

## **Original Article**

### **Management of Intracapsular Femoral Neck Fractures in Adults Younger Than 65 Years**

治療六十五歲以下之成年人關節囊內股骨頸骨折之研究

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#### **Abstract**

**Purpose:** The study is to review the results of intracapsular femoral neck fractures in young adults (age<65) treated with reduction and multiple-screw fixation from 2000 to 2007.

**Method:** Sixty-four consecutive patients were reviewed retrospectively. The mean age of the patients at the time of injury was 53.5 (32–65) years old. All fractures were either closely or openly reduced and fixed with three 7.5-mm cancellous screws. The mean follow up period was 36.8 months (6–100).

**Results:** We found that 9 of 64 (14.1%) patients developed osteonecrosis of femoral head on follow up. Displacement of fracture (Garden classification), initial stability of fracture pattern (Pauwel classification), and quality of reduction (Haidukewych grading) were found to have significant effect on the development of osteonecrosis, whereas the effect of patient age, time lapse of surgery, capsulotomy, hip aspiration, and postoperative weight bearing regimen were not statistically significant.

**Conclusion:** Fracture pattern and quality of reduction govern the fate of the femoral heads in young adults with their intracapsular femoral neck fractures fixed with screws.

#### **中文摘要**

這研究回顧了由 2000 年至 2006 年，所有在本院小於 65 歲患有關節囊內股骨頸骨折的成年病人接受了復位及多枚螺絲固定手術，共有連貫的 64 位病人被歸納在這個回顧性的調查。該組病人在受傷時的平均年齡為 53.5 歲。所有骨折經封閉式或開放式復位後，再以 3 枚 7.5mm 螺絲固定。病人的平均跟進期為 36.8 個月。64 位病人中有 9 人出現股骨頭壞死。骨折移位 (Garden 分類法)、骨折形態的穩定性 (Pauwel 分類法) 及復位的質量 (Haidukewych 分類法) 對股骨頭壞死的出現有顯著的影響。可是病人的年齡、手術的延時性、關節囊切開術、髖關節抽吸及術後負重活動方式均對股骨頭壞死的出現在統計學上無顯著差異。

**Keywords:** *femoral neck fractures, osteonecrosis*