

# Case Report of Radiographic Features of Epiphyseal Dysplasia Multiplex

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**Abstract:** *Epiphyseal Dysplasia Multiplex is characterized by early mineralization and symmetrical involvement of epiphysis. In this article we are reporting the radiographic features of 4 years female child with progressive difficulties and pain while walking for one year.*

**Keyword:** Epiphyseal dysplasias

## 1. Introduction

The epiphyseal dysplasias are diverse group of various overlapping disorder which are commonly characterized by epiphyseal involvement leading to skeletal deformities. Epiphyseal Dysplasia Multiplex cause early and irregular mineralization of epiphysis predominantly seen hips, knees and ankle. Involvement is usually symmetrical which start in 2<sup>nd</sup> and 3<sup>rd</sup> years of life. Growth is abnormal and delayed. Carpal and tarsal bones are hypoplastic and short tubular bones of hand and feet bare thick and short. Anterior wedging of vertebrae are also seen which may leads to platyspondyly. Clinically child present after two to three years of life with waddling gait and pain while running. Scoliosis may be seen due to spinal involvement.

## 2. Case Report

We report a case of 4 years, female child presenting with pain in lower limbs on walking. On X-Ray the epiphysis of hips, shoulder, knee, and ankle shows stippled and mottled appearance which are suggestive of mineralization. The thoracolumbar and cervical vertebrae show anterior wedging. The carpal and tarsal bones appear hypoplastic. Delayed appearance of metacarpal bones and phalanges are also evident.



**Figure 1A;** Showing stippled appearance of B/L femoral head epiphysis



**Figure 1B;** Showing absent carpal bones, irregular and hypoplastic metacarpal bones and phalanges.



**Figure 2A;** Showing platyspondyly of lumbar vertebrae



**Figure 2B;** Showing hypoplastic tarsal and metatarsal bone with stippled appearance of distal tibial epiphysis due to mineralization.

### 3. Discussion

Diagnosis of various epiphyseal dysplasia are sometimes difficult due to diverse nature and overlapping features of these dysplasia. Epiphyseal dysplasia multiplex can be differentiated from the chondrodysplasia punctata by extensive stippling of spinal vertebrae. Asymmetric proximal limb shortening is also seen in chondrodysplasia punctata. Spondyloepiphyseal dysplasia usually shows pear shaped vertebrae with delayed appearance of epiphysis.

### 4. Conclusion

Radiographic appearance are often typical in diagnosis of epiphyseal dysplasia. Children with waddling gait, painful walking and skeletal deformities and dwarf stature should be investigated.

### References

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