Femoral Neck System In Neck of Femur Fracture – Seremban Experience. Case series.

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INTRODUCTION:

Elderly patients are more prone to have femoral neck fracture (FNF) compared to young adults. Guidelines to determine treatment options are Pauwel's angle and Garden's classification. Femoral neck system (FNS) is a novel internal fixation system designed with improved angular stability and rotational stability[1]. We aim to reflect the possible modifiable factors in achieving favorable outcome.

METHODS:

Total of 10 patients with FNF underwent surgery using FNS. Leadbetter technique was performed for reduction with patient on traction table. Under fluoroscopy guidance, guide wire inserted to aim optimum Tip apex distance. Final placement and positing assessed via fluoroscopy. Patient's outcome was assessed clinically with assessment of plain to look for union and AVN changes.

RESULTS:

Age Distributions (Years)	**0-20**	**21-40**	**41-60**	**61-80**
	1	**2**	**6**	**1**
Pauwel's Angle (Degree)	**<30°**	**30-50°**	**>50°**	
	2	**1**	**7**	
Garden's Classification	**I**	**II**	**II**	**IV**
	1	**1**	**3**	**5**
Reduction method	**Closed**		**Open**	
	10		**0**	

OUTCOME:

Period / **Outcome**	**Number of Patients**	
	<6months	6-12 months
Implant failure		**2**
Non-union		**3**
Union	**5**	

** All patient developed avascular necrosis of hip eventually.

DISCUSSONS:

Literature reviews has various stand on method of fixation for neck of femur fracture to facilitate good clinical outcome aided by various meta-analyses and randomized controlled trials. However, there is no significant evidence that one technique is superior to the rest as the late sequala of outcome are similar. One salient component which is reproducible in all methods is anatomical reduction and stable fixation. Anatomical reduction regardless of technique with stable fixation is the key to favorable outcome.

CONCLUSION:

Open reduction method in conjunction with FNS promises more favorable outcome in high Pauwel type and Garden type 4 fractures in all age group[2].

REFERENCES:

1.Rajnish RK et al. Journal of Orthopedics. 2022
2.Stoffel et al Journal of Orthopedics Trauma. 2016