

Interview with Dr. Martyn J Parker, UK

Head preserving solution for medial femoral neck fractures – Targon® FN



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Mr. Parker, what was your motivation for developing this new implant with Aesculap?

Internal fixation of an intracapsular hip fracture has always been an operation fraught with complications. Conventional fixation implants will often fail to hold a displaced fracture in its reduced position to allow the fracture to heal. This occurs in approximately a third of displaced fractures.

The Targon FN has been specifically designed to try to reduce the occurrence of these fracture healing complications. It combines the advantages of the two most commonly used implants to fix this fracture that is the sliding hip screw (SHS) and multiple cancellous screws. The SHS has the advantage of allowing some collapse to occur at the fracture site because of its dynamic sliding ability. In addition the side plate provides good fixation of the distal side of the fracture. Both these attributes are incorporated into the Targon FN.

What do you consider outstanding features of Targon FN?

Multiple cancellous screws have the advantage of achieving a good fixation on the femoral head and linking two or more screws together with a locking side plate provides rotational stability. The Targon FN has the capacity for two, three or four cancellous screws to be accurately positioned within the femoral head. Other advantage of the Targon FN is the implant is made of Titanium, allowing MRI or CT scans of the femoral head to be undertaken. In addition the alignment jig for the implant makes the insertion technique easier with minimal surgical exposure of the femur.

For which indications is Targon FN suitable?

The current indications in our unit for the Targon FN are

- Undisplaced intracapsular fractures
- Minimally displaced intracapsular fractures

- Displaced intracapsular fractures in the young (aged less than approximately 70 years)
- Displaced intracapsular fractures in males (male patients have less fracture healing complications than women)
- Displaced intracapsular fractures in the very frail (those patients in which the more extensive procedure of replacement arthroplasty may be associated with a higher mortality or morbidity)

Can you briefly summarize your clinical results with this new implant?

The implant has been available for us since 2006. To date 327 consecutive patients have been treated in our unit with this implant with a minimum follow-up period of four months. The mean age of the patients was 77 years (range 22-103), 41% were male. Mean length of surgery was 46 minutes and the mean operative blood loss was estimated to be 132 mls. For the 114 undisplaced fractures non-union has occurred in three cases and avascular necrosis in two cases. For the 213 displaced fractures non-union occurred in 25 cases (12%), avascular necrosis in 10 patients (5%) and secondary fracture around the implant in 5 of cases (2%).

Overall our results for Targon FN to date indicate a complication rate of about a third of the previous contemporary implants that we used at our centre. These results suggest that the Targon FN may be a significant advance in the treatment of this difficult fracture.

Thank you very much for this interview.