



RESEARCH ARTICLE

FRACTURE ON CONGENITAL SHORT FEMUR: A CASE REPORT.

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Abstract

Background: Congenital short femur is characterized by a global femoral hypoplasia, classified in 5 types, type 1 is a simple hypoplasia, revealed in our patient in the context of a fracture.

Clinical case: The article presents a clinical observation of a one month old male infant who admitted on account of trauma of the left lower limb, an x-ray revealed a fracture on congenital short femur type 1.

Discussion: Short congenital femur is the most common growth deficiency of the femur, with five types: type 1: simple hypoplasia of the femur; type 2: short femur with angulation; type 3: short femur with coxa vara; type 4: deficiency of the proximal end of the femur; type 5: aplasia of the femur, a short congenital femur may be unrecognized and only diagnosed at walking age, or as in our case discovered in the context of a fracture, according to the literature no case of short congenital femur discovered in the context of a fracture in children has been found.

Conclusion: The short congenital femur is a rare malformation of the lower limb, after birth the diagnosis is based essentially on X-rays which can be of fortuitous discovery.

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Introduction:-

Congenital short femur is characterized by a global femoral hypoplasia, classified in 5 types, type 1 is a simple hypoplasia of the femur that is often unrecognized before walking age, revealed in our patient in the context of a fracture.

Clinical Case

We report the case of a one month old male infant who admitted on account of trauma of the left lower limb, Physical examination revealed a swollen left thigh, painful on mobilization with a shortened lower limb, an x-ray of the left lower limb revealed a fracture on congenital short femur type 1 associated with fibular hemimelia (Fig. 1).

Due to the age of the child, orthopedic reduction was performed, and placement of a spica cast, and the patient was discharged with satisfactory radiological controls (Fig. 2, 3).

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The cast was removed after consolidation at 2 months, and after one year a clear difference in length between the two lower limbs on X-ray (Fig. 4).

Discussion:-

Short congenital femur is the most common growth deficiency of the femur, with five types: type

1: simple hypoplasia of the femur; type 2: short femur with angulation; type 3: short femur with coxa vara; type 4: deficiency of the proximal end of the femur; type 5: aplasia of the femur [1,2,3].

Many etiologic factors acting from the 4th to the 8th week of gestation have been incriminated in the occurrence of short congenital femur but only thalidomide has been confirmed as a definite factor in its occurrence [2,4,5].

The shortening varies between 10% and 35% of the normal femoral length and compared to the healthy limb, and in more than 75% of cases it is associated with a leg anomaly such as fibular hemimelia [3], which is also found in our case.

A short congenital femur may be unrecognized and only diagnosed at walking age, or as in our case discovered in the context of a fracture, according to the literature no case of short congenital femur discovered in the context of a fracture in children has been found [6,7].

X-rays are used to make the diagnosis and to classify short congenital femur into five types [1].

The treatment is mainly based on the elongation of the short congenital femur, which is not without complications. In our patient, the short congenital femur was discovered incidentally on fracture, and an orthopedic treatment was performed with good evolution while waiting for the treatment of the short congenital femur [8,9].

Figures:-



Fig. 1:- X-ray : Fracture on congenital short femur.



Fig. 2:- X-ray control after 2 months : Adequate consolidation.



F Fig.3:- X-ray control after 5 months.



F Fig.4:- X-ray control after one year :clear difference in length between the two lower limbs.

Conclusion:-

The short congenital femur is a rare malformation of the lower limb, little described in the literature, this anomaly can be diagnosed during an antenatal ultrasound, after birth the diagnosis is based essentially on X-rays which can be of fortuitous discovery.

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