

Original Research Article

Condylar blade plate in subtrochanteric femur fractures: a robust implant forgotten way too early

Subodh M. Solanke*, Swarupa A. Walavalkar, Ramprasad J.,
Sunil D. Magadum, Pranav Shejul

Department of Orthopedic, MIOT International Hospitals, Chennai, Tamil Nadu, India

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*Correspondence:

Dr. Subodh M. Solanke,

E-mail: drsubodhsolanke@gmail.com

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ABSTRACT

Background: Subtrochanteric femur fractures comprise 10-34% of hip fractures. While cephalomedullary (CM) nails have largely replaced fixed-angle devices like the condylar blade plate (CBP), CBP's superior angular and rotational stability warrant reassessment. This study evaluated functional and radiological outcomes of subtrochanteric fractures treated with CBP.

Methods: This prospective observational study at MIOT International Hospitals, Chennai, included 36 patients (31 males, 5 females; mean age 51.47 years) treated with CBP fixation from June 2015 to December 2016. Patients with acute unilateral subtrochanteric fractures aged >17 years were followed for two years or until union. Outcomes were assessed using the Lower Extremity Functional Scale (LEFS), clinical examination (range of motion, pain, deformity), and radiographic monitoring. Statistical analysis employed Chi-square and ANOVA tests ($p < 0.05$).

Results: Mean radiographic union occurred at 15.61 weeks. Functional outcomes were excellent in 36.1% (n=13), very good in 13.9% (n=5), good in 27.8% (n=10), moderate in 16.7% (n=6), and poor in 5.6% (n=2). No patients exhibited varus malalignment or implant failure. The reoperation rate was 5.55%. CBP demonstrated effective anatomical reduction, strong stability, limb length restoration, and bone stock preservation.

Conclusions: CBP remains a viable fixation method for subtrochanteric fractures, offering outcomes comparable to CM nails with minimal complications. Its advantages in anatomical reduction, rotational stability, and bone preservation suggest CBP is underutilized in current practice and deserves reconsideration as a valuable treatment option.

Keywords: Subtrochanteric femur fractures, Condylar blade plate, Cephalomedullary nails, Fracture fixation, Functional outcome, Radiological outcome

INTRODUCTION

The subtrochanteric region of the femur, situated just below the lesser trochanter and extending approximately five centimeters distally, is subject to some of the highest mechanical stresses in the human body. These stresses result from the weight-bearing function of the femur combined with powerful differential muscle forces exerted around this region. Subtrochanteric fractures comprise roughly 10-34% of all hip fractures, with an incidence that has been increasing due to factors such as the widespread

availability of high-speed transportation and an aging population. This fracture type is characterized by a bimodal age distribution, with a peak in younger individuals who typically sustain these injuries through high-energy trauma (such as road traffic accidents or falls from height) and another peak in older individuals, where low-energy trauma (such as simple falls) is a more common cause.^{1,2}

Biomechanically, the subtrochanteric region is unique, as it is primarily composed of cortical bone with relatively

poor vascularity compared to the neighboring cancellous trochanteric region. This characteristic, combined with the high stresses concentrated in the posteromedial cortex, predisposes these fractures to delayed healing and, if not managed optimally, to high rates of fixation failure. The complex anatomy and biomechanical demands of the subtrochanteric region, including high compressive forces posteromedially and tensile forces laterally, present substantial challenges in achieving stable fracture fixation and prompt healing. Traditional non-surgical treatment options for these fractures have been associated with significant complications, including limb shortening, malrotation, and increased morbidity due to prolonged immobilization. Consequently, surgical intervention has largely supplanted nonoperative treatment, achieving superior functional outcomes and significantly improving patient quality of life.^{3,4}

Historically, fixed-angle extramedullary implants, such as the condylar blade plate (CBP) and dynamic condylar screw (DCS), were the mainstay of treatment for subtrochanteric fractures up until the early 2000s. These implants provide strong fixation by stabilizing both the proximal femoral segment and the diaphysis through compression and resistance to rotational forces. However, the evolution of intramedullary devices, particularly cephalomedullary (CM) nails, has led to a significant shift in clinical practice. CM nails are perceived to offer advantages such as reduced surgical time, less extensive soft tissue dissection, a smaller lever arm, and the facilitation of early weight-bearing. These perceived benefits, combined with the easier learning curve and adoption of CM nails, have led to a decline in the use of CBP and other extramedullary implants.^{5,6}

While CM nails offer certain advantages, they also present limitations, particularly in cases with subtrochanteric fractures extending into the intertrochanteric region or in fractures with significant comminution. In such cases, achieving and maintaining reduction through a closed technique is often challenging, and open reduction may be necessary, negating the benefit of 'minimally invasive' surgery. Also Varus malalignment is a common issue associated with CM nails. Furthermore, the biomechanical properties of extramedullary implants, such as CBP, often provide superior resistance to varus collapse and rotational instability in these complex fracture patterns. Studies have shown that extramedullary devices like CBP achieve higher rotational and angular stability, and improved load distribution compared to CM nails, particularly in cases where anatomical reduction is paramount to achieving functional restoration.

The CBP, with its unique load-bearing design, provides rigid fixation and maintains the anatomical alignment of the femur while allowing early mobilization. Despite its advantages, the CBP has seen a decline in use, primarily due to the shift toward intramedullary fixation devices and the lack of recent evidence directly comparing the outcomes of CBP to CM nails. However, there is a need to

revisit the role of CBP in subtrochanteric fractures, particularly in light of its ability to provide stable fixation and favorable functional outcomes. We hypothesize that CBP remains a valuable option for treating subtrochanteric fractures, especially in cases where anatomical reduction and long-term functional outcomes are prioritized over ease of surgical technique.^{7,8}

This study aims to analyze the functional and radiological outcomes of subtrochanteric femur fractures stabilized with the CBP to assess its relevance and effectiveness compared to modern intramedullary devices. Specifically, we seek to determine if the CBP provides comparable or superior stability, union rates, and functional outcomes, with an emphasis on minimizing complications such as implant failure and infection. This research will contribute to the understanding of optimal implant selection in the treatment of subtrochanteric fractures and may reinstate CBP as a valuable tool in the orthopedic surgeon's armamentarium.^{9,10}

METHODS

This study was designed as a prospective observational analysis conducted at MIOT International Hospitals, Chennai, Tamil Nadu, India. The hospital is a major trauma center in South India, known for its expertise in managing complex orthopedic injuries, providing a suitable setting to evaluate the effectiveness of CBP osteosynthesis in treating subtrochanteric femur fractures. The study period spanned from 01 June 2015, to 30 November 2016, during which all eligible patients presenting with acute subtrochanteric femur fractures received CBP fixation.

The study population included 36 patients who met the inclusion criteria. Among these, 31 were males, and 5 were females, with ages ranging from 17 to 85 years. Patients were followed for a minimum of two years or until their fracture was confirmed as healed, whichever duration was longer. Inclusion criteria were established to ensure consistency and reliability of data: patients had to be aged 17 or older, present with an acute (fresh) closed or compound subtrochanteric femur fracture, and have unilateral fractures. All surgeries were performed by a single experienced orthopedic surgeon. Exclusion criteria ruled out pediatric cases (due to differing fracture management protocols), patients lost to follow-up, those with neurovascular compromise in the ipsilateral limb, and patients with additional fractures in the ipsilateral or contralateral limbs. Additionally, cases with failed previous subtrochanteric fracture fixations and pathological fractures were excluded.

Ethical approval was obtained from the institutional ethics and scientific committees, and informed written consent was collected from all participating patients. Each patient underwent thorough preoperative assessment, which included detailed medical history, physical examination, and radiological imaging. Fractures were classified based

on the AO/OTA system, as well as the Russell-Taylor and Gustilo-Anderson classifications for compound injuries, allowing for precise characterization of each case.

The CBP used was an AO 95° fixed-angle implant made from 316 L stainless steel, available in multiple blade lengths, with the 70 mm blade most commonly used for adults. This implant provides a load-bearing fixation that ensures stability by engaging the proximal femoral segment and securing the diaphysis with multiple interlocking screws, thereby enabling primary healing. The surgical technique involved a standardized approach. Under general or regional anesthesia, patients were positioned supine on a radiolucent operating table. A lateral subvastus approach was used to expose the fracture site, with an incision averaging 17 cm in length. Under fluoroscopic guidance, a two mm Kirschner wire (K-wire) was first placed as a guide, aligning the seating chisel with the femoral neck's anteversion and inclination. A channel was created in the proximal femur using the seating chisel, allowing for the placement of the CBP. The CBP was then inserted, with the blade engaging the proximal femur and the plate fixed distally using 4.5 mm cortical screws. In fractures with comminution, interfragmentary screws were used to stabilize butterfly fragments to the main bone fragments prior to final fixation. Surgical time averaged 50 minutes, with blood loss estimated between 200 to 350 ml; two patients required perioperative blood transfusions due to low preoperative hemoglobin levels.¹¹⁻¹³

Postoperative X-rays were obtained to confirm reduction and alignment. Patients with closed fractures received a single intraoperative dose of a second-generation cephalosporin, followed by two additional postoperative doses. The patient with a compound fracture was managed with broad-spectrum antibiotics for two weeks. All patients followed a standardized rehabilitation protocol, beginning with in-bed mobilization and assisted ambulation on the first postoperative day. Weight-bearing on the operated limb was progressively increased, depending on radiological evidence of healing. Follow-up visits were scheduled at regular intervals: one month, two months, three months, six months, one year, and two years post-surgery or until complete fracture union.

Outcomes were assessed through both functional and radiological evaluations. Functional outcomes were measured both objectively and subjectively. Objective assessments included measurements of hip range of motion, limb length discrepancy, presence of deformities, and pain levels. The subjective functional outcome was assessed using the lower extremity functional scale (LEFS). Radiographic assessments were performed to monitor fracture healing, stability, and alignment, with time to union noted. Complications such as infection, delayed or nonunion, implant failure, and malalignment were documented along with the reoperation rate.

Statistical analyses were conducted using SPSS software version 17.0. The percentage method, Chi-square test, and ANOVA were used to analyze the data, with statistical significance set at $p < 0.05$. Data visualization and tables

were generated using Microsoft Word and Excel, allowing for clear presentation of study results.

Statistical analysis

Statistical analysis using ANOVA and Chi square tests confirmed the comparability of subjective and objective assessments of functional outcomes, with a p -value < 0.05 indicating statistical significance. The positive correlation between LEFS scores and clinical examination outcomes validated the functional effectiveness of CBP in this patient cohort.

The findings demonstrate that CBP osteosynthesis provides stable fixation and reliable union in subtrochanteric femur fractures, with minimal complications and a low reoperation rate. Compared to cephalomedullary nails, CBP offers advantages in achieving anatomical reduction, rotational stability, and preservation of bone stock. This study highlights CBP as an effective alternative for subtrochanteric fractures, particularly in cases where intramedullary devices may pose challenges, such as those with comminution or intertrochanteric extension.

RESULTS

A total of 36 patients with subtrochanteric femur fractures were included in this study, comprising 31 males (86.1%) and 5 females (13.9%). The mean age of the participants was 51.47 years, ranging from 17 to 85 years. The majority of patients (72%) were above the age of 45, reflecting the bimodal age distribution typically seen with these fractures.

Functional outcomes

Objective functional assessment was performed using clinical examination parameters, including hip range of motion, limb length discrepancy, presence of deformities, pain, and gait assessment. At the two-year follow-up, 28 out of 36 patients (77.8%) achieved an excellent, very good, or good outcome. Specifically, 13 patients (36.1%) had an excellent outcome, 5 (13.9%) had a very good outcome, and 10 (27.8%) had a good outcome. Six patients (16.7%) had a moderate outcome, and only 2 patients (5.6%) had a poor outcome.

The subjective functional outcome, assessed using the LEFS, showed comparable results to the objective assessment. An ANOVA test comparing subjective and objective assessments revealed a positive correlation, with a statistically significant p value < 0.05 , indicating consistency between the clinical and subjective outcomes.

Radiological outcomes

Radiographic evaluations revealed that the average time to union was 15.61 weeks, with all patients achieving union. This result aligns closely with other studies on subtrochanteric fractures managed by different fixation

methods, as shown in Table 4 of the study. One patient experienced delayed union and underwent secondary bone grafting at eight months, achieving union by 12 months. Overall, the union rates were comparable to those achieved with cephalomedullary nailing but with fewer complications and a lower reoperation rate.

Complications

The complication rate in this study was low. One patient with a gunshot injury and uncontrolled diabetes developed deep-seated sepsis, which was managed with wound debridement and prolonged antibiotic therapy, eventually leading to successful fracture union. Another patient experienced superficial sepsis, which was treated with a two-week course of intravenous antibiotics, resulting in healing without additional intervention. The incidence of superficial sepsis (2.7%) in this study was significantly lower than the 13.3% reported in other studies using cephalomedullary nails.

Notably, there were no cases of varus malalignment, implant failure, or limb shortening or lengthening greater than one centimeter. Additionally, no patients developed iatrogenic fractures in the femur, a complication sometimes observed with intramedullary devices. The reoperation rate in this study was 5.55%, lower than that reported in similar studies on cephalomedullary nails (up to 20% in some reports).

Comparison with other studies

The average time to radiological union (15.61 weeks) in our study was favorable compared to other studies. Laghari et al. reported an average union time of 20 weeks with a dynamic condylar screw, while Jaura et al. observed a union time of approximately 5.2 months with cephalomedullary nails. These findings suggest that CBP fixation provides a reliable and relatively quick path to union in subtrochanteric fractures.

Table 1: Demographic and clinical characteristics of study participants (N=36).

Characteristics	Number (N)	Percentage (%)	Mean±SD
Gender			
Male	31	86.1	-
Female	5	13.9	-
Age (years)			
17-30	6	16.7	-
31-45	4	11.1	-
46-60	14	38.9	-
>60	12	33.3	-
Side of injury			
Right	18	50.0	-
Left	18	50.0	-
Mode of injury			
Road traffic accident	22	61.1	-
Fall from height	10	27.8	-
Simple fall	3	8.3	-
Gunshot Injury	1	2.8	-
Type of fracture			
Closed	35	97.2	-
Compound	1	2.8	-
Associated comorbidities			
Diabetes mellitus	8	22.2	-
Hypertension	6	16.7	-
None	22	61.1	-

Table 2: Surgical details and radiological outcomes (N=36).

Parameters	Value/number (N)	Percentage (%)	Mean±SD (Range)
Surgical details			
Surgical time (minutes)	-	-	50±8.5 (40-65)
Blood loss (ml)	-	-	275±45.2 (200-350)
Incision length (cm)	-	-	17±2.1 (14-20)
Blade length used (mm)	-	-	70±5.0 (60-80)
Hospital stay (days)	-	-	7.2±2.3 (5-14)

Continued.

Parameters	Value/number (N)	Percentage (%)	Mean±SD (Range)
Radiological outcomes			
Time to union	-	-	15.61±3.42 weeks
<12 weeks	8	22.2	-
12-16 weeks	20	55.6	-
17-20 weeks	7	19.4	-
>20 weeks	1	2.8	-
Union status			
United	36	100	-
Delayed union	1	2.8	-
Alignment			
Anatomical	36	100	-
Varus malalignment	0	0	-

Table 3: Functional outcome assessment and statistical analysis (n=36).

Functional Outcome	Frequency (N)	Percentage (%)	LEFS score Mean±SD	95% CI	Range
Excellent	13	36.1	73.38±11.99	66.14-80.63	46-80
Very good	5	13.9	75.60±1.14	74.18-77.02	74-77
Good	10	27.8	73.10±0.994	72.39-73.81	72-75
Moderate	6	16.7	69.67±1.366	68.23-71.10	68-72
Poor	2	5.6	50.50±2.121	31.44-69.56	49-52
Total	36	100	71.72±8.959	68.69-74.75	46-80

Table 4: ANOVA test results for lefts score verses functional outcome.

Source of variation	Sum of Squares	df	Mean Square	F-value (p value)
Between groups	1056.212	4	264.053	4.669 (0.005)*
Within groups	1753.010	31	56.549	-
Total	2809.222	35	-	-

Note: *p < 0.05 indicates statistically significant difference between groups.

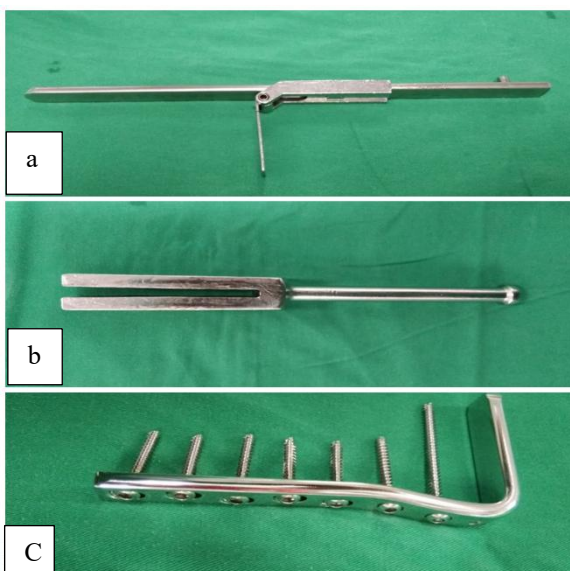


Figure 1: (a) Seating chisel with marking guide, (b) slotted hammer, (c) the 95° angled blade plate assembled with screws.

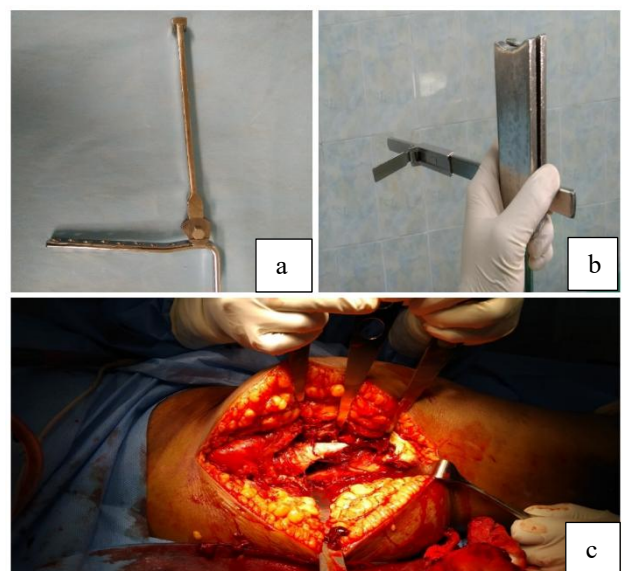


Figure 2: (a) The 95° angled blade plate with handle, (b) seating Chisel with slotted hammer; and (c) lateral approach to proximal femur.

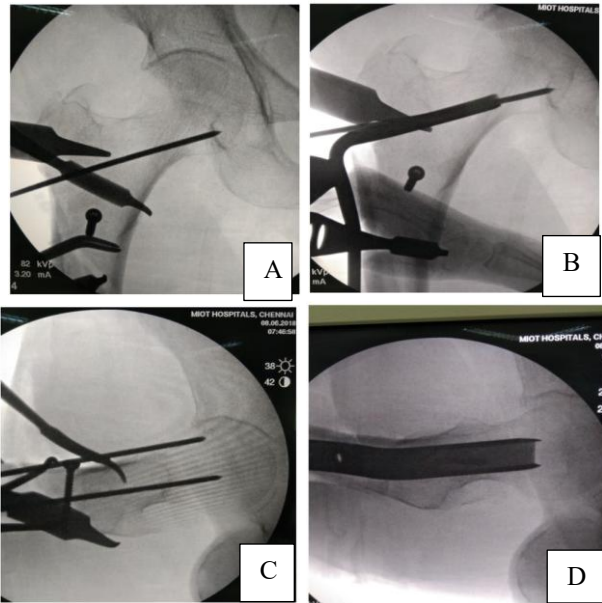


Figure 3: (A) Guide wire placed in proximal femur to mark the intended place of blade (AP view); (B) 95-degree angled blade plate being inserted into proximal femur (AP view), (C) guide wire placed in proximal femur to mark the intended place of blade (lateral view); and (D) 95-degree angled blade plate being inserted into proximal femur (lateral view).

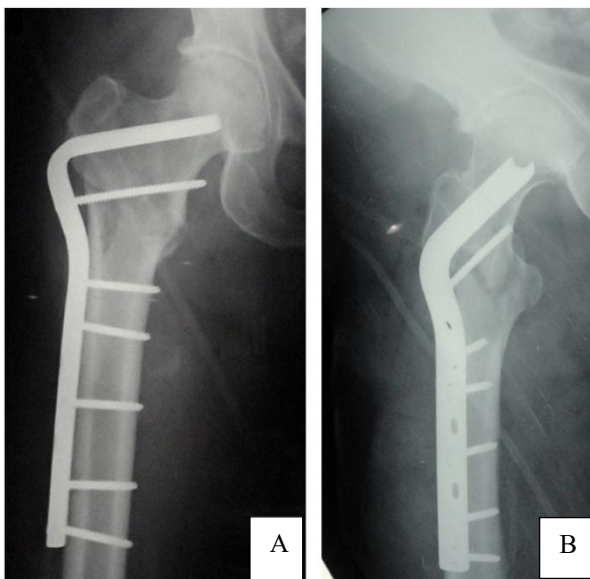


Figure 4: (A) Post operative X-ray of subtrochanteric femur fracture with 95-degree angled blade plate and screws in situ (AP view); (B) post operative X-ray of subtrochanteric femur fracture with 95-degree angled blade plate and screws in situ (lateral view).

DISCUSSION

Subtrochanteric femur fractures are particularly challenging to treat due to the high mechanical loads and poor vascular supply inherent in this region.^{1,2} The

postero-medial subtrochanteric region experiences the highest stresses in the human body due to high compressive forces below the lesser trochanter and tensile forces lateral to it.⁴ The limited vascularity, combined with high biomechanical stress, often contributes to delayed healing, potential malalignment, and the risk of fixation failure if not managed optimally.^{3,10}

Historically, fixed-angle devices such as the CBP and DCS were widely used in treating these fractures.^{5,6} However, with advancements in intramedullary devices- especially the development of cephalomedullary (CM) nails- the use of extramedullary devices like CBP has significantly declined.^{11,15} Despite this, our study findings suggest that CBP continues to offer reliable outcomes for subtrochanteric fractures, demonstrating that this method may still be highly effective and, in some cases, superior to more modern devices.¹²

Functional outcomes

In this study, functional outcomes in patients treated with CBP were favorable overall. Out of the 36 patients, a substantial majority (77.8%) achieved excellent to good functional outcomes, with 13 patients (36.1%) achieving excellent results. These outcomes were further corroborated by the Lower Extremity Functional Scale (LEFS) scores, which showed a strong positive correlation with clinical examination outcomes ($p < 0.05$).¹³ Similar favorable outcomes were reported by Kinast et al. who found that 95° CBP provided excellent functional results in 72% of patients.¹² Boopalan et al. also demonstrated good to excellent outcomes in 75% of their cohort treated with biological condylar blade plating.⁵

Radiological outcomes

Radiologically, the mean time to fracture union in our study was 15.61 weeks, which is competitive when compared with studies using CM nails, where union times often range from 16 to 21 weeks. Laghari et al reported an average union time of 20 weeks for patients treated with dynamic condylar screws, while Jaura et al documented union times of approximately 5.2 months (21 weeks) with CM nails.^{7,9} Baumgaertel et al. reported a mean healing time of 18 weeks in their study on biological osteosynthesis.⁸ This rapid union time observed with CBP in our study suggests that CBP offers a favorable environment for fracture healing in the subtrochanteric region, likely due to its ability to provide stable fixation with optimal load distribution across the fracture site.^{12,15}

Mechanical stability

One of the significant advantages of CBP is its durability and mechanical stability. In our study, we observed no cases of varus malalignment, implant failure, or limb length discrepancy greater than one centimeter. The absence of varus malalignment and implant failure suggests that CBP provides excellent angular and

rotational stability, which is essential in preventing fracture displacement under high mechanical loads.¹² Kinast et al similarly reported zero cases of implant failure in their series of 42 patients treated with CBP.¹² In contrast, studies on CM nails have reported varus malalignment rates ranging from 8-15%.^{3,9,11}

Bone stock preservation

Our study further highlights the advantage of CBP in preserving bone stock. Unlike CM nails, which require reaming of the femoral neck and head, CBP avoids this process, thereby preserving the bone stock of the proximal femur.^{5,12} This feature is especially beneficial for younger patients who may require additional surgeries in the future, as it reduces the risk of femoral head necrosis and maintains options for potential future procedures.¹⁴ Watson-Jones emphasized the importance of maintaining anatomical alignment and bone stock preservation in fracture fixation, principles that CBP effectively fulfills.⁶

Complication rates

In terms of complications, the low incidence observed in this study speaks to the reliability of CBP. Only one patient (2.7%) experienced delayed union, which was successfully treated with secondary bone grafting. The rate of superficial sepsis (2.7%) in this study is markedly lower than the 13.3% reported by Isaac et al. in their study using CM nails.³ Ahmad et al. reported infection rates of 6.25% with long proximal femoral nails, while our study demonstrated a combined infection rate of only 5.5%.¹¹ The lower infection rate may be attributed to the stable fixation provided by CBP and the avoidance of extensive soft tissue disruption.^{5,8}

The reoperation rate in our study was 5.55%, which is considerably lower than rates reported in CM nail studies, where reoperation rates range from 10-20%.^{3,9,11} This suggests that CBP provides durable fixation with fewer mechanical complications requiring revision surgery.

Clinical implications

While CM nails are often preferred due to their less invasive nature and easier learning curve, they present certain limitations, especially in fractures with extensive comminution or intertrochanteric extension.^{10,15} In these cases, closed reduction can be difficult to achieve with CM nails, and open reduction may be required, thus diminishing the 'minimally invasive' advantage of CM nailing. Additionally, our study found that the use of CBP led to a high rate of anatomic reduction, including a stable valgus femoral neck shaft angle, with the implant providing superior control over rotational and angular stability.^{5,12} Jiang et al noted similar challenges with intramedullary fixation in complex subtrochanteric fractures, emphasizing the need for alternative fixation methods in selected cases.¹⁵

Study limitations

Despite the positive findings, the study has limitations. The sample size of 36 patients, while adequate for preliminary analysis, is relatively small. As a case series study, the level of evidence is also limited, and a randomized controlled trial directly comparing CBP to CM nails would provide more definitive data.¹⁰ Furthermore, the study involved a single experienced surgeon performing all procedures, which may not reflect the outcomes achievable by surgeons with varying levels of expertise. CBP is known for its technically demanding nature and steep learning curve, and achieving consistent results with this implant may be challenging for less experienced surgeons.^{12,14}

Future studies should focus on comparing CBP and CM nails in larger cohorts, with a range of surgeons to better understand the scenarios in which CBP may be preferable. Such studies could also examine the long-term outcomes of CBP in different patient populations, including those with osteoporosis or other comorbidities.

CONCLUSION

The CBP remains a highly effective option for treating subtrochanteric femur fractures, providing functional and radiological outcomes comparable to modern cephalomedullary devices. With a high rate of union (mean time of 15.61 weeks), minimal complications, and excellent angular and rotational stability, CBP offers a reliable alternative, especially in complex fractures requiring stable fixation and bone preservation. While CM nails are commonly preferred, CBP's advantages in anatomical reduction and durability suggest it is a valuable tool in orthopedic practice. Further large-scale studies are needed to validate these findings and clarify CBP's role in contemporary fracture management.

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REFERENCES

1. Sassoon AA, Langford J, Haidukewych GJ. Subtrochanteric femur fractures. In: Bucholz RW, Heckman JD, Court-Brown CM, eds. *Rockwood and Green's Fractures in Adults*. Wolters Kluwer; 2015: 2131-2147.
2. Metal on Metal Hip Resurfacing as an Alternative to Total Hip Arthroplasty: A Technology Assessment - Medscape 2000. Available at:

- https://www.medscape.com/viewarticle/730321_5. Accessed on 3 August 2025.
- Isaac J, Krishna V, Kumar R, Shanmugavel. Surgical outcomes of subtrochanteric fractures of femur treated with proximal femoral nail (PFN). *J Evolution Med Dent Sci.* 2016;5(52):3373-7.
 - Thakur AJ. *The Elements of Fracture Fixation.* 3rd ed. New York, NY, USA: Elsevier; 1977.
 - Boopalan PR, Jepeganam TS, Nithyananth M, Venkatesh K, Cherian VM. Functional outcome of biological condylar blade plating of subtrochanteric fractures. *J Orthop Sci.* 2012;17(5):567-73.
 - Watson-Jones R. Operative reduction of fracture. In: Wilson JN, eds. *Watson-Jones Fractures and Joint Injuries.* Elsevier; 1998: 387-388.
 - Laghari MA, Makhdoom A, Pahore MK, Memon A, Memon FA. Subtrochanteric femoral fractures treated by fixation with dynamic condylar screw system. *JLUMHS* 2011;10(3):134-7.
 - Baumgaertel F, Gotzen L. Biological osteosynthesis in multi-fragment fractures of para-articular femur: A prospective study. *Unfallchirurg.* 1994;97(2):78-84.
 - Jaura GS, Gosal G. Management of subtrochanteric fracture femur by proximal femoral nail. *Int J Sci Res.* 2015;4(11):1774-7.
 - Craig NJA. Subtrochanteric fractures: Current management options. *Disabil Rehabil* 2005;27(18-19):1181-90.
 - Ahmad S, Singh R, Ghani A, Muzaffar K, Singh O. Management of subtrochanteric fractures with long PFN: Union rates and functional results. *Int J Cur Res Rev.* 2017;9(9):14-9.
 - Kinast C, Bolhofner BR, Mast JW, Ganz R. Subtrochanteric fractures of the femur: Results of treatment with the 95 degrees condylar blade-plate. *Clin Orthop Relat Res.* 1989;238:122-30.
 - Binkley JM, Stratford PW, Lott SA, Riddle DL. The Lower Extremity Functional Scale (LEFS): Scale development, measurement properties, and clinical application. *Phys Ther.* 1999;79(4):371-83.
 - Foundation AO. Blade plating (subtrochanteric) ORIF (open reduction internal fixation). 2024. Available at: <https://surgeryreference.aofoundation.org/orthopedic-trauma/adult-trauma/distal-femur/basic-technique/orif-blade-plate>. Accessed on 3 June 2025.
 - Jiang LS, Shen L, Dai LY. Intramedullary fixation of subtrochanteric fractures with long proximal femoral nail or long gamma nail: technical notes and preliminary results. *Ann Acad Med Singap.* 2007;36(10):821-6.

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