شبكة المعلومات الجامعية

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بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

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علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY

Role of Proximal Femoral Locked Plating for Peritrochanteric Fractures
(Systematic Review & Meta-Analysis)

Submitted for Partial Fulfillment of Master Degree in OrthopedicSurgery

By

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Ahmed Samir Mahmoud Selim

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List of Abbreviations

Abb.	Full term
AVN	*Avascular Necrosis*
CI	*Confidence interval*
DVT	*Deep Venous Thrombosis*
HHS	*Harris Hip Score*
NR	*Not reported*
OR	*Odds Ratio*
PFLCP	*Proximal femoral locked compression plate*
PFN	*Proximal femoral nail*
PPS	*Palmer and Parker score*
RCT	*Randomized controlled trials*
RR	*Relative Risk*
SAEs	*Sever adverse events*
SE	*Standard error*
SMD	*Standard Mean Difference*

INTRODUCTION

Trochanteric fractures have always been known for their complexity and variety. They are described as fractures occurring in the region extending from extracapsular basilar femoral neck region and passing through or below the greater trochanter along the lesser trochanter. [1]

These fractures occur mainly in elderly patients with osteoporosis as a result of low-energy trauma and well known to result in significant morbidity and mortality in such patients. [2]

Individuals above 50 years of age have a lifetime risk of hip fractures and the incidence is 5.6% for men and 20% for women. The incidence of trochanteric fractures is also increasing among younger population mainly due to high energy trauma with the increase in road traffic accidents. [3,6]

Complications secondary to these injuries produce significant morbidity and include non-union, malunion, decubitus ulcers, fat emboli, deep venous thrombosis, pulmonary embolus, pneumonia, myocardial infarction, stroke,infection, and death.[4]

The treatment has evolved and changed over a period of time, from conservative to operative, from extramedullary to intramedullary devices, from open reductions and fixations to newer minimally invasive techniques. It is well evident that new fixation devices are sought to improve the outcome of these injuries. No implant is universally fit for these fractures due to

it‟s variable configuration and the best method of surgical fixation is still debatable. [4]

The challenging goal in management of peritrochanteric fractures is to achieve anatomical reduction with a stable fracture fixation, early mobilization and low morbidity. [5]

The proximal femoral locking compression plate (PF-LCP) was introduced as a new implant for the treatment of complex comminuted intertrochanteric, subtrochanteric, osteoporotic stress fractures and revision surgeries. [5]

AIM OF THE WORK

This systematic review aims to evaluate the efficacy of proximal femoral locked compression plate in peritrochanteric fractures as regard it's indications, functional, radiological outcomes and possible complications

REVIEW OF LITERATURE

Pertrochanteric femoral fracture is a recent description of trochanteric fractures according to AO/OTA classification compendieum. [9] They are one of the most common fractures in old patients. They involve both the greater and/or lesser trochanter and are a type of extracapsular ftractures. [7]

Several classification systems for Pertrochanteric fracture have been proposed, but none has shown sufficient reproducibility to warrant wide spread adoption [8].

Trochanteric fractures, like the majority of hip fractures in the elderly, most commonly occur following a lateral fall with impact on the greater trochanter [9], with the overall Pertrochanteric fracture risk, severity, and prevalence of unstable fracture morphologies correlating with the severity of trochanteric osteoporosis [10]. Although impact direction has been shown to affect the overall risk of hip fracture, there is no clear correlation between impact direction and fracture location or morphology [11].

Pathophysiology:

These fractures are usually a result of a ground-level fall in the elderly population and are classified as either stable or unstable. Determination of stability is important as it helps determine the type of fixation required for stability. Stable fractures have an intact posteromedial cortex and will resist compressive loads once reduced.