

## Angle Condylar Blade Plate: Ancient But Not Forgotten

Hanif K, Irwan MA, Hudzairy A, Arnee W

*Orthopedic Department Hospital Sultanah Nora Ismail, Batu Pahat Johor.*

### Introduction

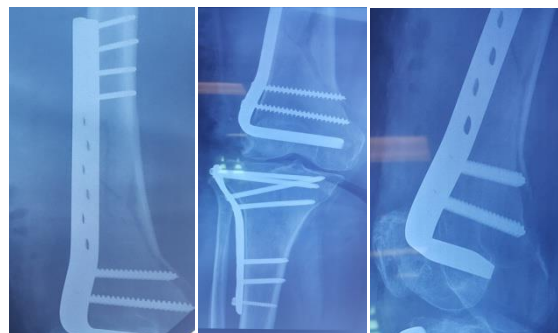
Angled Condylar Blade Plates have been introduced in the 1960s by the AO and belong still to surgeons basic armatorium, They are used for fracture fixation, revision surgery and correction osteotomies. As the our knowledge grew, several other option of fixation devices where develop for the femur fracture. They are more convenient however more costly. These is why the knowledge of angle blade plate should be remembered and to be kept as viable option for certain cases.

### Material

We are presenting a series of retrospective case report where by angle condylar blade plate was chosen as a fracture fixation device, their post operative outcome and long term recovery. The main outcome measured was union, and the secondary outcome measured was revision surgery, rate of infection, nonunion, and operating time. Infection was considered present with or without evidence of an organism, if antibiotics or debridement were deemed necessary. Non-union was defined as the absence of bridging callus on 2 radiographic views 9 months after injury. Fixation failure was defined as migration or failure of the implant, or loss of reduction deemed to require revision surgery . Operating time is divided into less or more than 2 hour of operating time (skin to skin) without any other additional procedure.

### Result

6 cases was reviewed, each was chosen base on the choice of fixation device (angled condylar blade plate). Out of all the cases, 5 was a proximal femur fracture and 1 was a distal femur fracture. All cases were fixed with either angle condylar blade plate or a reversed angle condylar blade plate. Out of 5 cases, all cases were had achieved union within 6 month post internal fixation, while only one of them is the currently on our regular follow up as the patient just underwent the operation recently.



Non of them underwent revision of surgery, and one had develop superficial soft tissue surgical site infection (non communicating with fracture site) , and was treated accordingly with antibiotics and later required debridment to control the infection. This correlates with the operating time as 5 is done within the 2 hour marks and the rest was not.

### Discussion

Angled condylar blade plate was design almost 60 years ago. The used of these technique is time-honoured and has a proven efficacy especially in good non osteoporotic bone. They serve as a tension band plate whenever possible. Due to their fixed-angle shape, successful application needs careful planning, concise orientation in all planes (AP and lateral views, rotation) and precise preparation of the channel for the blade.(1) The disadvantages is that it is not a very forgiving implant and there are risk of lost of fixation and even cut out in an osteoporotic bone. It also may require a large operative wound that may lead to unwanted soft tissue stripping.

### Conclusion

We had made a lot of advancement in the field of periarticular fracture fixation, and nowadays it is very seldom that the angled condylar blade plate is being chosen as a device of choice. They very technically demanding and requires high level of attention to details. Nevertheless it have proven to effective device if its was given to the capable hand. It may still serve as a viable option in certain case and its certainly gave some nostalgic sentiment to all of us.

### Reference

(1) Angled blade plate for adults, Surgical technique  
Deputy Synthes [www.depuysynthes.com/ifu](http://www.depuysynthes.com/ifu)