

A Study of Tibial Plateau Fracture Management by Surgical Methods and their Functional and Radiological Evaluation in Tertiary Care Hospital

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Date of Submission: 01/06/2025

Date of Review: 17/06/2025

Date of Acceptance: 29/07/2025

ABSTRACT

Background: Tibial plateau fractures, though uncommon, present significant clinical challenges due to their intra-articular involvement, variability in fracture patterns, and risk of long-term morbidity. Surgical management aims to restore joint congruity, alignment, and function. **Objective:** To assess and compare the functional and radiological outcomes of tibial plateau fractures managed surgically using various fixation techniques at a tertiary care centre. **Methods:** This prospective study included 60 patients aged 20–70 years with closed, unstable tibial plateau fractures treated surgically between November 2016 and December 2018. Fractures were classified using Schatzker's system. Operative methods included percutaneous cannulated cancellous screws (PCCS), open reduction and internal fixation (ORIF) with buttress plate ± bone graft and locking compression plates (LCP). Postoperative care included standard physiotherapy and rehabilitation protocols. Clinical and radiological outcomes were assessed at 6 months using the Modified Rasmussen Criteria. **Results:** The most common fracture pattern was Schatzker Type II (33.3%). ORIF with buttress plate and bone graft was the most commonly used technique (33.3%). Clinical outcomes were excellent or good in 86.3%, and radiological outcomes were excellent or good in 87%. A statistically significant association ($p = 0.004$) was observed between radiological and clinical outcomes. Postoperative complications included infection and stiffness in 6.7% each, and deformity in 3.3%. **Conclusion:** Surgical management of tibial plateau fractures yields favourable clinical and radiological outcomes when fixation technique is appropriately selected based on fracture morphology. Radiological alignment strongly correlates with functional recovery, reinforcing the need for anatomic reduction and early mobilisation.

KEYWORDS: Tibial plateau fracture, Schatzker classification, Surgical fixation, ORIF, Functional outcome, Radiological outcome, Rasmussen criteria

INTRODUCTION

Tibial plateau fractures involve the weight-bearing articular surface of the proximal tibia and account for about 1% of adult fractures. [1, 2] They typically occur from high-energy trauma resulting from indirect coronal or direct axial compressive forces. [3] Even a low-energy falls in osteoporotic bone can also cause these injuries. [4] These fractures consist of different fracture configurations that involve medial, lateral or both plateaus with variable range of articular depressions and displacements. [1] Lateral condyle involvement was more common than isolated medial condyle fracture and bicondylar fractures. [5, 6]

High-energy tibial plateau injuries are frequently accompanied by significant soft-tissue damage and associated intra-articular injuries e.g. meniscal tears, ligament ruptures, even neurovascular compromise. [5, 7] Intra-articular involvement makes management challenging, particularly an inadequate reduction or fixation can lead to joint incongruity, malalignment, knee instability, and stiffness. [3] Indeed, recent retrospective cohort study found that about 10% of surgically treated tibial plateau fractures progress to knee replacement within 5–10 years, especially when joint depression is not fully corrected. [8]

Given these concerns, operative management is usually indicated for displaced or unstable tibial plateau fractures. Open reduction and internal fixation (ORIF) using plates and screws (for example, buttress plates, lateral locking plates, cancellous screws) has been the standard treatment

to restore alignment and allow early motion [3, 7] and even using intramedullary nailing and compression bolts provides good fixation. [9] The goals of surgery are to achieve anatomic articular reduction, rigid fixation, and limb alignment so that the patient can begin rehabilitation promptly.

Because tibial plateau fractures can have widely varying patterns and outcomes, it is important to evaluate both radiological healing and functional recovery. Outcomes are commonly measured with scoring systems (e.g. Rasmussen's or the Knee Society Score) that incorporate pain, range of motion, stability, and radiographic alignment. [10, 11] Even with optimal fixation, many patients never regain entirely normal anatomy or cartilage, so long-term morbidity (post-traumatic osteoarthritis) remains a concern. [8, 12]

In this context, a prospective study was conducted at the tertiary care center to analyze the surgical management of tibial plateau fractures. The objectives were to compare functional outcomes in patients with tibial plateau fractures treated by closed reduction and internal fixation (CRIF) versus open reduction and internal fixation (ORIF). and to correlate the postoperative radiographic results with functional outcomes.

MATERIAL AND METHODS

This prospective study was conducted in the Department of Orthopaedics at a Santhiram Medical College and General Hospital during November 2016 to December 2018. All consecutive patients fulfilling inclusion and exclusion criteria were enrolled. Total 60 patients with tibial plateau fractures were included during the study period. Fractures were classified based on the Schatzker classification system (Types I–VI). [13, 14]

Inclusion Criteria:

- Patients diagnosed with closed, unstable fractures of the tibial plateau.
- Both sexes and age between 20 to 70 years.

Exclusion Criteria:

- Skeletally immature individuals.
- Fracture-dislocations of the knee.
- Open fractures.
- Associated injuries involving ipsilateral femur, tibia, or foot.
- Unstable fractures were defined as those with displacement >10 mm, articular depression >3 mm, or instability >10° on stress radiographs.

Study Procedure:

All enrolled tibial plateau fractures patients underwent surgical management as follow

1. Surgical Management: The operative method was selected based on fracture type, bone quality, and degree of displacement. Type I and select Type II fractures were managed with percutaneous cannulated cancellous screw fixation. Types II–VI with depression, comminution, or bicondylar involvement were treated with open reduction and internal fixation using locking compression plates (LCP), T- or L-buttress plates, with or without autologous bone grafting from the ipsilateral iliac crest. All procedures were performed under C-arm fluoroscopy.

2. Postoperative Care: Postoperatively, all patients were immobilized in an above-knee posterior slab for three weeks and received intravenous antibiotics, later shifted to oral regimens. Quadriceps-strengthening exercises were initiated during the immobilization period, followed by progressive range of motion exercises and non-weight-bearing ambulation with crutches for up to six weeks. Thereafter, full weight-bearing was encouraged based on radiographic union.

3. Follow-Up and Outcome Assessment: Patients were followed at 2 weeks, 6 weeks, 3 months, and 6 months. Clinical and radiological assessments were conducted at each visit. Final functional and radiological outcomes were evaluated using the modified Rasmussen clinical and radiological scoring criteria. [11, 15]

Ethical Considerations:

The study was approved by the Institutional Ethics Committee. Written informed consent was obtained from all participants.

Statistical Analysis:

Data were compiled in Microsoft Excel and analyzed using SPSS version 25.0. Categorical data were expressed as frequencies and percentages. Associations between clinical and radiological outcomes were tested using the Chi-square test. A p-value <0.05 was considered statistically significant.

RESULTS

A total of 60 patients with tibial plateau fractures were surgically managed and followed up. The demographic and clinical profile is summarised in Table 1.

Majority of patients were below 50 years of age. Specifically, 24 patients (40%) were in the 31–40 age group, while 20 patients (33.7%) were aged 41–50 years. Only 16.7% were above 50 years. Majority of them were males (71.7%). Many patients were either businessmen or employees, each comprising 30% followed by labourers at 23.3% and housewives at 16.7%. Road traffic accidents was the most common mode of injury, accounting for 60%, while falls from a height and falls on a level surface contributed 23.3% and 16.7% respectively. The left side was more commonly involved, seen in 66.7% (n=40) of the patients (Table 1).

Characteristic	Category	Number of Patients (n=60)	Percentage (%)
Age Group (years)	<30	6	10
	31–40	24	40
	41–50	20	33.7
	51–60	10	16.7
Gender	Male	43	71.7
	Female	17	28.3
Occupation	Businessman	18	30.0
	Housewife	10	16.7
	Employee	18	30.0
	Labourer	14	23.3
Mode of Injury	Road Traffic Accident	36	60.0
	Fall from Height	14	23.3
	Fall on Level Surface	10	16.7
Side Involved	Left	40	66.7
	Right	20	33.3

Table 1: Demographic and Clinical Profile of Patients with tibial plateau fractures

As shown in Table 2, fractures were classified according to Schatzker's system, with Type II being the most common subtype (33.3%), followed by Type III (23.3%) and Type I (16.7%). Type IV fractures were least frequently observed (3.3%).

Regarding treatment modalities, open reduction and internal fixation (ORIF) with buttress plate and bone graft was the most commonly employed method (33.3%), followed by ORIF with buttress plate alone (30%). PCCS fixation was used in 20%, and ORIF with locking compression plate (LCP) in 16.7% of cases. PCCS was mainly used in simpler fracture types (I and II), while locking compression plates (LCPs) were more frequently employed in complex or comminuted fractures such as Types V and VI (Figure 1 for illustration).

Table 3 shows the distribution of clinical and radiological outcomes across different surgical methods according to the Modified Rasmussen Criteria. Among patients treated with ORIF + Buttress Plate + Bone Graft, the majority showed good outcomes both clinically (65%) and radiologically (95%). Similarly, ORIF + Buttress Plate alone resulted in good clinical outcomes in 61% and good radiological outcomes in 72% of patients.

Fracture Type No. (%)	PCCS*	ORIF* + Buttress Plate	ORIF + Buttress Plate + Bone Graft	ORIF + LCP*	Total
Type I	4 (6.7)	2 (3.3)	3 (5.0)	1 (1.7)	10 (16.7)
Type II	5 (8.3)	7 (11.7)	6 (10.0)	2 (3.3)	20 (33.3)
Type III	2 (3.3)	6 (10.0)	4 (6.7)	2 (3.3)	14 (23.3)
Type IV	0	1 (1.7)	0 (0.0)	1 (1.7)	2 (3.3)
Type V	0	1 (1.7)	4 (6.7)	1 (1.7)	6 (10)
Type VI	1 (1.7)	1 (1.7)	3 (5.0)	3 (5.0)	8 (13.3)
Total	12 (20)	18 (30)	20 (33.3)	10 (16.7)	60 (100)

* PCCS: Percutaneous Cannulated Cancellous Screw fixation, ORIF: Open Reduction and Internal Fixation. LCP: Locking Compression Plate

Table 2: Distribution of Surgical Management Across Schatzker Fracture Types in Patients with Tibial Plateau Fractures (n = 60)

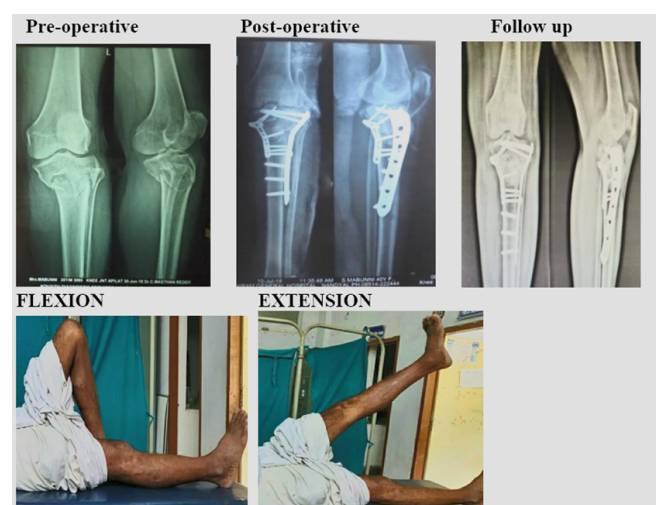


Figure 1: Case of Open reduction and internal fixation with plating

Modified Rasmussen Criteria	PCCS [n = 12(%)]	ORIF + But-tress Plate [n = 18(%)]	ORIF + But-tress Plate + Bone Graft [n = 20(%)]	ORIF + LCP [n = 10(%)]	Total [n = 60 (%)]
Clinical Assessment					
Excel-lent	3 (25)	4 (22)	5 (25)	2 (20)	14 (23)
Good	6 (50)	11 (61)	13 (65)	8 (80)	38 (63)
Fair	2 (17)	2 (11)	0	0	4 (7)
Poor	1 (8)	1 (6)	2 (10)	0	4 (7)
Radiological Assessment					
Excel-lent	2 (17)	3 (17)	1 (5)	0	6 (10)
Good	7 (58)	13 (72)	19 (95)	7 (70)	46 (77)
Fair	2 (17)	0	0	2 (20)	4 (7)
Poor	1 (8)	2 (11)	0	1 (10)	4 (7)

Note: Percentages have been rounded to the nearest whole number.

Table 3: Clinical and radiological outcomes by treatment method according to Modified Rasmussen criteria (n = 60)

In the PCCS group, 50% achieved good clinical outcomes and 58% had good radiological scores. The ORIF + LCP group had 80% good clinical outcomes and relatively lower radiological grades.

A statistically significant association was noted between radiological and clinical outcomes ($p = 0.004$). Patients with excellent to good radiographic healing ($n = 52$) predominantly had favourable clinical recovery, while those with fair or poor radiological grades were more likely to have poorer clinical outcomes.

Postoperative complications were observed in a small subset of patients. Infection and joint stiffness were reported in 4 patients each (6.7%), and deformity was observed in 2 patients (3.3%) (Figure 2).

DISCUSSION

Tibial plateau fractures pose significant challenges due to their intra-articular involvement, potential for long-term disability, and the complexity of restoring anatomical alignment and knee joint function. These injuries often result from high-energy trauma and are commonly encountered in the young to middle-aged population. In the present study, the

Radiologi-cal / Clinical Assess-ment	Excel-lent	Good	Fair	Poor	Total
Excellent	4 (6.7%)	2 (3.3%)	0	0	6 (10.0%)
Good	9 (15.0%)	30 (50.0%)	4 (6.7%)	3 (5.0%)	46 (76.7%)
Fair	1 (1.7%)	3 (5.0%)	0	0	4 (6.7%)
Poor	0	3 (5.0%)	0	1 (1.7%)	4 (6.7%)
Total	14 (23.3%)	38 (63.3%)	4 (6.7%)	4 (6.7%)	60 (100.0%)

Fisher Exact test, $p=0.004$.

Table 4: Association Between Clinical and Radiological Outcomes Based on Modified Rasmussen Criteria (n = 60)

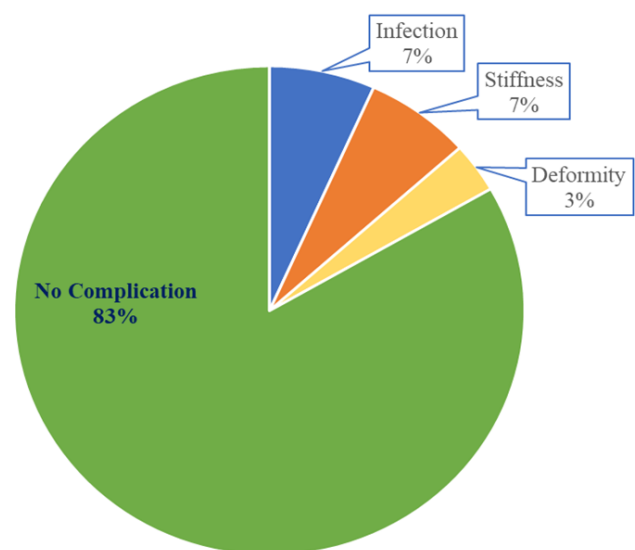


Figure 2: Post Operative Complications in patients with tibial plateau fractures

majority of patients belonged to the 31–50 years age group, with a mean age of 38.3 years. This aligns with previous reports that tibial plateau fractures commonly affect individuals in their third to fifth decade due to higher levels of physical activity and mobility. [1, 3, 5]

Male predominance (71.7%) was also observed in our study, consistent with other studies' findings, which attribute this trend to increased exposure to road traffic and occupational hazards among males. [5] The most frequent mechanism of injury was road traffic accidents (60%), followed by falls from height (23.3%) and on level ground (16.7%). These findings are similar to global and Indian data

where high-energy trauma remains the main cause of such injuries. [5, 16–18]

In this study, the choice of fixation method was tailored to the Schatzker fracture type, displacement, soft tissue injuries and bone quality. Type I and selected Type II fractures with minimal displacement were treated using percutaneous cancellous screw fixation (PCCS), which allowed stable fixation with minimal soft tissue disruption. Fractures with articular depression exceeding 3 mm, particularly Types II, III, IV, V, and VI, were managed with open reduction and internal fixation (ORIF) using buttress plates or locking compression plates, with bone grafting when required for defect filling or comminution. These findings align with standard practices for surgical management of tibial plateau fractures. [6, 17–19]

The clinical and radiographical outcomes in various surgical methods shown in this study highlight the importance of matching the fixation method to the fracture type and the surrounding soft tissue status to achieve optimal healing and functional results. For example, ORIF with buttress plate and bone grafting demonstrated the highest radiological success rate, with 95% of patients achieving good outcomes, although excellent scores were limited.

This individualized strategy aligns with findings from Biswas et al. [20], who emphasized that fracture morphology should guide implant selection, with minimally invasive methods like MIPPO offering advantages in simpler patterns. Rana et al. [21] and Jain et al. [17] similarly reported satisfactory outcomes in complex fractures when anatomical reduction and stable fixation were achieved. Additionally, a cohort study by Tahririan MA et al. [22] comparing locking compression plates with non-locking buttress plates found that LCPs provided significantly better clinical scores and lower postoperative pain at one-year follow-up.

In the present study, a statistically significant association was observed between radiological and clinical outcomes, $p = 0.004$. Of the 52 patients with excellent to good radiographic healing, the majority demonstrated favorable clinical outcomes, confirming the impact of anatomical reduction on function. Comparable outcomes were reported by Kayath and Kayathwal [16] who found 92% of their surgically managed tibial condylar fractures achieved excellent or good functional scores. Rana et al. [21] also noted similar success rates with LCP fixation, emphasizing the importance of anatomical reduction. Additionally, Amin TK et al. [3] found 96.23% excellent result using periarticular proximal tibia plating and allowing mobilisation of the knee.

Moreover, Liu ZY et al. [23] highlighted that specifically designed approaches in anterior tibial plateau fractures led to improved function, particularly when combined with early knee mobilization protocols. A recent observational study by Chowdhury ALM et al. [24] of 37 patients treated surgically for tibial plateau fractures reported excellent or good clinical outcomes in over 86% of cases, as per the Rasmussen scoring system. Specifically, 51.4% were classified as excellent and

35.1% as good, closely similar to our own findings of 23.3% excellent and 63.3% good clinical results. Their results lend strong external validity to our study, demonstrating consistent outcome patterns across different populations and surgical settings using Modified Rasmussen criteria. In another study by Hap & Kwek involving 41 surgically treated tibial plateau fractures, a clear relationship was observed between the quality of fracture reduction and functional outcomes. Using WOMAC and SF-36 scores at a mean follow-up of 19–42 months, they reported significantly better results in Schatzker I–III fractures compared to more complex fractures (Schatzker IV–VI). [25]

Postoperative complications in the present study were noted in a limited subset of patients, with infection and joint stiffness reported in 4 patients each (6.7%), and postoperative deformity observed in 2 patients (3.3%). The incidence of complications reported in the literature varies considerably, influenced by factors such as the type of fracture, surgical approach, extent of soft tissue injury, and quality of postoperative rehabilitation. The differences in surgical techniques and follow-up durations across studies further complicates direct comparison. [6, 11, 16, 20] Hence, there is a need for long-term, standardised prospective studies to more accurately assess and compare complication rates associated with different surgical interventions.

DISCLOSURE

Conflict of Interest: The authors declare no conflict of interest.

Funding: This research received no external funding.

Data Availability: The dataset used and analyzed during the current study are available from the corresponding author upon reasonable request.

REFERENCES

1. Malik S, Herron T, Mabrouk A, Rosenberg N. Tibial Plateau Fractures. Treasure Island (FL): StatPearls Publishing; 2025. Available from: <https://pubmed.ncbi.nlm.nih.gov/29261932/>.
2. Marsh JL. Tibial Plateau Fractures. In: Bucholz RW, Heckman JD, Court-Brown CM, Tornetta P, editors. Rockwood and Green's Fractures in Adults . vol. 2. Philadelphia: Lippincott Williams and Wilkins; 2010. p. 1275–1275.
3. Amin TK, Patel I, Jangad AH, Shah H, Vyas RP, Patel NV et al. Evaluation of Radiological and Functional Outcome of Intra-articular Proximal Tibia Plateau Fracture Treated with Plating. Malaysian Orthopaedic Journal. 2023;17(1):90–97. Available from: <https://dx.doi.org/10.5704/moj.2303.011>.
4. Donovan RL, Smith JRA, Yeomans D, Bennett F, Smallbones M, White P et al. Epidemiology and outcomes of tibial plateau fractures in adults aged 60

- and over treated in the United Kingdom. *Injury*. 2022;53(6):2219–2225. Available from: <https://dx.doi.org/10.1016/j.injury.2022.03.048>.
5. Aguilar JR, Rios X, Edery EG, Rosa ADL, Ortega LA. Epidemiological characterization of tibial plateau fractures. *Journal of Orthopaedic Surgery and Research*. 2022;17(1):1–7. Available from: <https://dx.doi.org/10.1186/s13018-022-02988-8>.
 6. Rudran B, Little C, Wiik A, Logishetty K. Tibial plateau fracture: anatomy, diagnosis and management. *British Journal of Hospital Medicine*. 2020;81(10):1–9. Available from: <https://dx.doi.org/10.12968/hmed.2020.0339>.
 7. Prat-Fabregat S, Camacho-Carrasco P. Treatment strategy for tibial plateau fractures: an update. *EFORT Open Reviews*. 2016;1(5):225–232. Available from: <https://dx.doi.org/10.1302/2058-5241.1.000031>.
 8. Howell M, Khalid A, Nelson C, Doonan J, Jones B, Blyth M. Long term outcomes following tibial plateau fracture fixation and risk factors for progression to total knee arthroplasty. *The Knee*. 2024;51:303–311. Available from: <https://dx.doi.org/10.1016/j.knee.2024.10.003>.
 9. Lasanianos NG, Garnavos C, Magnisalis E, Kourkoulis S, Babis GC. A comparative biomechanical study for complex tibial plateau fractures: Nailing and compression bolts versus modern and traditional plating. *Injury*. 2013;44(10):1333–1339. Available from: <https://dx.doi.org/10.1016/j.injury.2013.03.013>.
 10. Scuderi GR, Bourne RB, Noble PC, Benjamin JB, Lonner JH, Scott WN. The New Knee Society Knee Scoring System. *Clinical Orthopaedics & Related Research*. 2012;470(1):3–19. Available from: <https://dx.doi.org/10.1007/s11999-011-2135-0>.
 11. Bormann M, Bitschi D, Neidlein C, Berthold DP, Jörgens M, Pätzold R et al. Mismatch between Clinical–Functional and Radiological Outcome in Tibial Plateau Fractures: A Retrospective Study. *Journal of Clinical Medicine*. 2023;12(17):5583. Available from: <https://dx.doi.org/10.3390/jcm12175583>.
 12. Davis JT, Rudloff MI. Posttraumatic Arthritis After Intra-Articular Distal Femur and Proximal Tibia Fractures. *Orthopedic Clinics of North America*. 2019;50(4):445–459. Available from: <https://dx.doi.org/10.1016/j.ocl.2019.06.002>.
 13. Zeltser DW, Leopold SS. Classifications in Brief: Schatzker Classification of Tibial Plateau Fractures. *Clinical Orthopaedics & Related Research*. 2013;471(2):371–374. Available from: <https://dx.doi.org/10.1007/s11999-012-2451-z>.
 14. Bryanton M, Knipe H, Machang’a K. Schatzker classification of tibial plateau fractures. *Radiopaedia.org*; 2009. Available from: <https://radiopaedia.org/articles/7322>.
 15. Rasmussen PS. Tibial condylar fractures: Impairment of knee joint stability as an indication for surgical treatment. *Journal of Bone and Joint Surgery*. 1973;55(7):1331–1350. Available from: <https://pubmed.ncbi.nlm.nih.gov/4586086/>.
 16. Kayath AM, Kayathwal AK. Prospective study to measure the functional outcome of tibial plateau fractures. *International Journal of Research in Orthopaedics*. 2019;5(6):1061–1064. Available from: <https://dx.doi.org/10.18203/issn.2455-4510.intjresorthop20194163>.
 17. Kant Jain R, Shukla R, Baxi M, Agarwal U, Yadav S. Evaluation of functional outcome of tibial plateau fractures managed by different surgical modalities. *International Journal of Research in Orthopaedics*. 2016;2(1):5–12. Available from: <https://dx.doi.org/10.18203/issn.2455-4510.intjresorthop20160709>.
 18. Gawali SR, Nair PS, Sonkawade VD. A prospective study of management of tibial plateau fractures by locking compression plate in adults. *International Journal of Research in Orthopaedics*. 2021;7(5):953–958. Available from: <https://dx.doi.org/10.18203/issn.2455-4510.intjresorthop20213175>.
 19. Mthethwa J, Chikate A. A review of the management of tibial plateau fractures. *Musculoskeletal Surgery*. 2018;102(2):119–127. Available from: <https://dx.doi.org/10.1007/s12306-017-0514-8>.
 20. Biswas B, Halam AK, Chowdhury A, Purkayastha T, Reang S. Optimizing Surgical Management of Tibial Plateau Fractures: A Comparative Study of Minimally Invasive Versus Open Reduction Techniques. *Cureus*. 2024;16(5):60078. Available from: <https://dx.doi.org/10.7759/cureus.60078>.
 21. Rana H, Ninama K, Chavda A, Meena R. Surgical management of tibial condyle fractures using locking compression plate. *National Journal of Clinical Orthopaedics*. 2020;4(1):39–43. Available from: <https://dx.doi.org/10.33545/orthor.2020.v4.i1a.199>.
 22. Tahririan MA, Mousavitadi SH, Derakhshan M. Comparison of Functional Outcomes of Tibial Plateau Fractures Treated with Nonlocking and Locking Plate Fixations: A Nonrandomized Clinical Trial. *ISRN Orthopedics*. 2014;2014:1–6. Available from: <https://dx.doi.org/10.1155/2014/324573>.
 23. Yu Liu Z, Li Zhang J, Liu C, Cao Q, Jie Shen Q, Chao Zhao J. Surgical Strategy for Anterior Tibial Plateau Fractures in Hyperextension Knee Injuries. *Orthopaedic Surgery*. 2021;13(3):966–978. Available from: <https://dx.doi.org/10.1111/os.12997>.

24. Chowdhury AAM, Rahman MM, Zaman F, Sarker M. Functional outcome of internal fixation of tibial plateau fractures: an observational study. International Surgery Journal. 2024;11(8):1233–1237. Available from: <https://dx.doi.org/10.18203/2349-2902.isj20242111>.
25. Hap DXF, Kwek EBK. Functional outcomes after surgical treatment of tibial plateau fractures. Journal of Clinical Orthopaedics and Trauma. 2020;11(1):S11–S15. Available from: <https://dx.doi.org/10.1016/j.jcot.2019.04.007>.

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How to cite this article: Babu CJ, Reddy TM, Sathya AM. A Study of Tibial Plateau Fracture Management by Surgical Methods and their Functional and Radiological Evaluation in Tertiary Care Hospital. Perspectives in Medical Research. 2025;13(2):85-91
DOI: [10.47799/pimr.1302.25.16](https://doi.org/10.47799/pimr.1302.25.16)