Title: Assessment of care given to patients with incident fragility hip fracture admitted to a tertiary care facility in Sri Lanka

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Objective: This study assessed the state of current care given to patients admitted with low energy hip fracture to a tertiary care center in Southern Sri Lanka.

Material and Methods: Consecutive patients with an incident hip fracture (within 30 days) admitted to Teaching hospital, Karapitiya in Southern Sri Lanka were included in the study. Fractures resulting from major trauma, falls from heights, pathological fracture and readmissions due to the same fracture were excluded. Patients were observed during the hospital stay and until 3 months post discharge and data were collected using a pre-designed questionnaire.

Results: There were 469 patients (339 women) admitted during study period and the sites of fracture were intertrochanteric (41%), femoral neck (39%) and subtrochanteric the rest. The mean (SD) age of patients was 76.6 (9.6) years and the time from injury to admission to hospital (median and IQR) was 1 (1-7) days. Surgery was performed in 236 (51%) patients while others were managed conservatively (non-surgical). The median (IQR) time from admission to operation was 11 (7-21) days. The mean (IQR) duration of hospital stay was 11 (3-14) and nearly one third of patients developed complications while in the hospital. Patients who underwent surgery had less complications (32% with one complication or more) compared to those managed conservatively (68% with one complication or more) ($p<0.001$). No difference was found in the in-hospital mortality between patients who were managed surgically and non-surgically but mortality at 3 month was lower among those who underwent surgery (3.7% vs 5.6%, $p<0.001$). Patients managed surgically had higher physical independence (mean Barthel index 89.1 and SD 17.6) compared to those managed non-surgically (mean Barthel index 67.9 and SD 29.6) and the difference was significant ($p<0.001$).

Conclusions: A substantial delays in admission and operation of patients after hip fracture was observed. High proportion of patients was managed non-surgically and this was associated with higher mortality and physical dependence at 3 months post, discharge.

Key words: Barthel index, care gap, hip fracture, Sri Lanka