

Chapter 1

INTERTROCHANTERIC FEMORAL FRACTURES AND TREATMENT PRINCIPLES

Mesut MISIRLIOĞLU¹

Hip fractures are one of the most important public health problems encountering orthopedics and traumatologists. Fractures in the region between the large trochanter and the small trochanter are called intertrochanteric femur fractures classically, (IFF). Almost half of the fractures in the hip area are IFF's. Femoral calcar is an intramedullary trabecular bone thickening that starts from the compact bone at the distal part of the trochanter minor and extends into the trabecular spongy structure of the femoral neck. Between the femoral neck and body, there is femur inclination angle of $130 \pm 7^\circ$. Also there is an anteversion angle of $10.4 \pm 6.7^\circ$ at transverse plane forwardly between the femoral neck and the epicondylar plane through the distal femur condyles. These angles are gradually decreasing as the age increases from birth and the loading to the hip(1).

A-Incidence

The number of IFFs are increasing gradually depending on the average life expectancy. Compared with intracapsular femoral neck fractures, IFFs are seen in older people. Most of the hip fractures are seen in over 65 years of age, female patients with osteoporosis, systemic diseases and low motor activity. The reason why IFFs are more common in women, osteoporosis and similar metabolic bone diseases in women more often and women live longer than men(2).

The blood supply to the femoral head after IFF, is rarely damaged. The rate of nonunion and avascular necrosis is low in the IFF because of the fact that the intertrochanteric region is a metaphyseal region and the blood supply is also good. In elderly patients followed up with conservative treatment, complications caused by malunion and long term confined to bed (pressure

¹ Dr.Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital, Orthopedics and Traumatology, Başaşıstan Dr. Email: mesutmisirlioglu@gmail.com,

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