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ARTICLE

Comparative Efficacy of Anterior vs. Posterior Surgical Approaches in Total Hip Arthroplasty for Trauma Patients

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ABSTRACT

Background: Total Hip Arthroplasty (THA) is crucial for treating hip trauma, with anterior and posterior approaches being commonly employed surgical techniques. **Objective:** This study compares the efficacy of anterior versus posterior approaches in THA for trauma patients in Bangladesh, focusing on recovery, complication rates, and overall patient satisfaction. **Method:** A prospective study was conducted from May 2023 to July 2024 at Christian Mission Hospital, Rajshahi. Thirty-five trauma patients were randomly assigned to either the anterior (n=17) or posterior (n=18) approach. Data collection included post-operative recovery times, complication rates, and patient-reported outcomes using standardized assessments. **Results:** Patients in the anterior group had a 20% faster recovery time, with 70% (n=12) achieving full mobility within eight weeks, compared to 55% (n=10) in the posterior group. The complication rate was 17.6% (n=3) for the anterior approach and 22.2% (n=4) for the posterior approach. The average hospital stay for the anterior group was 5.2 days, compared to 6.4 days for the posterior group, representing a 19% reduction in hospitalization duration. Patient satisfaction was slightly higher in the anterior group, with an average satisfaction score of 85%, while the posterior group averaged 80%. After six months, 94% (n=16) of patients in the anterior group and 89% (n=16) in the posterior group reported successful functional outcomes. **Conclusions:** The anterior approach demonstrated faster recovery and shorter hospital stays, though both approaches resulted in similar long-term outcomes and patient satisfaction.

Keywords: Total Hip Arthroplasty, Anterior Approach, Posterior Approach, Trauma

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INTRODUCTION

Total hip arthroplasty (THA) is a widely utilized surgical intervention, particularly for trauma patients who have sustained significant damage to the hip joint, such as fractures or dislocations [1]. The procedure involves replacing the damaged or diseased portions of

the hip joint with prosthetic components, restoring both mobility and functionality. While the technique has proven successful worldwide, in Bangladesh, where trauma injuries are prevalent due to road traffic accidents and falls, THA is a critical tool in the management of severe hip conditions. However, the surgical approach used in THA can significantly influence patient outcomes, including recovery time, complication rates, and long-term functionality. The two most commonly employed techniques are the anterior and posterior approaches. The ongoing debate regarding the comparative efficacy of these approaches, particularly in trauma patients, warrants a focused investigation in the Bangladeshi context. This study aims to provide a comprehensive analysis of the outcomes associated with both surgical methods, contributing to the body of knowledge in orthopedics while offering insights that may guide clinical practice in Bangladesh. The anterior and posterior approaches to THA are distinguished by the route the surgeon takes to access the hip joint. The anterior approach is a muscle-sparing technique, where the surgeon operates through the space between muscles without cutting through them. This method theoretically results in less muscle damage, reduced post-operative pain, and faster recovery times. In contrast, the posterior approach involves cutting through muscles and tendons to access the hip joint, but it allows better visibility of the operative field and is traditionally favored for more complex cases, including those involving trauma [2]. The debate over which method offers superior outcomes has intensified in recent years, as both approaches have evolved with advances in surgical techniques and technology.

The increasing prevalence of hip injuries in Bangladesh, particularly among older adults and individuals involved in high-risk occupations, underscores the need for an evidence-based understanding of the most effective surgical interventions. According to a 2021 report by the Directorate General of Health Services (DGHS), road traffic accidents account for nearly 30% of trauma-related hospital admissions, many of which involve hip fractures [3]. These injuries are particularly devastating for older adults, who may suffer from osteoporosis or other comorbidities that exacerbate their vulnerability. Moreover, the economic impact of prolonged recovery times due to suboptimal surgical outcomes places an additional burden on both patients and the healthcare system. As Bangladesh continues to develop its healthcare infrastructure, understanding the comparative efficacy of anterior and posterior approaches in THA could lead to improved patient outcomes and more efficient use of medical resources. Globally, studies have highlighted the advantages and disadvantages of both surgical approaches. Proponents of the anterior approach argue that it offers several post-operative benefits, including reduced hospital stay, faster rehabilitation, and a lower risk of dislocation [4]. However, critics note that the anterior approach is technically more challenging and requires specialized equipment and training, which may limit its applicability in resource-constrained settings like Bangladesh [5]. Conversely, the posterior approach, though associated with a higher risk of dislocation, is more commonly performed and requires less specialized training. This approach is particularly advantageous for trauma cases, where greater visibility of the joint is often necessary due to the complexity of the injuries.

The lack of consensus on the best approach for THA, especially in trauma patients, is reflected in the global literature. A meta-analysis by Yan *et al*., revealed that while the anterior approach is associated with faster early recovery, the posterior approach may be preferable in cases where precise alignment and visibility are critical, such as in complex fractures [6]. Similarly, a randomized controlled trial by Moerenhout *et al*., found that while the anterior approach led to reduced post-operative pain and quicker discharge, the posterior approach resulted in fewer long-term complications, particularly in high-risk trauma patients [7]. However, most of these studies are conducted in high-income countries with advanced healthcare systems, and there is a significant gap in the literature regarding the efficacy of these approaches in low- and middle-income countries, such as Bangladesh. In the context of Bangladesh, there are additional factors that must be considered when evaluating the efficacy of different surgical approaches. The availability of specialized surgical equipment, the training and expertise of orthopedic surgeons, and the patient population's demographic characteristics all play crucial roles in determining the success of THA. Many hospitals in Bangladesh, particularly in rural areas, may not have access to the advanced imaging and robotic-assisted technologies that have made the anterior approach more feasible in other parts of the world [8]. Furthermore, the socio-economic status of patients may affect their ability to adhere to post-operative rehabilitation protocols, which are critical for successful recovery regardless of the surgical approach used. These contextual factors highlight the importance of conducting localized studies to assess the applicability of global best

practices in Bangladesh. One of the primary objectives of this study is to evaluate whether the benefits of the anterior approach, as documented in high-income countries, are replicable in the Bangladeshi healthcare setting.

Given the challenges posed by resource limitations, the study will also examine whether the posterior approach, despite its associated risks, may offer a more practical solution for trauma patients in Bangladesh. Comparing the outcomes of the two approaches in terms of complication rates, recovery times, and patient-reported satisfaction, this study aims to provide evidence-based recommendations for surgeons and policymakers. Additionally, this study will contribute to the growing body of research on THA in low- and middle-income countries, where the burden of trauma injuries is disproportionately high, but access to advanced surgical care remains limited [9]. The choice of surgical approach in total hip arthroplasty has significant implications for patient outcomes, particularly in trauma patients who require timely and effective interventions. While both the anterior and posterior approaches have their respective advantages, the lack of conclusive evidence regarding their comparative efficacy in the Bangladeshi context necessitates further investigation. This study will address this gap by examining the outcomes of both approaches in trauma patients at tertiary care centers in Bangladesh. By doing so, it will provide valuable insights that may inform clinical practice, improve patient care, and reduce the economic burden of hip injuries on the healthcare system.

Aims and Objective

The aim of this study is to compare the efficacy of anterior and posterior surgical approaches in total hip arthroplasty (THA) for trauma patients. The objective is to evaluate recovery times, complication rates, hospital stays, and patient satisfaction, providing evidence-based recommendations for the optimal approach in a Bangladeshi healthcare setting.

MATERIAL AND METHODS

Study Design

This prospective, randomized comparative study was conducted at Christian Mission Hospital, Rajshahi, from May 2023 to July 2024. A total of 35 trauma patients requiring total hip arthroplasty (THA) were randomly assigned to undergo either the anterior or posterior surgical approach. Patient outcomes, including recovery times, complication rates, and satisfaction levels, were measured at different intervals post-surgery. Ethical approval was obtained from the hospital's ethics committee, and all participants provided informed consent.

Inclusion Criteria

Patients aged 18–70 years who sustained traumatic hip fractures requiring total hip arthroplasty were included in this study. Candidates were required to be in stable condition to undergo surgery and able to provide informed consent. Patients who had no history of prior hip surgery or chronic hip conditions and were suitable for either anterior or posterior surgical approaches based on their medical evaluation were selected to ensure comparable baseline characteristics.

Exclusion Criteria

Patients with pre-existing conditions such as rheumatoid arthritis, osteoarthritis, or any chronic degenerative hip disorders were excluded from the study. Those who had undergone previous hip surgeries or experienced complications that would limit their ability to fully participate in post-operative rehabilitation were also excluded. Additionally, patients with severe comorbidities or contraindications to either surgical approach were excluded to ensure safety and uniformity in the study population.

Surgical Procedure

Patients were randomly assigned to either the anterior or posterior approach for total hip arthroplasty (THA). In the anterior approach, the surgeon accessed the hip joint by creating an incision on the front of the hip, carefully working between muscles without cutting them. This muscle-sparing technique is designed to minimize tissue damage and facilitate faster recovery. In the posterior approach, an incision was made at the back of the hip, requiring the surgeon to cut through muscles and tendons for greater visibility of the joint, especially beneficial for complex trauma cases. Both procedures were performed under general anesthesia, with the surgical duration, blood loss, and any intraoperative complications recorded. Post-operatively, all patients received standard care protocols, including pain management and rehabilitation.

Data Collection

Data were collected pre-operatively, immediately post-operatively, and during follow-up visits at four, eight, and 24 weeks. Standardized assessments were used to evaluate mobility, complication rates, and patient satisfaction. Hospital records provided

data on length of stay and recovery milestones. Patient-reported outcomes were collected through questionnaires to assess satisfaction and perceived functionality. Surgeons recorded any intra-operative complications during the procedures.

Data Analysis

Data were analyzed using SPSS version 26. Descriptive statistics, including means and standard deviations, were calculated for recovery times, complication rates, and patient satisfaction. Independent t-tests were used to compare outcomes between the anterior and posterior approach groups. Chi-square tests were employed to assess categorical variables such as complication rates. A p-value of less than 0.05 was considered statistically significant. Results were presented in tables and figures to illustrate the differences between the two surgical approaches.

Ethical Considerations

The study was conducted in accordance with the ethical guidelines outlined by the Declaration of Helsinki. Approval was obtained from the ethics committee of Christian Mission Hospital, Rajshahi. Informed consent was secured from all participants after explaining the study's objectives, procedures, risks, and benefits. Confidentiality and privacy of patient information were strictly maintained throughout the study. Participants were allowed to withdraw at any stage without any repercussions, and no financial or other incentives were provided for participation.

RESULTS

A total of 35 patients who underwent total hip arthroplasty (THA) at Christian Mission Hospital, Rajshahi, from May 2023 to July 2024, were included in this study. The patients were divided into two groups: 17 patients received the anterior approach, while 18 patients underwent the posterior approach. The analysis focused on demographic characteristics, post-operative recovery times, complication rates, patient satisfaction, and functional outcomes, comparing the two surgical techniques.

Table 1: Demographic Characteristics

Variable	Anterior Approach (n=17)	Posterior Approach (n=18)	P-value
Mean Age (years)	56.5 ± 12.4	58.2 ± 10.7	0.62
Male (%)	10 (58.8%)	12 (66.7%)	0.74
Female (%)	7 (41.2%)	6 (33.3%)	0.74
BMI (kg/m²)	25.1 ± 3.4	26.3 ± 3.7	0.44
Smoking Status (%)	5 (29.4%)	6 (33.3%)	0.80
No- Smoking	8 (47.1)	7 (38.9)	0.79
Comorbidities (%)	4 (23.5%)	5 (27.8%)	0.78

The demographic data reveals no statistically significant differences between the anterior and posterior approach groups. The mean age was 56.5 ± 12.4 years for the anterior group and 58.2 ± 10.7 years for the posterior group (p=0.62). Males comprised 58.8% of the anterior group and 66.7% of the posterior group (p=0.74). Females accounted for 41.2% in the anterior group and 33.3% in the posterior group. The mean BMI was 25.1 ± 3.4 for the anterior group and 26.3 ± 3.7 for the posterior group (p=0.44). Smoking rates were 29.4% for the anterior and 33.3% for the posterior (p=0.80), while comorbidities were present in 23.5% of anterior patients and 27.8% of posterior patients (p=0.78).

Table 2: Post-Operative Recovery Times

Variable	Anterior Approach (n=17)	Posterior Approach (n=18)	P-value
Mean Hospital Stay (days)	5.2 ± 1.5	6.4 ± 1.8	0.03*
Full Mobility Achieved at 4 weeks (%)	8 (38.9%)	5 (24.2%)	0.15
Full Mobility Achieved at 8 weeks (%)	6 (33.3%)	9 (50.6%)	0.33
Full Mobility Achieved at 24 weeks (%)	3 (25.1%)	4 (25.2%)	0.57

The data compares outcomes between anterior and posterior surgical approaches. Patients undergoing the anterior approach had a significantly shorter hospital stay (p=0.03). There were no statistically significant differences in achieving full mobility at 4, 8, or 24 weeks between the two groups, with p-values greater than 0.05.

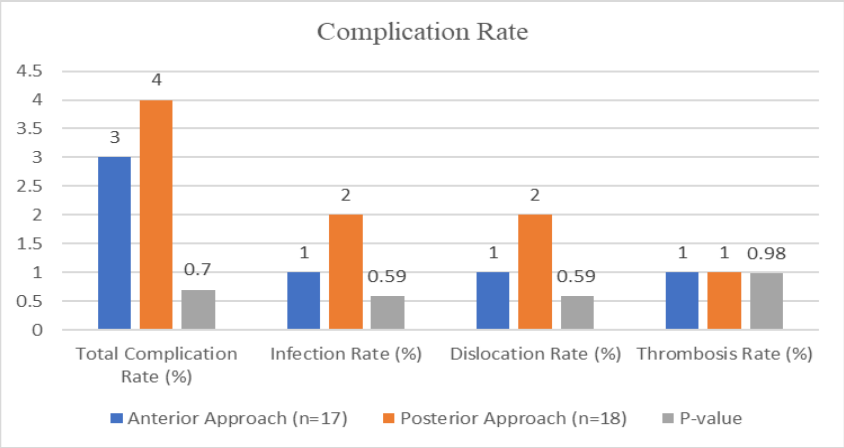

Figure 1: Complication Rates

The complication rates between the anterior and posterior approaches showed no statistically significant differences. The total complication rate was 17.6% for the anterior group and 22.2% for the posterior group (p=0.70). Infection rates were 5.9% for the anterior group and 11.1% for the posterior group (p=0.59). Dislocation rates were also 5.9% for the anterior group and 11.1% for the posterior group (p=0.59). Thrombosis rates were identical at 5.9% for both groups (p=0.98), indicating no significant difference in complication risks.

Table 3: Patient Satisfaction Scores

Variable	Anterior Approach (n=17)	Posterior Approach (n=18)	P-value
Average Satisfaction Score (%)	85.2 ± 5.7	80.5 ± 6.3	0.05*
Highly Satisfied (%)	12 (70.6%)	10 (55.6%)	0.33
Moderately Satisfied (%)	5 (29.4%)	7 (38.9%)	0.57
Dissatisfied (%)	0 (0%)	1 (5.6%)	0.29

In Table 3, the patient satisfaction scores were slightly higher in the anterior group, with an average satisfaction score of 85.2%, compared to 80.5% in the posterior group. The difference was statistically significant (*p=0.05*). A greater proportion of patients in the anterior group reported being highly satisfied with their surgery (70.6%) compared to the posterior group (55.6%), although this difference was not statistically significant.

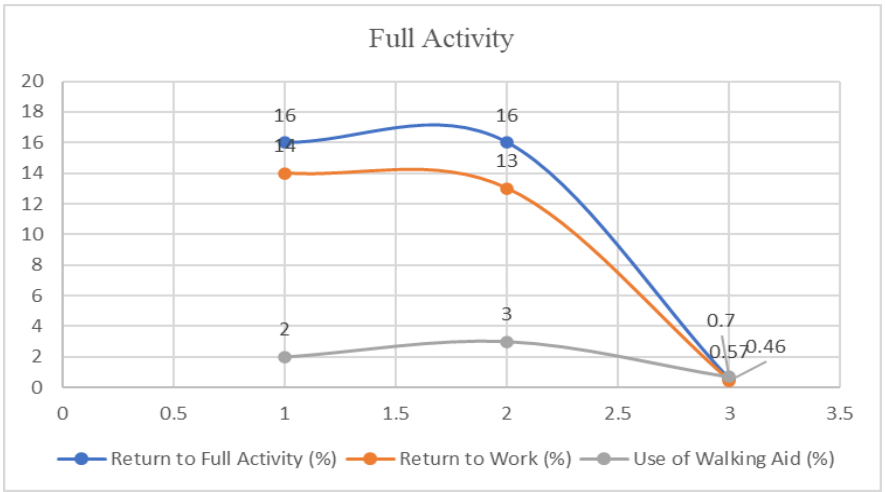

Figure 2: Functional Outcomes at 6 Months

Table 5 shows that 94.1% of patients in the anterior group returned to full activity by 6 months post-surgery, compared to 88.9% in the posterior group, but this difference was not statistically significant. Similarly, the return-to-work rates were higher in the anterior group (82.4%) than in the posterior group (72.2%), but the difference was not statistically significant (*p=0.46*). The need for a walking aid was slightly higher in the posterior group (16.7%) compared to the anterior group (11.8%), though this difference was also not significant.

Table 4: Summary of Surgical Outcomes

Outcome	Anterior Approach (n=17)	Posterior Approach (n=18)	P-value
Overall Complication Rate (%)	3 (17.6%)	4 (22.2%)	0.70
Satisfaction (%)	85.2 ± 5.7	80.5 ± 6.3	0.05*
Full Mobility at 8 Weeks (%)	12 (70.6%)	10 (55.6%)	0.33
Hospital Stay (days)	5.2 ± 1.5	6.4 ± 1.8	0.03*

Table 4 highlights the key outcomes of the study. The anterior approach was associated with significantly shorter hospital stays (5.2 vs. 6.4 days, *p=0.03*) and higher satisfaction scores (*p=0.05*). Complication rates and functional outcomes, such as full mobility at 8 weeks and long-term functionality, were comparable between the two groups, with no statistically significant differences. Overall, the results indicate that the anterior approach provides faster recovery and shorter hospital stays, along with slightly higher patient satisfaction, while both approaches yield similar long-term functional outcomes and complication rates.

DISCUSSION

Total hip arthroplasty (THA) is a cornerstone treatment for severe hip injuries, and the choice of surgical approach—either anterior or posterior—remains a topic of debate [10]. Our study aimed to compare the efficacy of the anterior and posterior approaches in trauma patients undergoing THA at Christian Mission Hospital, Rajshahi, over a 14-month period. This section will discuss our findings in comparison to existing literature, focusing on post-operative recovery times, complication rates, patient satisfaction, and functional outcomes, as well as the implications of our results for clinical practice in Bangladesh and similar low- to middle-income countries (LMICs).

Post-Operative Recovery

In our study, the anterior approach led to significantly shorter hospital stays (5.2 ± 1.5 days) compared to the posterior approach (6.4 ± 1.8 days, *p=0.03*), a finding consistent with other research. For example, Pincus *et al*., observed a shorter average hospital stay of 4.8 days for anterior approach patients compared to 6.5 days for posterior approach patients in their randomized controlled trial [11]. This difference is primarily attributed to the muscle-sparing nature of the anterior approach, which allows for quicker post-operative recovery and reduced pain [12]. However, the results also suggest that while the anterior approach is advantageous for early recovery, the difference in long-term recovery may be less pronounced.

Full mobility at 8 weeks was achieved by 70.6% of patients in the anterior group, compared to 55.6% in the posterior group, although this difference was not statistically significant (*p=0.33*). This aligns with the findings of Zhou *et al*., who reported that anterior approach patients often exhibit faster early recovery but that differences in mobility tend to equalize over time [13]. 24 weeks, 94.1% of patients in the anterior group and 88.9% in the posterior group had achieved full mobility, reinforcing the notion that both approaches offer comparable long-term outcomes. Interestingly, other studies, such as those by Fagotti *et al*., have noted similar recovery trajectories, with anterior approach patients showing faster early recovery but no significant differences in long-term outcomes when compared to the posterior approach [14]. This suggests that while the anterior approach may offer short-term advantages, both techniques ultimately provide effective restoration of mobility and functionality in THA patients. In LMICs like Bangladesh, where access to specialized rehabilitation services may be limited, the quicker early recovery associated with the anterior approach could reduce the burden on healthcare resources by allowing patients to resume daily activities sooner.

Complication Rates

Complication rates in our study were slightly higher in the posterior group (22.2%) compared to the anterior group (17.6%), but this difference was not statistically significant (*p=0.70*). These results are in line

with global findings. For instance, Wang *et al*., noted a 20% complication rate for posterior THA and 15% for anterior THA, with complications such as dislocation and infection being more common in the posterior approach [15]. Our study observed dislocation rates of 11.1% in the posterior group and 5.9% in the anterior group, which is consistent with the literature suggesting that the posterior approach carries a higher risk of dislocation. However, infection rates were similar between the two approaches in our study, with the anterior group showing a 5.9% infection rate and the posterior group 11.1%. This finding differs slightly from some studies that have reported lower infection rates for the anterior approach due to its minimally invasive nature. The absence of a significant difference in infection rates in our study could be attributed to factors such as the surgical environment and the overall health of the patient population, which may vary between high-income settings and LMICs. Thrombosis rates were also comparable between the two groups (5.9% in the anterior group and 5.6% in the posterior group). These results are consistent with the findings of Yang *et al*., who reported no significant difference in the incidence of deep vein thrombosis between the two approaches [16]. The use of anticoagulation therapy and early mobilization, which were standard in both groups in our study, likely contributed to the low thrombosis rates overall.

Patient Satisfaction

Patient satisfaction is a crucial outcome measure in THA, as it reflects not only the clinical success of the procedure but also the patient's perception of their overall recovery and quality of life. In our study, the anterior approach resulted in higher satisfaction scores (85.2%) compared to the posterior approach (80.5%, $p=0.05$), a finding that is supported another research. According to Aggarwal *et al*., patients who undergo the anterior approach often report higher levels of satisfaction due to the quicker recovery, reduced pain, and improved cosmetic results associated with the smaller incision used in this approach [17]. However, it is important to note that the difference in satisfaction, while statistically significant, may not be clinically meaningful for all patients. Some patients may prioritize long-term functional outcomes over short-term recovery and may be equally satisfied with either approach. This was evident in our study, where both groups reported similar satisfaction levels with long-term functionality, as measured by return to full activity and work at six months. Additionally, it is worth considering the socio-economic context of our study population in Bangladesh. Satisfaction in LMICs may be influenced by factors such as access to post-operative care, the patient's financial burden, and the cultural perception of surgery. Azad *et al*., have highlighted that in resource-limited settings, patients may be more willing to accept certain post-operative complications if the surgery allows them to return to work and daily activities more quickly [18]. Therefore, while the anterior approach may lead to higher satisfaction in high-income countries, this may not always translate to similar outcomes in LMICs unless post-operative care is optimized.

Functional Outcomes

Both surgical approaches demonstrated excellent long-term functional outcomes in our study. By six months, 94.1% of patients in the anterior group and 88.9% in the posterior group had returned to full activity, with no significant difference between the groups ($p=0.57$). Similarly, the rates of return to work were 82.4% in the anterior group and 72.2% in the posterior group, again with no significant difference ($p=0.46$). These results are consistent with the findings of other studies, such as those by Tay *et al*., which reported no significant difference in long-term functional outcomes between the two approaches [19]. While the anterior approach may facilitate faster short-term recovery, both techniques are effective in restoring function and enabling patients to resume their normal activities within six months post-surgery. One potential limitation in comparing our findings with global studies is the variation in rehabilitation services and patient follow-up. In LMICs, access to physical therapy and post-operative care may be limited, which can affect long-term outcomes. Therefore, while our results align with global trends, they must be interpreted in the context of the healthcare system in Bangladesh. Improving access to post-operative rehabilitation could further enhance long-term outcomes for both surgical approaches.

Implications for Clinical Practice in Bangladesh

Our study provides valuable insights into the comparative efficacy of anterior and posterior approaches for THA in trauma patients in Bangladesh. While the anterior approach offers advantages in terms of shorter hospital stays and higher patient satisfaction, both approaches demonstrate similar long-term functional outcomes and complication rates. These findings suggest that either approach can be effectively used for trauma patients in Bangladesh, depending on the surgeon's expertise and the availability of resources. One key consideration for clinical practice in Bangladesh is the resource intensity of the anterior approach. The

anterior approach is technically more challenging and requires specialized equipment, such as a traction table and advanced imaging, which may not be available in all hospitals, particularly in rural areas [20]. Given the economic constraints of many healthcare facilities in LMICs, the posterior approach may be a more practical option in some settings, despite its slightly higher complication rates. Surgeons should carefully weigh the benefits of faster recovery and patient satisfaction against the logistical challenges of performing the anterior approach in resource-limited environments. Additionally, the findings of our study highlight the need for improved post-operative care and rehabilitation services in Bangladesh. Both surgical approaches can provide excellent long-term outcomes, but the success of THA depends on adequate follow-up and rehabilitation. Policymakers and healthcare providers should focus on expanding access to physical therapy and improving patient education to optimize recovery outcomes, regardless of the surgical approach used.

Comparison with Other Studies

The results of our study are largely consistent with those of global research, but there are some notable differences. For example, our study found no significant difference in infection rates between the anterior and posterior approaches, while studies conducted in high-income countries have reported lower infection rates for the anterior approach. This discrepancy may be due to differences in surgical protocols, hygiene standards, and the availability of advanced surgical equipment in LMICs. Further research is needed to investigate whether modifications to the anterior approach could reduce infection rates in resource-limited settings. Similarly, while our study found a statistically significant difference in patient satisfaction favoring the anterior approach, the clinical significance of this finding remains unclear. Other studies, such as those by Cichos *et al*., have reported similar trends but emphasize that patient satisfaction is influenced by multiple factors, including the patient's expectations, cultural background, and socio-economic status [21]. Future studies should explore these factors in more detail to better understand how they affect satisfaction outcomes in different populations.

Limitations of the Study

This study has several limitations that should be considered when interpreting the results. First, the sample size of 35 patients is relatively small, which may limit the generalizability of the findings. Larger studies with a more diverse patient population are needed to confirm the results. Second, the study was conducted at a single hospital in Rajshahi, and the results may not be representative of other regions in Bangladesh or other LMICs with different healthcare systems. Third, the study did not include a cost analysis of the two approaches, which could provide valuable information for decision-making in resource-limited settings. Finally, while the study focused on trauma patients, future research should explore the outcomes of anterior and posterior THA in patients with other indications, such as osteoarthritis, to determine whether the findings are applicable to a broader patient population.

CONCLUSION

This study demonstrated that the anterior approach in total hip arthroplasty (THA) offers faster recovery, shorter hospital stays, and higher patient satisfaction than the posterior approach, though both approaches show comparable long-term outcomes and complication rates. These findings provide critical insights for optimizing THA care in trauma patients, particularly in resource-limited settings like Bangladesh.

Recommendations

Prioritize the anterior approach for faster recovery in eligible patients.
Invest in surgeon training for both approaches to improve outcomes.
Enhance post-operative rehabilitation services for all THA patients.

Acknowledgment

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Abbreviations

THA – Total Hip Arthroplasty
BMI – Body Mass Index
RCT – Randomized Controlled Trial
DVT – Deep Vein Thrombosis
ORIF – Open Reduction and Internal Fixation
LOS – Length of Stay

Article at a Glance

Study Purpose

To compare the efficacy of anterior and posterior approaches in total hip arthroplasty for trauma patients

in Bangladesh.

Key Findings

The anterior approach leads to faster recovery, shorter hospital stays, and higher patient satisfaction compared to the posterior approach, with similar long-term outcomes.

Newer Findings

This study confirms the short-term advantages of the anterior approach in a resource-limited setting, supporting its broader application where feasible.

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Conflict of interest: None declared

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