

The Utility of Post-Operative Hip Radiographs in Patients Treated with Hip Hemiarthroplasty for Femoral Neck Fractures

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Background: Patients treated with hip hemiarthroplasty for low energy femoral neck fractures routinely undergo hip radiographs at each postoperative clinic visit regardless of history and examination findings. No studies to date have evaluated the effectiveness of this accepted practice. The goal of this study was to identify the postoperative utility of both history and examination (H/E) and hip radiographs in the treatment course of patients treated with hip hemiarthroplasty for low energy femoral neck fractures.

Methods: A retrospective chart review was performed on consecutive patients treated with hip hemiarthroplasty for low energy femoral neck fractures. An abnormal history and examination (H/E) and hip radiographs as well as a change in treatment course were recorded at each clinic or emergency department visit.

Results: Five hundred and eighty-three patients met inclusion criteria, consisting of 1,177 clinic and 50 ED visits. An abnormal H/E alone changed treatment course in 28 (3%) clinic visits and 18 (36%) ED visits. An abnormal H/E and the presence of an abnormal hip radiograph changed the treatment course in 23 (2%) clinic visits and 18 (36%) ED visits. An abnormal radiograph in the presence of a normal H/E did not lead to a change in treatment course. In only one case - 0.3% of abnormal radiographs or 0.08% of 1177 clinic visits - did an abnormal hip radiograph change treatment course in the setting of an abnormal H/E within 6 months from surgery.

Conclusion: Abnormal radiographs do not change treatment course in the presence of a normal H/E. Hip radiographs obtained in clinic within 6 months of surgery rarely lead to a change in treatment course and thereby are a source of excess cost and radiation exposure to the patient.