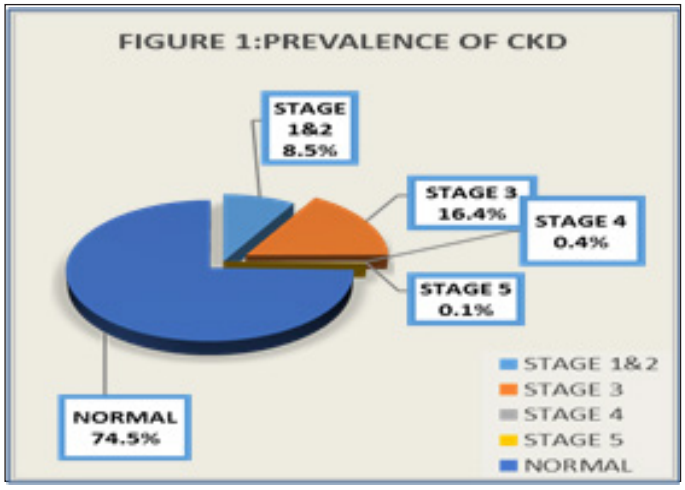

TABLE 1: Risk factors for CKD in univariate analysis.

Risk factors (No:3359)	CKD Patients (No:853)	Normal (No:2502)	P Value
Mean age	48.1± 16.9	43.7±16.2	0.0001
Gender (M/F)	484/369	1507/995	0.076
BMI> 30 kg/m2	323 (37.9%)	745 (29.8%)	0.0001
Diabetes Mellitus	144 (16.9%)	195 (7.7%)	0.0001
Hypertension	250 (29.3%)	449 (17.9%)	0.0001
Analgesic abuse	72 (8.5%)	139 (5.5%)	0.004
eGFR (CKD-EPI)	61.1±17.4	81.5±16.3	0.0001
LDL (mg/dl)	94.8±25.7	95.7±25.5	0.378
HDL (mg/dl)	41.4±9.8	43.1±9.8	0.0001
Smoking	230(38%)	605 (31.8%)	0.058
Renal Stone	22 (0.03%)	22 (0.009%)	0.0001

TABLE 2: Risk factors for CKD in logistic regression analysis Photograph

Risk factors	Odds Ratio	95% Confidence Interval	P Value
Elderly ,age>65	1.55	1.23-1.95	0.0001
BMI> 30 kg/m2	1.03	1.01-1.04	0.002
Diabetes Mellitus	1.88	1.48-2.41	0.0001
Hypertension	1.35	1.10-1.66	0.007
Analgesic abuse	------	-----	0.37
low HDL < 40(mg/ dl)	1.28	1.09-1.50	0.003
Smoking	-----	--------	0.057
Renal Stone	2.41	1.3-4.5	0.005

Kidney-accommodating eating routine for CKD

You have to have a kidney-accommodating supper plan when you have constant kidney sickness (CKD). Watching what you eat and drink will assist you with remaining more beneficial. A kidney-accommodating eating routine may likewise help shield your kidney from further harm by constraining certain nourishments to keep the minerals in those food sources from working up in your body. Become familiar with the kidney-accommodating eating regimen for CKD.

REFERENCES

1. Kazancioğlu R. Risk factors for chronic kidney disease: an update. Kidney International Supplements. 2013; 3(4):368-371.
2. Mahdavi-Mazdeh M, Saeed Hashemi Nazri S, Hajghasemi E, Nozari B, Zinat Nadia H, Mahdavi A. Screening for decreased renal function in taxi drivers in Tehran, Iran. Ren Fail. 2010; 32(1):62-8.
3. Najafi I, Shakeri R, Islami F, et al. Prevalence of chronic kidney disease and its associated risk factors: the first report from Iran using both microalbuminuria and urine sediment.Arch Iran Med 2012;15:70-5
4. Bowe B, Xie Y, Xian H, Balasubramanian S, Al-Aly Z. Low levels of high-density lipoprotein cholesterol increase the risk of incident kidney disease and its progression. Kidney Int. 2016; 89(4):886-96.
5. Baragetti A, Norata G. D, Sarcina C. et al. High density lipoprotein cholesterol levels are an independent predictor of the progression of chronic kidney disease. J Intern Med 2013; 274:252–262.