CODEN [USA]: IAJPBB ISSN: 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

Available online at: http://www.iajps.com Research Article

TREATMENT ACCORDING TITANIUM ELASTIC SPICA CAST NAILING VS TRACTION AND HIP SPICA CAST IN CHILDREN BETWEEN AGE 6-12 YEARS

[1]Dr.Mohsin Ali, [2]Dr.Yasir Hussain, [3]Dr.Noor ul Huda

[1]Foundation University Medical College, Islamabad.
[2]Foundation University Medical College, Islamabad
[3]Foundation University Medical College, Islamabad

Abstract:

Objective: *comparison of adaptable nails in titanium with skeletal traction and hip gland for the treatment of femoral rupture in young people between 6 and 12 years old in our implant. Study design: randomly controlled start controls.*

Place and duration of the study: *this examination was carried out at the MMC / Ibn-E-Siena MMC hospital / research institute from June 1, 2016 to December 31, 2016.*

Materials and methods*: 60 patients with rupture of the femoral axis were included in this examination. The understanding of the first 3 months of introduction was regulated by the budget and the allocation of the spike, while the following 3 months were by TEN. The industrial age of 6 to 12 years with a femoral rupture rod discovered within a seven-day multiple injury sequence was consolidated in the study.*

Results: *in this examination, 31 of the 60 patients were men and 29 women. The average age of the patients was recorded as 8.90 + 2.00 years. In the Fractions regulated by TEN, the typical cooling time (08 weeks) appears differently in relation to the total spic in which the recovery time (10 weeks) (p = 0.001), the angulation of the analogous fractionation is greater in the spik crop (p = 0.001). The rotational distortion is lower in TEN (P <0.005) while the length of the separation of the lime was higher in the spik crop (P <0.001). the length of the non-heavy bearing is longer in the spike, with an increase of P <0.005. The scores of Flynn's results were better on TEN when they appeared differently in relation to the spike collection.*

Conclusion: *we have induced that the result has improved in the social event TEN when it is different from those that meet the balance sought by the cast of espica.*

Key Words: *Fermur, Hip spica, Titanium elastic nailing, Femoral shaft.*

Corresponding author:
Dr.Mohsin Ali,
Foundation University Medical College,
Islamabad.

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Please cite this article in press Mohsin Ali et al., ***Treatment According Titanium Elastic Spica Cast Nailing Vs Traction and Hip Spica Cast in Children between Age 6-12 Years.,*** *Indo Am. J. P. Sci, 2018; 05(10).*

INTRODUCTION:

The femoral axis is broken as a rule caused by blunt damage. These are normal in groups of 6 to 12 years. The tree is clogged with a larger part of these cases[1,2].Tracheal angiography of solid intramedullary anterograde angiography is used in cases of skeletal creation, it is known as standard treatment. A progressive relationship reveals that the delayed consequences of internal fixation are better in more prepared adolescents, and epically in a trauma of high essence [3].

Anyway, the femur of the faces can be treated in several courses in children and still the choice of a particular method, in general, depending on the weight, the age of the patient, the case of divided and rational understanding of the professional orthopedic. Age is a basic factor4. The treatment modalities vary according to age. The cast of Spica is used in young people under 6 years of age and intramedullary nailing in children over 12 years of age.

MATERIALS AND METHODS:

These randomized control trails were coordinated at the MMDC / Ibn-e-Siena Hopsital / Research Institute, Multan from June 1, 2016 to December 31, 2016. This review included 60 progressive patients. The understanding of the beginning of the studies from 03 months has been monitored by the balance and the distribution of the spike, while the next 03 months by the TEN. The understanding of the 6 to 12 years with a nearby femoral break rod reported within a seven-day sequence of multiple lesions of the two sexes was consolidated in the study. The common damage technique was a direct result of the street action. Accident 39.58% sought after the fall of stature n = 21.42% preoperative evaluation, including the complete x-ray of the thigh included between the knee and hip joint, both anteroposterior and flat. The territory of the divisions in this examination, 06 breaks were in the proximal third, 46 in the third fire and in the distal third of the femur. 30 breaks were transversal, sixteen of short slope, four devious and ten crumbled insignificantly. The overwhelming understanding of the part experienced the repair strategy within six days of the damage. The prosthetic system was performed under general anesthesia with the patient in a prostrate position. The image intensifier was used to reduce the breakage and the position of the shipments. Two adaptable titanium nails of the same width were used. The width of each nail was found by Flynn's Etn formula.

The estimate of the nail was taken so that each nail included 33% of the medullary misery, the nails were implanted in a retrograde plane with a point of lateral and normal section of 2-3 cm above the physis. In four cases, an open descent was necessary due to the intercession of the sensitive tissue that the nails were fixed in a medullar canal with the aim that the proximal end of the nail is distal to 1 cm from the proximal femoral physis. The postoperative end of the patients was raised in the pad. The patients were established in the third week after the intervention was discharged. Central weight pad after 4 weeks and full load after one week, depending on the response of the callus. Similarly, in the collection of spica cast, the skeletal balance was associated through the distal femoral bar for 7-10 days, depending on the shortening, so that the hip spike was associated using the extraction table with the image intensifier aid under G / A. The circumstance of the hip of the extreme point of the wound was maintained at 150-200 of flexion and injured limbs in 100-150 outside of the disorders. Spica has continued until the complete relationship to the point of rupture. The load was granted 10 days after the removal of the spike. All the patients were followed radiologically and what is more clinically predictable during 06 months. The parameters examined were the clinical and radiological characteristics of the affiliation, the bad game plan, the extension of the development of the affected side of the knee, the irregularity in the length of the limb and some other perplexities found in the middle of the study.

RESULTS:

In this exam, 31 (51.7%) were men and 29 (48.3%) were women (Table 1). The average age was 8.90 + 2.00 years and 8.97 + 2.00 years in women. (Table 2). Among the 30 patients treated with adaptable titanium nails, there were 16 young women and 14 young women; the average age was 10 years. Of the 30 patients of the Spica collection. There were 15 young people and 15 young women with an average age of 9.30 years. The rupture is created, the site of the division and the technique for the damage. There was no extraordinary rating among social occasions. The recurrence of damage in both men and women was similar. On both social occasions, the follow-up was 6 months, from 5-7 months.

Table No.1: Frequency of gender (n = 60)

Gender	No.	%
Male	31	51.7
Female	29	48.3

Table No.2: Mean age of the children

Gender	Age	Mean + SD
Male	7-11.6	8.84 + 2.03
Female	6-11.10	8.97 + 2.00

Table No.3: Comparison between Surgery & Spica Group

Parameter	**Group**	**Range**	**Mean**	**Signifi-cance (P value)**
Angulation	Surgery Spica	9-4^0 21-7^0	3.16 9.56	0.001
Rotational malalignemnt(^{0})	Surgery Spica	6-9^0 20-8^0	5.56 14.45	0.005
Union (weeks)	Surgery Spica	5-8 weeks 6- 12 weeks	6.35 8.15	0.001
Non-weight bearing (weeks)	Surgery Spica	4-8 weeks 7-11 weeks	5.31 7.20	0.005
LLD at 06 months follow-up (cm)	Surgery Spica	1cm to + 1cm 0.5cm to -2cm	0.56 1.25	0.000

Table No.4: Flynn et al's Scoring Criteria for TENS

	Excellent	Satisfactory	Poor
Pain	None	None	Present
Malalingment	<5^0	5-10^0	>10^0
Limb Length discrepancy	<1cm	102cm	>2cm
Complication	None	Minor	Major and/or lasting morbidity

In nail collection, coronal / sagital angulation> 50 occurred in 2 patients (mean 3.20) compared to total spike that was at a much higher level, occurred in 9 patients (mean 9, 60) (P = 0.001). The rotational distortion was greater in the total spica, going from 100 internal disorders to 200 external changes, while in a cautious social event, the race is 50 in the swing at 150 outside the orbit. This mutilation is at a much

higher level in the spik crop (mean 14.34) than the vigilant social event (mean 5.32) P <0.005 table 3. Consequently, the recovery time was found at a very low level less TEN in a center of 6.36 weeks (expand 5 two months) where as in the spica group (duration 6-12 weeks) with center 8.36 weeks P = 0.001 Table 3. The length of the unweighted bearing (P <0.001) after the full load operator, everything was basically higher in spike accumulation in relation to nail collection. (Table 3). There was no significant unpredictability in the cunning social situation, while the smaller traps, such as the disturbing influence of the skin are found in 02 cases. Therefore, the contamination of the surface was recorded in 03 cases that were resolved by giving the enemy of the microbes naturally in spica. In a total of 10 cases, 33% had real disaromi, including disfigurement (angulation, rotation, shortening) or, as such, P <0.001. After 6 months of follow-up, the refinement of the divergence of limb duration is essential between two social events. It was greater in the medial spline of 1.22 cm than in the mean of TEN 0.54 cm (P <0.001). Table 3. The degree of patients with real problems was significantly higher in the collection of spica. (P <0.001).

DISCUSSION:

In children, the sting of the spike with the balance of the skeleton is used mainly for the organization of the femoral divisions, the accumulated data reveal possible ramifications for the angles related to money, energy costs, social and informative. Contrary to this, as an intramedullary community of critical adaptation in light of its psychofinanziari aspects and clinical outcome with a reduced type of complicanze[11-12]. In this review, we have differentiated the RTE system and the prudent equilibrium and gypsum in spike in long bones affiliation, concentration, time to start walking openly or with the help of attention, parent satisfaction and return to school. Our revelations are simultaneously with several examinations that show favorable circumstances and the suitability of the adaptable nails for the organization of the femoral diaphyseal tears. An examination performed by Wright and another flexible intramedullary nail (antero-soning or retrograde) with kirschner wires or pin[13]. The data reveal that the complexity related to the TEN, join the affiliations, the risospensioni, misalignment in varus or valgus, the disturbing influences of the tip of the nail, bad rotation, the proximal movement of the nail and have reached an accumulation general of the rat, that is, 11.7% [14]. We have seen that external fixation is an appropriate strategy for the organization of frmoral fractures in children, particularly during the supervision of young people injured by maultitrama and breaking open. The organization warns of these divisions through distinctive fixation devices (plating, fingernails or versatile anterograde trochanteric nails) has achieved significant tempting results with a lower frequency of meetings in children older than 8 years, these revelations are similar to other studies [15,16].

CONCLUSION:

We decided that consequence is expressively superior in TEN group as paralleled to those undertaking traction followed by spica cast.

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