Hip fracture management

DR HAGOP **KIYORK** *MBBS(UNSW) FRACS(ORTH) FAOA*

Dr Kiyork is an orthopaedic surgeon with a particular interest in surgery of the hip and knee joints. He performs hip and knee replacement as well as knee arthroscopy and reconstruction. He can offer MAKO robotic surgery as well as direct anterior approach hip replacement. In addition he treats trauma, fractures and sports injuries. P: 8488 9918 W: orthosurgery.com.au

Hip fracture is a common and complex injury that is estimated to occur in 19000 Australians over the age of 50 each year. The majority of patients with hip fractures are however over 65. The diagnosis is often associated with elderly patients with complex and at times life threatening co-morbidities. The treatment of the fracture is but one part of a multidisciplinary approach, which involves medical, nursing, physiotherapy and rehabilitation personnel to achieve the best possible outcome for the individual patient. Involvement of the patient's general practitioner is also extremely important for the transition out of hospital or rehabilitation unit as well in helping prevent future fractures.

In September 2016 the Australian Government with the Australian Commission on Safety and Quality in Health Care and the Health Quality & Safety Commission New Zealand released the document "Hip Fracture Care Clinical Care Standard ".

This useful document serves as an excellent framework to help standardise and deliver care for this difficult injury.

It is summarised into seven quality statements. These statements deal with treatment from presentation to discharge as well as aftercare.

Hip fracture patients require prompt assessment on presentation. If a fracture is suspected, appropriate imaging studies should be performed promptly. Pain relief should be adequate and any other injury excluded. A medical cause for a fall and any other significant co-morbidities should be identified. Cognitive impairment should be identified as well as risks factors for delirium along with any potential preventative measures.

A physician should be involved early, preferably at presentation and an orthogeriatric model of care instituted. This is to manage medications, co-morbidities and optimise the patient before surgery. Identification of post-operative goals and instituting pathways to achieve these can begin as early as possible.

With regards to timing, if indicated and after informed consent is given, surgery should ideally be done within 48 hours of presentation. This is however contingent on fitness for surgery. Antibiotic and thromboprophylaxis should be utilised as per guidelines.

Generally speaking a displaced intra-capsular fracture will require an arthroplasty. For a more ambulant patient, a total hip arthroplasty is often appropriate and for the lower demand less ambulant patient a hemi-arthroplasty. An impacted or undisplaced intra-capsular fracture can generally be internally fixed. There may be exceptions however to these principles, such as a very young patient with a displaced intra-capsular fracture. Either an intra-medullary device or a dynamic hip screw and plate can successfully treat an inter-trochanteric fracture. The choice of appropriate operation and device is based on the surgeon's assessment of each individual patient.

If possible the patient should be allowed to weight bear as tolerated on the day following the surgery. This depends on the condition of the patient as well as the fracture. This important part of the patient's treatment requires physiotherapy staff to be present and available.

The last two quality statements from the Clinical Care Standard refer to minimising the risk of further fracture and transitioning out of hospital. In terms of avoiding refracture, education, strengthening programs and perhaps medication can all play a part. Again this requires the involvement of the physician, physiotherapist and the rehabilitation physician if appropriate.

The seventh and last quality statement refers to transitioning from hospital. This involves a plan that is clear and has specific goals. The patient's general practitioner needs to be kept informed and involved - preferably within a day or so after discharge. Any changes to medications or new medications should be passed on as well mobilisation goals, wound care and the recommendations for further fracture prevention.

In summary, fractured hip is a common problem posed to orthopaedic surgeons. As surgeons, our methods and techniques have evolved and improved to a point where most patients can mobilise and weight bear the following day. The operation is but one part of the patient's road to recovery. The involvement of a physician, rehabilitation staff, physiotherapist and others is vital to returning the patient to the pre-injury level of function, which is, after all, the goal.

References available on request.

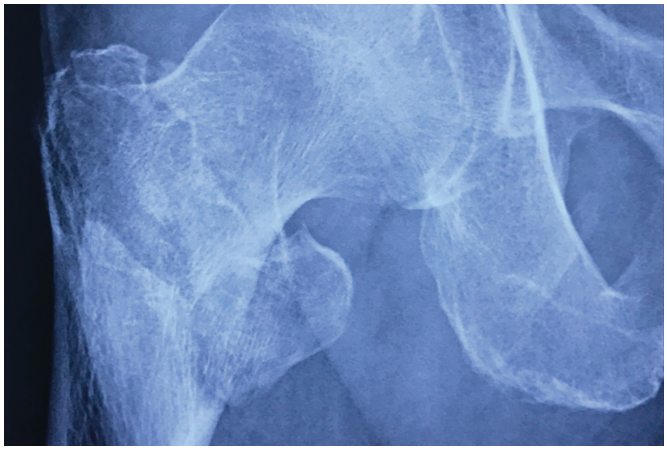

Figure 1. Hip fracture

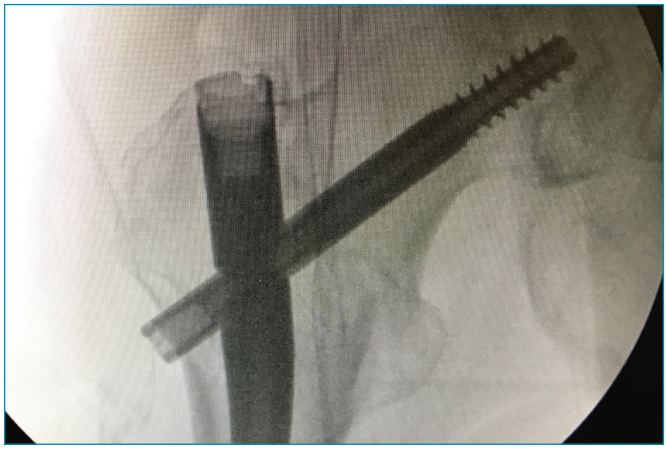

Figure 2. Post op image