



Original Research Article

A COMPARATIVE STUDY OF ACCELERATED PONSETI WITH STANDARD PONSETI REGIMEN IN TREATMENT OF IDIOPATHIC CLUBFOOT PATIENTS

Rananjoy Sarmah¹, Bipasha Dev Choudhury², Prashant Prakash³, Tulasi Das Bhattacharyya⁴, Sujit Nath⁵, Hasnain Bari⁶

¹Assistant Professor, Gauhati Medical College and Hospital, Guwahati, Assam, India.

²PRCA Intern, Gauhati Medical College and Hospital, Guwahati, Assam, India.

³Junior Resident -2, Gauhati Medical College and Hospital, Guwahati, Assam, India.

⁴Professor, Gauhati Medical College and Hospital, Guwahati, Assam, India.

⁵Junior Resident-2, Gauhati Medical College and Hospital, Guwahati, Assam, India.

⁶Junior Resident-1, Gauhati Medical College and Hospital, Guwahati, Assam, India.

Received : 17/07/2026
Received in revised form : 19/08/2026
Accepted : 02/09/2026

Corresponding Author:

Dr. Prashant Prakash,
Junior Resident -2, Gauhati Medical
College and Hospital, Guwahati,
Assam, India.
Email: prakashprashant21@gmail.com

DOI: 10.70034/ijmedph.2026.3.689

Source of Support: Nil,

Conflict of Interest: None declared

Int J Med Pub Health
2026; 16 (3); 4399-4406

ABSTRACT

Background: Congenital talipes equinovarus (CTEV), commonly known as clubfoot, is one of the most common congenital musculoskeletal deformities, affecting approximately 1–2 per 1,000 live births. The Ponseti method is the gold standard for the management of idiopathic clubfoot. The accelerated Ponseti regimen, involving more frequent cast changes, has been proposed to shorten treatment duration while maintaining comparable clinical outcomes. **Aim:** To compare the clinical outcomes of the Accelerated Ponseti regimen with the Standard Ponseti regimen in the treatment of idiopathic clubfoot.

Materials and Methods: A prospective randomized comparative study was conducted at the Clubfoot Clinic, Gauhati Medical College and Hospital, from July 2025 to June 2026. Fifty infants (<1 year) with idiopathic clubfoot were randomly allocated into two equal groups: Standard Ponseti (weekly casting) and Accelerated Ponseti (twice-weekly casting). Clinical outcomes assessed included Pirani scores before and after treatment, number of casts required, treatment duration, requirement for percutaneous Achilles tenotomy, relapse, and treatment-related complications. Statistical analysis was performed using Student's *t*-test, and a *p*-value <0.05 was considered statistically significant.

Results: All 50 patients completed the study. Baseline demographic and clinical characteristics were comparable between the groups. Both regimens achieved similar deformity correction, with final mean Pirani scores of 0.74 ± 0.55 in the Standard group and 0.76 ± 0.44 in the Accelerated group ($p=0.88$). The Accelerated Ponseti group required significantly fewer casts (5.80 ± 1.58 vs. 7.64 ± 2.58 ; $p<0.05$) and a significantly shorter treatment duration (5.90 ± 1.73 vs. 7.64 ± 2.50 weeks; $p<0.05$). Percutaneous Achilles tenotomy was performed in 72% of the Accelerated group and 56% of the Standard group ($p=0.38$). Treatment-related complications were infrequent and comparable between the groups.

Conclusion: The Accelerated Ponseti regimen achieved deformity correction comparable to the Standard Ponseti method while significantly reducing the number of casts required and overall treatment duration. It appears to be a safe and effective alternative for the management of idiopathic clubfoot, with clinical outcomes comparable to the conventional weekly Ponseti regimen.

Keywords: Accelerated Ponseti, Standard Ponseti, Idiopathic Clubfoot, Pirani Score, Congenital Talipes Equinovarus (CTEV).

INTRODUCTION

Congenital talipes equinovarus (CTEV), commonly known as clubfoot, is one of the most common congenital musculoskeletal deformities affecting the lower limbs. It is characterized by a complex three-dimensional deformity consisting of equinus, varus, cavus, and forefoot adduction, resulting in a rigid, inwardly rotated foot. Clubfoot occurs in approximately 1–2 per 1,000 live births worldwide, with males being affected nearly twice as often as females. Bilateral involvement is observed in approximately 40–50% of cases.^[1] Although the exact etiology remains uncertain, idiopathic clubfoot is considered to result from a combination of genetic and environmental factors affecting fetal musculoskeletal development. If left untreated, the deformity can lead to gait abnormalities, pain, disability, and reduced quality of life, highlighting the importance of early diagnosis and appropriate treatment.^[1,2]

Historically, treatment consisted of extensive surgical soft-tissue release following failed conservative management. Although surgical correction initially produced satisfactory alignment, long-term follow-up demonstrated complications including joint stiffness, muscle weakness, painful scarring, recurrence, and early degenerative arthritis.^[3] These limitations led to the widespread adoption of the Ponseti method, which is now regarded as the gold standard for the management of idiopathic clubfoot because of its high correction rates and minimal requirement for extensive surgery. The technique involves gentle sequential manipulation, serial long-leg casting, percutaneous Achilles tenotomy when indicated, and subsequent maintenance with a foot abduction brace to minimize recurrence.^[4]

The conventional Ponseti protocol involves weekly cast changes, generally requiring five to eight casts before complete correction is achieved.^[5] Although this method has consistently demonstrated excellent clinical outcomes, the overall duration of treatment may extend over several weeks.^[6] To shorten this period, the accelerated Ponseti regimen was introduced, in which casts are changed every three to five days while maintaining the same manipulation principles and treatment protocol. The primary objective of the accelerated regimen is to reduce the overall duration of casting without compromising deformity correction or treatment safety.^[7,8]

Several comparative studies have evaluated accelerated and standard Ponseti regimens and have reported similar improvements in Pirani scores, correction rates, tenotomy requirements, and early complication rates.^[9] Many investigators have demonstrated that the accelerated regimen significantly shortens treatment duration while achieving clinical outcomes comparable to the conventional weekly protocol. However, variations

in patient characteristics, treatment protocols, follow-up periods, and outcome assessment have resulted in inconsistent findings across studies. Furthermore, evidence from the Indian population remains relatively limited, warranting additional evaluation in different clinical settings.^[10,11]

The Pirani scoring system remains the most widely accepted clinical tool for assessing the severity of clubfoot and monitoring treatment response. It evaluates six clinical signs of the hindfoot and midfoot, providing an objective measure of deformity severity and treatment progress while helping determine the need for Achilles tenotomy.^[12]

Considering the need to determine whether accelerated casting provides outcomes comparable to the conventional weekly regimen while reducing treatment duration, the present study was undertaken to compare the Accelerated Ponseti regimen with the Standard Ponseti regimen in infants with idiopathic clubfoot. The study compared deformity correction using Pirani scores, number of casts required, treatment duration, requirement for percutaneous Achilles tenotomy, relapse, and treatment-related complications to evaluate the effectiveness and safety of the two treatment protocols.

MATERIALS AND METHODS

2.1 Study Design

The present study was conducted as a **prospective randomized comparative interventional study** to compare the effectiveness of the Accelerated Ponseti regimen with the Standard Ponseti regimen in the treatment of idiopathic clubfoot. Consecutive eligible patients attending the Clubfoot Clinic during the study period were enrolled. Following enrolment, participants were randomly allocated in a 1:1 ratio to either the Standard Ponseti group or the Accelerated Ponseti group using a **lottery-based randomization method**. Equal numbers of folded opaque chits labelled "Standard" and "Accelerated" were prepared, thoroughly mixed in a sealed container, and one chit was drawn for each participant by the parent/guardian. The investigator enrolling participants was not involved in preparing the allocation sequence. Owing to the nature of the intervention, blinding of the treating surgeon and outcome assessor was not feasible. Clinical outcomes, including Pirani score, number of casts, treatment duration, requirement for percutaneous Achilles tenotomy, relapse, and treatment-related complications, were prospectively recorded and compared.

2.2 Study Setting

The study was conducted at the **Clubfoot Clinic, Department of Orthopaedics, Gauhati Medical College and Hospital (GMCH), Guwahati**, a tertiary care referral centre providing specialized management for congenital musculoskeletal

disorders. The clinic receives patients from Assam and neighbouring states. All patients were managed by orthopedic surgeons trained in the Ponseti technique using a standardized treatment protocol.

2.3 Study Duration

The study was conducted from **1 July 2025 to 30 June 2026**. Eligible patients were consecutively recruited during this period and followed until completion of treatment and the scheduled follow-up period.

2.4 Participants

Inclusion Criteria

- Infants aged less than one year with idiopathic congenital talipes equinovarus.
- Either sex.
- Initial pirani score of 6.0
- Previously untreated clubfoot.
- Parents/guardians willing to provide written informed consent.

Exclusion Criteria

- Age more than one year.
- Initial Pirani score less than 6.0
- Syndromic or secondary clubfoot associated with neuromuscular disorders.
- Previously operated clubfoot.
- Previously treated or recurrent clubfoot managed elsewhere.
- Parents unwilling to participate or comply with follow-up.

2.5 Study Sampling

A **consecutive sampling technique** was adopted. All eligible patients attending the Clubfoot Clinic during the study period who fulfilled the inclusion criteria were recruited after obtaining written informed consent. Participants were subsequently randomized into either the Standard Ponseti or Accelerated Ponseti group using the lottery method.

2.6 Study Sample Size

The sample size was determined based on feasibility and the number of eligible patients presenting to the Clubfoot Clinic during the study period. A similar prospective randomized comparative study by Dutta et al,^[14] enrolled 64 patients (32 in each group) to compare the Standard and Accelerated Ponseti regimens, while Samria et al,^[13] conducted a comparable randomized study including 50 patients (25 in each group). Considering the annual patient load at our tertiary care centre and the study duration of one year, 50 consecutive eligible patients fulfilling the inclusion criteria were recruited and randomized equally into two groups (25 patients in the Standard Ponseti group and 25 patients in the Accelerated Ponseti group). Although no formal prior sample size calculation was performed, the sample size was comparable to previously published randomized studies. The absence of a formal sample size calculation has been acknowledged as a limitation of the study.

2.7 Study Groups

Group A: Standard Ponseti Regimen

Patients underwent manipulation followed by weekly long-leg plaster casting according to the standard Ponseti protocol. Percutaneous Achilles tenotomy was performed whenever residual equinus persisted. Following tenotomy, a final cast was maintained for approximately three weeks before initiation of foot abduction bracing.

Group B: Accelerated Ponseti Regimen

Patients underwent identical manipulation techniques; however, casts were changed every **3–4 days**. Indications for Achilles tenotomy and the post-tenotomy bracing protocol were identical to the Standard group.

2.8 Study Parameters

The study evaluated:

- Demographic variables: age, sex, laterality.
- Clinical variables: initial and final Pirani scores.
- Treatment variables: number of casts, treatment duration, Achilles tenotomy.
- Outcome variables: relapse and treatment-related complications.

The patient was considered the unit of analysis.

In bilateral clubfoot, treatment outcomes were analysed at the patient level.

2.9 Study Procedure

After enrollment, all patients underwent clinical examination and baseline Pirani scoring. Serial manipulation and casting were performed according to the allocated treatment protocol. Percutaneous Achilles tenotomy was performed whenever indicated, followed by a final cast for approximately three weeks. Treatment duration was calculated from initiation of casting until removal of the final post-tenotomy cast. After correction, all patients received a foot abduction brace according to the Ponseti protocol.

Each case was followed up for a period of six months during which they were reviewed regularly for assessment of correction, relapse, brace use, and complications.

Relapse was defined as recurrence of any component of clubfoot after complete correction of deformity requiring repeat casting or further intervention.

Brace compliance was advised according to the Ponseti protocol; however, compliance was not objectively measured during the study which has been acknowledged as a limitation.

2.10 Study Data Collection

Data were prospectively recorded using a structured case record proforma. Baseline demographic details, Pirani scores, number of casts, treatment duration, Achilles tenotomy, relapse, and complications were documented during follow-up visits. Each participant was assigned a unique study identification number to maintain confidentiality.

2.11 Data Analysis

Data were entered into Microsoft Excel and analysed using IBM SPSS Statistics version 26.0. Continuous variables were expressed as mean $\pm$ standard deviation (SD), whereas categorical

variables were presented as frequencies and percentages.

Normality of continuous variables was assessed using the Shapiro–Wilk test.

Comparisons between groups for continuous variables were performed using the independent Student's t-test, while within-group comparisons were performed using the paired Student's t-test.

Comparisons of categorical variables (sex, laterality, Achilles tenotomy, relapse, and complications) were performed using the Chi-square test or Fisher's exact test, as appropriate.

A p-value <0.05 was considered statistically significant.

2.12 Ethical Considerations

The study was approved by the Institutional Ethics Committee of Gauhati Medical College and Hospital prior to commencement of the study. Written informed consent was obtained from the parents or legal guardians of all participants. Separate written parental consent was obtained for publication of clinical photographs. Patient confidentiality was maintained by assigning unique study identification numbers.

RESULTS

A total of 50 patients were randomized equally into the Standard Ponseti and Accelerated Ponseti groups. Baseline characteristics, including age, sex, laterality, and initial Pirani score, were comparable between the two groups. Both treatment protocols achieved satisfactory deformity correction, with comparable final Pirani scores. The Accelerated Ponseti group required significantly fewer casts (5.80 ± 1.58 vs. 7.64 ± 2.58 ; $p < 0.05$) and had a significantly shorter treatment duration (5.90 ± 1.73 vs. 7.64 ± 2.50 weeks; $p < 0.05$) than the Standard Ponseti group. Percutaneous Achilles tenotomy was performed in 72.0% of patients in the Accelerated group and 56.0% in the Standard group, with no statistically significant difference between the groups ($p > 0.05$). Treatment-related complications and early relapse were infrequent in both groups. Overall, the Accelerated Ponseti regimen achieved clinical outcomes comparable to the Standard Ponseti regimen while significantly reducing the overall duration of treatment.

Table 1: Distribution of Study Participants According to Age

Age (Months)	Standard Ponseti (n=25)	Accelerated Ponseti (n=25)
<1 month	7 (28.0%)	10 (40.0%)
1–3 months	16 (64.0%)	14 (56.0%)
>3 months	2 (8.0%)	1 (4.0%)
Mean $\pm$ SD (months)	1.51 $\pm$ 0.85	1.45 $\pm$ 0.85
p-value	0.736	

Most patients in both groups presented between 1 and 3 months of age, accounting for 64.0% in the Standard Ponseti group and 56.0% in the Accelerated Ponseti group. Infants presenting before one month constituted 28.0% and 40.0% of the

Standard and Accelerated groups, respectively. The mean age at presentation was comparable (1.51 ± 0.85 vs 1.45 ± 0.85 months) with no statistically significant difference ($p=0.736$).

Table 2: Distribution of Study Participants According to Sex

Sex	Standard Ponseti (n=25)	Accelerated Ponseti (n=25)	P-value
Male	15 (60.0%)	15 (60.0%)	1.000
Female	10 (40.0%)	10 (40.0%)	

Chi-square/Fisher's exact test

Male participants constituted 60.0% (15/25) of both the Standard Ponseti and Accelerated Ponseti groups, while females accounted for 40.0% (10/25) in each group. The sex distribution was identical between the two groups ($p = 1.000$), indicating successful randomization with no significant baseline difference.

Distribution of study samples according to sex

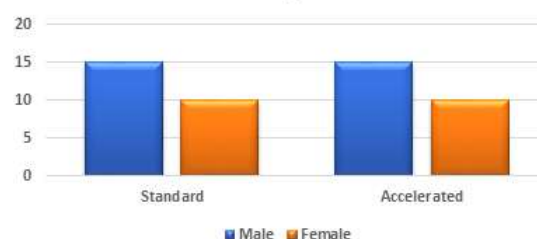


Table 3: Distribution According to Laterality of Clubfoot

Laterality	Standard Ponseti (n=25)	Accelerated Ponseti (n=25)	p-value
Right	3 (12.0%)	7 (28.0%)	0.41
Left	6 (24.0%)	4 (16.0%)	
Bilateral	16 (64.0%)	14 (56.0%)	

Chi-square/Fishers

Bilateral clubfoot was the most common presentation, observed in 64.0% of the Standard Ponseti group and 56.0% of the Accelerated Ponseti group. Right-sided involvement was seen in 12.0% vs. 28.0%, while left-sided involvement was noted in 24.0% vs. 16.0% of patients, respectively. The distribution of laterality was comparable between the two groups, with no statistically significant difference ($p = 0.41$).

Distribution of study samples according to manifestation of anomaly

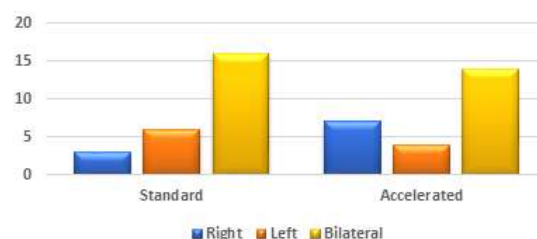


Table 4: Comparison of Pirani Scores Before and After Treatment

Variable	Standard Ponseti	Accelerated Ponseti	p-value
Final Pirani Score	0.74 ± 0.55	0.76 ± 0.44	0.88

Following treatment, the mean final Pirani scores improved to 0.74 ± 0.55 in the Standard group and 0.76 ± 0.44 in the Accelerated group, with no statistically significant difference between the groups ($p = 0.88$), demonstrating that both treatment regimens achieved comparable correction of the deformity.

Mean Pirani Score of Foot After Treatment



Table 5: Comparison of Number of Casts Required

Variable	Standard Ponseti	Accelerated Ponseti	p-value
Mean Number of Casts	7.64 ± 2.58	5.80 ± 1.58	<0.05

The Accelerated Ponseti group required a significantly lower mean number of casts (5.80 ± 1.58) compared with the Standard Ponseti group (7.64 ± 2.58). This difference was statistically significant ($p < 0.05$), indicating that the accelerated regimen achieved deformity correction with fewer casts.

No of Cast

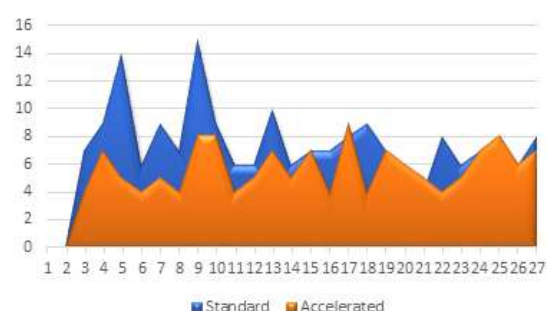


Table 6: Comparison of Treatment Duration Until Final Correction

Variable	Standard Ponseti	Accelerated Ponseti	p-value
Mean Duration (Weeks)	7.64 ± 2.50	5.90 ± 1.73	<0.05

The Accelerated Ponseti group achieved complete deformity correction in a significantly shorter duration (5.90 ± 1.73 weeks) compared with the Standard Ponseti group (7.64 ± 2.50 weeks). This

reduction in treatment duration was statistically significant ($p < 0.05$), demonstrating that the accelerated regimen shortened the overall treatment period without compromising clinical correction.

Table 7: Requirement of Percutaneous Achilles Tenotomy

Tenotomy	Standard Ponseti (n=25)	Accelerated Ponseti (n=25)	P-value
Yes	14 (56.0%)	18 (72.0%)	0.38
No	11 (44.0%)	7 (28.0%)	

Chi-square/fisher's.

Percutaneous Achilles tenotomy was required in 72.0% of patients in the Accelerated Ponseti group compared with 56.0% in the Standard Ponseti group. However, the difference was not statistically significant ($p = 0.38$), indicating that the requirement for tenotomy was comparable between the two treatment groups.

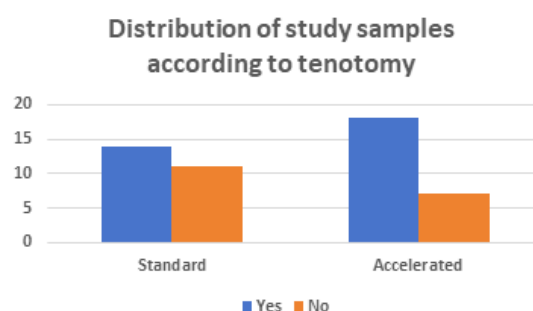
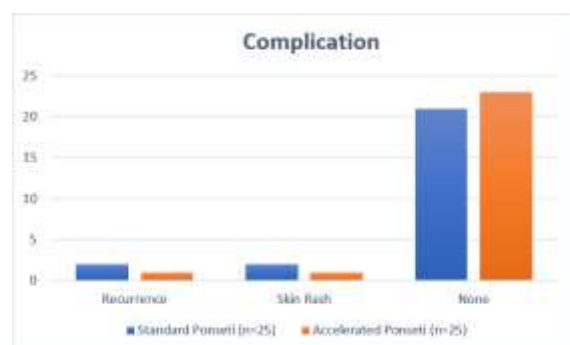


Table 8: Distribution of Treatment-related Complications

Complication	Standard Ponseti (n=25)	Accelerated Ponseti (n=25)	P value
Recurrence	2 (8.0%)	1 (4.0%)	0.55
Skin Rash	2 (8.0%)	1 (4.0%)	
None	21 (84.0%)	23 (92.0%)	

Fisher's

Treatment-related complications were infrequent in both groups. Recurrence was observed in 8.0% (2/25) of patients in the Standard Ponseti group and 4.0% (1/25) in the Accelerated Ponseti group, while skin rash occurred in 8.0% (2/25) and 4.0% (1/25) of patients, respectively. The majority of patients had no complications (84.0% vs. 92.0%), and the overall complication rates were comparable between the two groups with no statistically significant difference ($p = 0.55$).



DISCUSSION

The present prospective randomized comparative study evaluated the effectiveness of the Accelerated Ponseti regimen compared with the Standard Ponseti regimen in the management of idiopathic clubfoot. A total of 50 infants were equally

randomized into the Standard Ponseti (n=25) and Accelerated Ponseti (n=25) groups. Baseline demographic and clinical characteristics, including age, sex, laterality, and initial Pirani score, were comparable between the two groups, indicating successful randomization and allowing an unbiased comparison of treatment outcomes. Male predominance (60%) and bilateral involvement (64% in the Standard group and 56% in the Accelerated group) observed in the present study are consistent with previous reports by Samria et al,^[13] Chandan and Hathwar,^[16] and Kumar and Kumar,^[17] who also reported similar demographic distributions among patients with idiopathic clubfoot.

Both treatment protocols produced excellent correction of the deformity. The initial mean Pirani score was 6.00 ± 0.00 in both groups, indicating comparable severity before treatment. Following serial casting, the final Pirani scores improved significantly to 0.74 ± 0.55 in the Standard Ponseti group and 0.76 ± 0.44 in the Accelerated Ponseti group, with no significant difference between the groups ($p = 0.88$). These findings suggest that increasing the frequency of cast changes does not compromise the quality of deformity correction. Similar observations were reported by Dutta et al,^[14] who found no significant difference in the final Pirani scores between the two regimens. Likewise, Islam et al,^[19] Sahu et al,^[18] and Samria et al,^[13] demonstrated comparable correction of clubfoot irrespective of casting frequency.

A notable finding of the present study was the significantly lower number of casts required in the Accelerated Ponseti group. The mean number of casts was 5.80 ± 1.58 compared with 7.64 ± 2.58 in the Standard Ponseti group ($p < 0.05$). Although several studies, including those by Dutta et al,^[14] Islam et al,^[19] and Chandan and Hathwar,^[16] reported no significant difference in the number of casts between the two regimens, our findings suggest that accelerated casting may reduce the number of casts required in certain patient populations. Variations in patient age at

presentation, severity of deformity, and institutional treatment protocols may explain these differences.

The Accelerated Ponseti regimen also resulted in a significantly shorter treatment duration. The mean duration to final correction was 5.90 ± 1.73 weeks in the Accelerated group compared with 7.64 ± 2.50 weeks in the Standard group ($p < 0.05$). This finding agrees with previous studies by Samria et al,^[13] Dutta et al,^[14] Islam et al,^[19] and Sahu et al,^[18] all of which demonstrated that more frequent cast changes substantially shorten the treatment period while maintaining comparable correction. A shorter treatment duration may reduce the overall period of immobilization and the number of hospital visits, thereby improving the practicality of treatment for families.

Percutaneous Achilles tenotomy was performed in 72.0% of patients in the Accelerated Ponseti group and 56.0% in the Standard Ponseti group; however, the difference was not statistically significant ($p = 0.38$). Similar tenotomy rates have been reported by Dutta et al,^[14] Islam et al,^[19] and Solanki et al,^[20] indicating that increasing casting frequency does not significantly alter the requirement for tenotomy. Treatment-related complications were uncommon in both groups. Recurrence and skin rash occurred in 8.0% of patients in the Standard group and 4.0% in the Accelerated group, with no significant difference between the groups ($p = 0.55$). These findings are consistent with those of Dutta et al,^[14] and Kumar and Kumar,^[17] who also reported low relapse rates and successful management of recurrent deformities.

Overall, the present study demonstrates that the Accelerated Ponseti regimen provides clinical outcomes comparable to the Standard Ponseti method while significantly reducing the number of casts required and the overall duration of treatment. The findings support previous evidence that accelerated casting is a safe and effective alternative for the correction of idiopathic clubfoot.

Limitation

Nevertheless, the study was limited by its single-centre design, relatively small sample size, absence of a formal prior sample size calculation, lack of assessor blinding, lack of objective measurement of brace compliance and limited follow-up of late relapse. Larger multicentre randomized studies with longer follow-up are warranted to further validate these findings.

CONCLUSION

The present study demonstrated that both the Standard Ponseti and Accelerated Ponseti regimens were effective in the correction of idiopathic clubfoot, achieving comparable clinical outcomes as reflected by similar final Pirani scores (0.74 ± 0.55 vs. 0.76 ± 0.44 ; $p = 0.88$). However, the Accelerated Ponseti regimen significantly reduced the mean number of casts required (5.80 ± 1.58 vs. $7.64 \pm$

2.58 ; $p < 0.05$) and the overall treatment duration (5.90 ± 1.73 weeks vs. 7.64 ± 2.50 weeks; $p < 0.05$). The requirement for percutaneous Achilles tenotomy and the incidence of treatment-related complications were comparable between the two groups ($p > 0.05$). These findings suggest that the Accelerated Ponseti regimen is a safe and effective alternative to the Standard Ponseti method, providing equivalent deformity correction while significantly shortening the duration of treatment.

REFERENCES

1. Dobbs MB, Gurnett CA. Update on clubfoot: etiology and treatment. *Clin Orthop Relat Res*. 2009;467(5):1146-53.
2. Miedzybrodzka Z. Congenital talipes equinovarus (clubfoot): a disorder of the foot but not the hand. *J Anat*. 2003;202(1):37-42.
3. Ponseti IV. *Congenital Clubfoot: Fundamentals of Treatment*. Oxford: Oxford University Press; 1996.
4. Morcuende JA, Dolan LA, Dietz FR, Ponseti IV. Radical reduction in the rate of extensive corrective surgery for clubfoot using the Ponseti method. *Pediatrics*. 2004;113(2):376-80.
5. Zions LE, Sangiorgio SN, Ebrahimzadeh E, Morcuende JA. The current management of idiopathic clubfoot revisited. *Iowa Orthop J*. 2010;30:90-102.
6. Ganesan B, Luximon A, Al-Jumaily A. Ponseti method in the management of clubfoot under 2 years of age: a systematic review. *PLoS One*. 2017;12(6):e0178299.
7. Harnett P, Freeman R, Harrison WJ, Brown LC, Beckles V. An accelerated Ponseti versus standard Ponseti method: a prospective randomized controlled trial. *J Bone Joint Surg Br*. 2011;93(3):404-8.
8. Xu RJ. A modified Ponseti method for the treatment of idiopathic clubfoot: a comparative study. *J Pediatr Orthop B*. 2011;20(1):45-9.
9. Sharma R, Chettri P, Singh GK. Accelerated versus standard Ponseti technique in idiopathic clubfoot: a comparative study. *J Clin Orthop Trauma*. 2019;10(Suppl 1):S30-S35.
10. Hussain N, Khan MQ, Ahmed A, et al. Outcome of accelerated Ponseti technique for idiopathic clubfoot. *Cureus*. 2020;12(10):e11192.
11. Gupta A, Singh S, Kumar D. Comparative evaluation of accelerated and standard Ponseti technique in idiopathic clubfoot. *Int Orthop*. 2021;45(8):2143-50.
12. Pirani S, Outerbridge HK, Sawatzky B, Stothers K. A reliable method of clinically evaluating a virgin clubfoot evaluation. Presented at the 21st SICOT Congress; Sydney, Australia; 1999.
13. Samria U, Sheikh AN, Khinchi P. Standard and accelerated Ponseti technique in management of idiopathic congenital talipes equinovarus: A comparative study. *Int J Acad Med Pharm*. 2025;7(6):632-5.
14. Dutta A, Sipani AK, Jain PK. A comparative study between standard and accelerated Ponseti method in management of idiopathic congenital talipes equinovarus. *Int J Orthop Sci*. 2019;5(2):359-363. doi:10.22271/ortho.2019.v5.i2g.49.
15. Kumar S, Singh PP, Singh MK, Kumar Y, Verma S, Kumar H. Outcomes of Ponseti technique in management of idiopathic clubfoot in Infants-A short term study of Ninety feet in rural India. *Journal of Bone and Joint Diseases*. 2020 May 1;35(2):9-13.
16. Chandan D, Hathwar KK. Original Article Comparative Study of Functional Outcome of Idiopathic Congenital Talipes Equinovarus Treated between Ponseti Technique and Accelerated Ponseti Technique using Pirani Score: Ponseti Technique and Accelerated Ponseti Technique for Idiopathic CTEV. *Journal of Bones & Muscles Health*. 2023 Jul 1;1(1):17-25.

17. Kumar R, Singh SK. Conventional Ponseti vs accelerated Ponseti in the management of cases of idiopathic clubfoot. *Eur J Mol Clin Med.* 2020;7:7000-4.
18. Sahu B, Rajavelu R, Tudu B. Management of idiopathic congenital talipes equinovarus by standard versus accelerated Ponseti plaster technique: A prospective study. *Journal of Orthopaedics, Traumatology and Rehabilitation.* 2015 Jan 1;8(1):30-4.
19. Islam MS, Masood QM, Bashir A, Shah FY, Halwai MA. Results of a standard versus an accelerated Ponseti protocol for clubfoot: a prospective randomized study. *Clinics in orthopedic surgery.* 2020 Feb 13;12(1):100.
20. Solanki M, Ajmera A, Rawat S. Comparative study of accelerated Ponseti method versus standard Ponseti method for the treatment of idiopathic clubfoot. *Journal of Orthopaedics, Traumatology and Rehabilitation.* 2018 Jul 1;10(2):116-9.