# CHRONIC KIDNEY DISEASES

**1. BP (Blood Pressure)**:

* + **Description**: This refers to the blood pressure level of the patient. High blood pressure (hypertension) is a common cause and symptom of CKD.
  + **Typical Values**: Measured in mmHg (millimeters of mercury). Normal values are around 120/80 mmHg.

1. **Sg (Specific Gravity)**:
   * **Description**: It measures the concentration of solutes in the urine. In CKD, kidney function declines, leading to an inability to concentrate urine.
   * **Typical Values**: Normal specific gravity ranges from **1.005** to **1.030**. Lower values may indicate kidney disease.
2. **Al (Albumin)**:
   * **Description**: Refers to the presence of albumin (a type of protein) in the urine, also known as proteinuria. It's a key indicator of kidney damage.
   * **Typical Values**: Normally, urine contains little to no albumin. Levels range from **0** (normal) to **4+** (severe albuminuria).
3. **Su (Sugar)**:
   * **Description**: Measures the presence of sugar (glucose) in the urine. It can indicate diabetes, which is a major risk factor for CKD.
   * **Typical Values**: Normal urine should have no sugar. The scale goes from **0** to **4+** for increasing levels of sugar in the urine.
4. **Rbc (Red Blood Cells)**:
   * **Description**: The presence of red blood cells in the urine (hematuria) can indicate kidney damage or other conditions such as kidney stones.
   * **Typical Values**: **Normal**: None or very few RBCs. Any significant presence indicates an abnormality.
5. **Bu (Blood Urea)**:
   * **Description**: This measures the amount of urea nitrogen in the blood. Urea is a waste product filtered by the kidneys, and elevated levels indicate impaired kidney function.
   * **Typical Values**: Normal range is around **7–20 mg/dL**.
6. **Sc (Serum Creatinine)**:
   * **Description**: This measures the level of creatinine in the blood. Creatinine is a waste product from muscle metabolism, and its levels increase when kidney function declines.
   * **Typical Values**: Normal values are around **0.6–1.2 mg/dL** for males and **0.5–1.1 mg/dL** for females. Higher values suggest kidney damage.
7. **Sod (Sodium)**:
   * **Description**: Sodium levels in the blood are important for fluid balance and kidney function. Abnormal sodium levels can indicate kidney issues.
   * **Typical Values**: Normal range is **135–145 mEq/L**. Both low and high sodium levels can be problematic.
8. **Pot (Potassium)**:
   * **Description**: Potassium is a key electrolyte, and abnormal levels can indicate kidney dysfunction. The kidneys regulate potassium balance in the body.
   * **Typical Values**: Normal levels are between **3.5–5.0 mEq/L**. High potassium (hyperkalemia) is a common complication in CKD.
9. **Hemo (Hemoglobin)**:

* **Description**: This measures the level of hemoglobin in the blood, which is responsible for carrying oxygen. Low levels (anemia) are common in CKD.
* **Typical Values**: Normal levels are **13.8–17.2 g/dL** for males and **12.1–15.1 g/dL** for females. Lower levels indicate anemia.

1. **Wbcc (White Blood Cell Count)**:

* **Description**: Measures the number of white blood cells in the blood, which are part of the immune system. High levels can indicate infection or inflammation.
* **Typical Values**: Normal range is around **4,000–11,000 cells per microliter (µL)**.

1. **Rbcc (Red Blood Cell Count)**:

* **Description**: This measures the number of red blood cells, which carry oxygen. Low levels (anemia) are common in CKD.
* **Typical Values**: Normal range is **4.7–6.1 million cells/µL** for males and **4.2–5.4 million cells/µL** for females. Low counts indicate anemia, a common symptom of CKD.

1. **Htn (Hypertension)**:

* **Description**: Refers to whether the patient has high blood pressure (hypertension). Hypertension is both a cause and consequence of CKD.
* **Typical Values**: Coded as **1 (Yes)** for hypertensive and **0 (No)** for non-hypertensive.