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Case Study on Talipes Disorder.

S Geetha*.

Assistant Professor, Department Of Child Health Nursing, Sree Balaji College Of Nursing, Affiliated to Bharath University, Chrompet, Chennai, Tamil Nadu, India.

ABSTRACT

Talipes deformity is a disorder of ankle and foot. . Talipes equinus deformity could either be unilateral (affecting a single foot only) or bilateral (both feet are affected). Clubfoot (also called talipes equinovarus) is a general term used to describe a range of unusual positions of the foot. Most types of clubfoot are present at birth (congenital clubfoot). clubfoot is painless in a baby, treatment should begin immediately. Clubfoot can cause significant problems as the child grows. But with early treatment most children born with clubfoot are able to lead a normal life. Treatment focus on depends upon severity of club foot ;Ponseti's method and surgical correction of club foot can be done according to child's condition.

Keywords: Aberrant club foot, talipes equinus, Ponseti's casting method

**Corresponding author*

CASE STUDY ON MASTER X

This case report discusses the presentation and treatment of a baby boy with club foot deformity. New-born baby with the history of unusual positions of the foot admitted in NICU. New-born baby has foot (Heel) smaller than normal. The front of the foot may be rotated toward the other foot. After the Physical Examination and X-ray child was diagnosed as (mild congenital clubfoot) in both feet. He was initially treated by Ponseti’s method of weekly plaster of Paris casting. This treatment requires stretching. The foot is repositioned to the normal position then a cast (the "Ponseti cast") is placed on top of it. The baby’s foot is then continually repositioned and placed back into a cast once a week for several months. After the foot has been realigned, maintenance involves routine stretching. The child also has to wear special shoes or braces full-time for three months, then just nightly for three years. Parents have to follow the doctor’s orders for when to wear and not wear the brace to keep the foot corrected [1-5].



Incidence

Commonly called clubfoot, it is a congenital anomaly occurring at approximately 1 to 2 in every 1000 live births. Male-female incidence ratio is 2:1. Bilateral deformity involvement accounts 30%-50% of cases.

Etiology

The exact cause of this deformity is unknown. But **suggestions or hypotheses** of its disease process are the following:

Book Picture	Child Picture
Genetic factor	Not Known
Abnormal tendon insertion	Not Known
Retracting fibrosis (myofibrosis)	Not Known
Neurogenic factors	Not Known
Oligohydramnios	Mother had Oligohydramnios in pregnancy
Developmental arrest of fetal development	Not Known
Diminished Vascular Circulation.	Not Known

Pathophysiology of Clubfoot

- The exact cause of clubfoot remains unknown.
- A strong familial tendency, with a 1 in 10 chance that a parent with clubfoot will have an affected child.
- Other possible theories as to the cause of clubfoot include arrested fetal developmental of skeletal and soft tissue.
- Distal limb amniotic banding, a condition in which the amnion forms constrictive bands around a limb in utero, cutting off the circulation to the limb and resulting in further abnormal or arrested development.

Symptoms of Clubfoot

BOOK PICTURE	CHILD PICTURE
<p>The top of the foot is usually twisted downward and inward, increasing the arch and turning the heel inward.</p> <p>The foot may be turned so severely that it actually looks as if it's upside down.</p> <p>The calf muscles in the affected leg are usually underdeveloped.</p> <p>The affected foot may be up to 1/2 inch (about 1 centimeter) shorter than the other foot.</p>	<p>Child has both feet congenital club foot.</p>

Diagnostic Evaluation

Book Picture	Child Picture
<p>Physical Examination Radiography.</p>	<p>Child has twisted foot appearance .It was In X-ray child has abnormal bony appearance</p>

Management

Categories of treatment

1. For mild cases: manipulation, cast and splint application (nonsurgical management)
2. For severe cases: surgery

Master x [Child] had under gone Nonsurgical management



Denis browne splint was applied to the child.

Book Picture	Child Picture
<p>Denis browne splint</p>	<p>Denis browne splint was applied <i>Ponseti Method</i> – Applies certain techniques to reduce and correct the deformity to promote normal foot mobility and position.Denis Brown Splints (shoes or boots attached to a bar) are used 23 hours each day for 3 months to maintain the normal foot alignment. For the next 2-4 years the splint is fitted during naps and nighttime only.</p>

Surgical Management

- Posteromedial Release
- Tendon Transplant

Complications

- Rocker bottom Foot
- Recurrent deformity

Nursing intervention**Acute pain R/T muscular and tissue damage secondary to splint application.**

- Infant Splint area should be assessed every 2 hourly (Infants cannot voice out pain. Crying may mean hunger, wet diapers, abdominal pain or tingling sensation from a tight cast).
- Cast was kept clean and dry. Used a damp cloth and dry cleansers in wiping
- Placed a pillow or padding under the casted area to prevent cast damage and prevent sores from heel pressure.

Risk for impaired skin integrity related to cast application.

Infants with cast assess for circulation, redness and swelling distal from the splint for every 2 hourly. Placed a pillow or padding under the casted area to prevent cast damage and prevent sores from heel pressure. Instructed the mother Never forcibly evert or pronate the foot during clubfoot casting. This can cause damage to the bones. Instructed the mother frequently change the infant's diaper to prevent soiling of the splint.

Risk for Impaired Parenting R/T maladaptive coping strategies secondary to diagnosis of talipes deformity.

Allowed parents to verbalize their concerns. Explained to the parents the effect of the device being used. Infant condition was explained to Parents. Educated the mother breastfeeding should be continued. Explained about cast care and proper alignment. Reassured the mother about importance cast. Reassured the parents that the child is comfortable with the cast. Explained to the parents the importance of passive foot exercises after the final cast is removed. Educated the mother Maintain the aligned position after the cast application is essential to prevent reoccurrence.

SUMMARY

Master X has Congenital club foot **Denis Brown Splints** was applied to the child. Child didn't develop any complication during Hospital Stay.

CONCLUSION

Prevention of Diseases is important in child care. Mother Should be educated about splint care and importance. Nurse should educate the mother about importance splint. Reassure the parents that the child is comfortable with the splint. Nurse should Explain to the parents the importance of passive foot exercises after the final splint is removed.

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