# Effects of Physical Activity on Chronic Kidney Diseases

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(Received 11 November 2016- Accepted & Published 25 November 2016)

## Abstract

Chronic kidney disease also known as chronic renal disease. Chronic kidney diseases of lung duration and generally slow progression it is such as heart diseases stroke, cancer, chronic respiratory diseases and diabetes. The symptoms of kidney disease generally unwell feelings reduce aptitude and more sweating on the night bed. Those who has high blood pressure diabetes and blood relative problem, more chance to be chronic disease. Physical activity is very necessary for patient of the chronic kidney diseases. Yoga and therapy is very beneficial for the chronic kidney and heart diseases also. Types of Kidney Diseases they are 1. Diabetes, 2. High blood pressure (hyper tension), 3. Hereditary, 4. Kidney stone, 5. Drug and toxins, 6. Cancers 7. HIV Infections and 8. Smoking. 1st Stage Slightly diminished function GFR (>90 mL/min/1.73 m2). 2nd Stage Mild reduction in GFR (60-89 mL/min/1.73 m2). 3rd Stage Moderate reduction in GFR (30-59 mL/min/1.73 m2). 4th Stage Severe reduction in GFR (15-29 mL/min/1.73 m2). 5th Stage Established kidney failure (GFR <15 mL/min/1.73 m2). Physical activity is plays important role to prevent chronic kidney diseases. If we can do per day physical activity, therapy and yoga, avoid from this diseases. Mostly related to the kidney and heart risk for developing the coronary artery diseases because of cholesterol level, diabetes and stress.

# INTRODUCTION

Chronic kidney disease also known as chronic renal disease. Chronic kidney diseases of lung duration and generally slow progression it is such as heart diseases stroke, cancer, chronic respiratory diseases and diabetes. The symptoms of kidney disease generally unwell feelings reduce aptitude and more sweating on the night bed. Those who has high blood pressure diabetes and blood relative problem, more chance to be chronic disease.Physical activity is very necessary for patient of the chronic kidney diseases. Yoga and therapy is very beneficial for the chronic kidney and heart diseases also.

## **FUNCTION OF KIDNEY**

- 1. Remove waste products.
- 2. Regulate the chemical level in the blood
- 3. Kidney produced some hormones like
  - a. Kidney stimulates red blood cells production.
  - b. Regulate blood pressure
  - **c.** Control calcium metabolis

#### **CHRONIC DISEASES**

Mostly related to the kidney and heart risk for developing the coronary artery diseases because of cholesterol level, diabetes and stress.

#### **KIDNEY DISEASES**

It is disorders that affected kidney"

- **Types of Kidney Diseases** 
  - 1. Diabetes
  - 2. High blood pressure (hyper tension)
  - 3. Hereditary
  - 4. Kidney stone

International Journal of Movement Education and Sports Sciences (IJMESS) Annual Refereed & Peer Reviewed Journal Vol. IV No. 1 January-December 2016 Online ISSN 2321-7200 Print ISSN 2348-5604

- 5. Drug and toxins
- 6. Cancers
- 7. HIV infections
- 8. Smoking

## SYMPTOMS

- 1. High blood pressure
- 2. Fatigue and weakness
- 3. loss appetite
- 4. Nausea and vomiting
- 5. Swelling in lungs
- 6. Puffiness around the eyes
- 7. Headaches
- 8. Numb ness in the feet or hand
- 9. Disturbed sleep
- 10. Rest less legs syndrome
- 11. Chest pain
- 12. Bone pain
- 13. Poor blood clotting

# STAGES OF THE PATIENTS

- 1. 1st Stage: Slightly diminished function GFR (>90 mL/min/1.73 m2).
- 2. 2nd Stage: Mild reduction in GFR (60-89 mL/min/1.73 m2).
- 3. **3rd Stage:** Moderate reduction in GFR (30-59 mL/min/1.73 m2).
- 4. 4th Stage: Severe reduction in GFR (15-29 mL/min/1.73 m2).
- 5. **5th Stage: -** Established kidney failure (GFR <15 mL/min/1.73 m2).

# GLOMERULAR FILTRATION RATE (GFR)

As kidney disease progresses, GFR falls.

- 1. The normal GFR in men 100-140 ml/min.
- 2. In women GFR 85-115 ml/min.
- 3. GFR may be calculated from the amount of waste products in the 24-hour. It decreased in most people with age.

#### PREVENTION

- a. Keep your B.P. bellow 130/80.
- b. Maintain your Blood sugar level
- c. Maintain your cholesterol level
- d. Control smoking
- e. In take low fatty diet
- f. Changes in life style
- g. Avoid medications

# TREATMENT

#### Self care at home

- 1. Protein restriction
- 2. Salt restriction
- 3. Potassium restriction
- 4. Phosphors restriction
- 5. Fluid in take
- 6. Stop smoking
- 7. Lose excess weight

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## **Medical treatment**

- 1. Urine test
- 2. Blood test
- 3. Electrolyte level in acid base balance
- 4. Estimated GFR
- 5. Blood cell counts
- 6. Biopsy

# PREVENTION THROUGH PHYSICAL ACTIVITY

Physical activity is plays important role to prevent chronic kidney diseases. If we can do per day physical activity, therapy and yoga, avoid from this diseases.

# NEW DATA

- 1. In India 13 people out of hundred has chronic diseases.
- 2. 40% of kidney failure people have diabetes in the world.
- 3. 50% kidney failure people with diabetes in India.
- 4. In Chennai 3 to 4 % young (20-25 years) have hypertension.
- 5. 50% people (50-60 years) have high B.P. in Chennai.
- 6. 48% people (50-60 years) have high B.P. in Delhi.
- 7. 7000 people have Vic timed with chronic diseases in India

# Conclusion

Physical activity is plays important role to prevent chronic kidney diseases. If we can do per day physical activity, therapy and yoga, avoid from this diseases. Mostly related to the kidney and heart risk for developing the coronary artery diseases because of cholesterol level, diabetes and stress.

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