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Commentary: Dynamic hip screw fixation versus multiple screw fixation for intracapsular hip fracture

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As the elderly population increases, the incidence of fragility hip fracture also increases. By 2050, the incidence is predicted to be around 4.5 million.¹ Treatment of intracapsular hip fractures depends on many factors including patient age, fracture pattern, degree of fracture displacement and comorbidities. For younger patients (<65 years of age), the femoral head should be preserved using an internal fixation method, either multiple screw fixation or dynamic hip screw (DHS), to avoid any long-term complication of arthroplasty.² For elderly patients, both internal fixation methods are suitable for non-displaced intracapsular hip fractures. Nonetheless, arthroplasty is preferable for displaced intracapsular hip fractures because of a lower reoperation rate and better functional outcome.³

In this issue, Jettoo et al.⁴ compared DHS fixation with multiple screw fixation for intracapsular hip

fractures in terms of complications and conversion to hemiarthroplasty or total hip arthroplasty. DHS fixation resulted in more medical complications than multiple screw fixation, whereas multiple screw fixation was associated with a higher conversion rate to arthroplasty. DHS fixation has more disadvantages related to soft-tissue stripping and blood loss.^{5,6} It is important to emphasise that the reasons for revision surgery are multifactorial and not due to the implant/fixation method alone.^{7,8} Accurate fracture reduction is a prerequisite to satisfactory bone union.⁹

It is worth noting that the study by Jettoo et al.³ was a retrospective review based on hospital data. The fracture classification, degree of fracture displacement, and bone quality were not clearly documented. The evidence was not sufficient to support the superiority of DHS fixation over multiple screw fixation in treating intracapsular hip fractures.

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