

# **Rickets**

#### **Definition:**

Rickets is a skeletal disorder that is caused by prolonged vitamin D deficiency that leads to the softening and weakening of bones as well as a deficiency of calcium and phosphate, which stimulates excess secretion of parathyroid hormones.

#### Causes:

- 1. Rickets is caused by insufficient exposure to sunlight, and low intake of foods containing vitamin D.
- 2. Problems with vitamin D absorption due to certain medical conditions such as:
  - Bowel resection, chronic pancreatitis, cystic fibrosis
- 3. Liver problems such as cirrhosis.
- 4. Kidney problems .
- 5. Medications such as phenytoin
- 6. Genetics.

# **Symptoms: For children:**

- 1. Delayed fontanel closure and softening of the skull bones.
- 2. Pain and swelling in the joints.
- 3. Rachitic rosary
- 4. Skeletal deformities in the legs and knees.
- 5. Delayed or unsteady walking.
- 6. Impaired growth, short stature, and lack of weight gain.
- 7. Dental deformities.
- 8. Bone fractures in certain cases.



### **Risk factors:**

- 1. Dark skin.
- 2. Children and older adults.
- 3. Pregnancy.
- 4. Obesity.
- 5. Exclusive breast-feeding after the age of 6 months.
- 6. Poverty.
- 7. Vegetarianism.
- 8. Alcohol consumption.
- 9. Living at high altitudes.
- 10. Family history.

# **Diagnosis:**

- 1. Consultation from a family doctor.
- 2. Medical history.
- 3. Physical examination.
- 4. A vitamin D test.

## **Complications:**

- 1. Chronic skeletal pain
- 2. Skeletal deformities
- 3. Skeletal fractures.

#### **Treatment:**

Boosting vitamin D levels in the body.

## **Prevention:**

- 1. Proper nutrition and sufficient sun exposure.
- 2. Early diagnosis and treatment.



# **Frequently Asked Questions:**

- Is rickets a common disease? Yes, it is a common disease.
- What is to be expected after starting the treatment?

  A positive outcome is expected if the patient responds to the treatment.
- Should the mother refrain from breastfeeding?

  No, mothers should continue to breastfeed.

# **Clinical Health Education Department**

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