

## **Hip Fracture Fixation**

### **Introduction**

- Common hip fractures are mainly divided into Intracapsular femoral neck and intertrochanteric fractures
- Common in elderly because of osteoporosis and they tend to fall more often
- Most patients are treated by operative management, which allows early mobilization. This is especially important for geriatric patients because prolonged bed rest will increase the chance of other morbidities like:
  - Chest infection
  - Urinary tract infection
  - Pressure sore
  - Deep vein thrombosis complicated by pulmonary embolism which can be life-threatening
- Non-operative management is appropriate in only a small group of elderly patients who are:
  - Non-ambulators prior to fracture and the fracture caused minimal discomfort, or
  - Those who are medically unfit for surgery

### **Intended Benefit**

The primary goal is reduce pain and resume mobility.

### **The Procedure**

The internal fixations of hip fractures are mainly divided into 2 kinds:

- Femoral neck fractures:
  - Patient is put under anesthesia (general / spinal)
  - Patient is put on a traction table for fracture reduction under X - ray
  - Incision is made over lateral side of upper thigh
  - Reduction is made and screws are usually inserted
- Intertrochanteric fractures:
  - Patient is put under anaesthesia (spinal/general)
  - Patient is put on a traction table for fracture reduction under image intensifier
  - Incision is made over lateral side of upper thigh
  - A sliding hip screw or intramedullary nail is usually used for fixation

### **Risk and Complication**

#### ***General***

- Wound infection
- Deep vein thrombosis, pulmonary embolism, MI, CVA
- Blood loss

### **Specific Complications**

- Fixation Failure, implant cut out from osteoporotic bone
- Delay union, malunion, nonunion
- Avascular necrosis of femoral head in intracapsular fractures, secondary osteoarthritis
- Fracture, nerve and blood vessels injury leading to paralysis or loss of limb (extremely rare)
- Leg length difference
- Persistent limping and the use of walking aids
- Deterioration of pre-existing disease leading to worsening of symptoms
- Additional procedures: extra-procedures or treatment may be required if complications arise

### **Before the Procedure**

- Treat and optimize existing disease conditions, e.g. ischemic heart disease, hypertension, diabetes mellitus, anemia, lung disease
- Fasting few hours before the procedure

### **After the Procedure**

- A drain may be inserted, it will be removed within few days after the operation
- Patient is allowed to walk with walking aids supervised by physiotherapist
- The weight allowed to put on the injured limb depends on fracture stability
- Off stitches at about 2 weeks after operation

### **Alternative Treatment**

- For debilitated patients, patients who are medically unfit for surgery or have very poor soft tissue condition, they can be treated conservatively by:
  - Adequate analgesics
  - And / or Traction
- However, complications like pneumonia, urinary tract infection, bed sores or deep vein thrombosis are more likely in prolonged bed-bound patients

### **Follow Up**

- You should keep your wound clean and dry
- You must follow instructions strictly on taking medication, see the doctor as scheduled
- If you have any excessive bleeding, collapse, severe pain, fever or signs of wound infection such as redness, swelling or large amounts of discharge, see your doctor immediately or attend the nearby Accident and Emergency Department

### **Remarks**

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. The actual risks may be different for different patients. During the operation, unpredictable condition may arise, and additional procedures may be performed if necessary. For further information, please contact your doctor.