Clinics in Surgery

Letter to the Editor
Published: 27 Apr, 2020

Perforation of the Cecum after a Simple Fall

Ami Schattner and Ina Dubin*

Department of Medicine, Laniado Hospital, Hebrew University and Hadassah Medical School, Jerusalem, Israel

Letter to the Editor

Ground-Level Falls (GLF) in elderly patients are exceedingly common and the ER physicians' chief concern are fragility fractures and traumatic brain injury. However, significant internal trauma may be associated with GLF and due to its rarity and occult nature, a delay in diagnosis may occur. An 89-year-old independent-living woman was brought to the ER after a simple fall at home 2 days prior and back pain. She had no previous admissions but had obesity, hypertension (on ramipril/lercanidipine) and osteoporosis (on calcium/vitamin D).

Vital signs and laboratory tests, ECG, and chest X-ray were normal excepting neutrophilia. CT revealed compression fracture of L1 and kyphoplasty was planned. While preparing her for surgery, a surgical abdomen was suspected. X-rays and ultrasound showed abundant free air and laparotomy was done instead revealing a minute cecal perforation which was sutured.

Two day later, peritonitis developed and a second laparotomy was performed. Purulent ascites was found especially at the right lower quadrant (growing *pseudomonas*, *enterococci*, *enterobacter*) and right hemicolectomy/ileostomy were done. The pathology specimen showed several perforations and ischemic necrosis of the ileo-cecal bowel and peritonitis. The patient developed multi-organ failure but eventually recovered.

The spectrum of serious internal injury that may be associated with simple, ground-level falls in community-dwelling elderly patients is wide but remains largely unknown due to its rarity. However, with increasing longevity and accumulating comorbidities, the incidence of GLF is steadily increasing. It is estimated that nearly 30% of community-dwellers over the age of 65 experiences one or more falls every year [1], thus, even rare outcomes may be encountered by emergency, trauma and even primary care physicians.

Ground-level falls have been associated with splenic rupture, isolated gallbladder rupture, ruptured urinary bladder, and perinephric hematoma [2]. Small intestinal perforation had also been noted after GLF in community-dwelling seniors [3]. However, among approximately 200 abstracted publications in English mentioning "perforation" and 'cecum' in elderly patients (PubMed) the major aetiologies are malignancy, diverticulitis and infection (the latter especially in the tropics). An association with a simple fall had not been previously reported. We conclude that serious internal trauma including intestinal perforation should be recognized among the rare but possible adverse outcomes of ground-level falls in the elderly [3], and the recommendation for a "pan-CT scan" [4] may be a useful approach allowing a more timely diagnosis in the ER.

References

1. Liu-Ambrose T, Davis JC, Hsu CL, Gomez C, Vertes K, Marra C, et al. Action seniors!-secondary falls prevention in community-dwelling senior fallers: Study protocol for a randomized controlled trial. Trials. 2015;16:144.
2. Schattner A, Mavor E, Adi M. Unsuspected serious abdominal trauma after falls among community-dwelling older adults. QJM. 2014;107:649-53.
3. Whiteley GS, Penna LK, Bolton JP. Small intestinal perforation following minor trauma. Injury. 1992;23:487-8.
4. Kim C, Sartin R, Dissanaike S. Is a "Pan-Scan" Indicated in the Older Patient with a Ground Level Fall? Am Surg. 2018;84:1480-3.

OPEN ACCESS

Correspondence:
Ami Schattner, Department of Medicine, Hebrew University-Hadassah Medical School, Jerusalem, Israel, Tel: 97289390330; Fax: 972 9 860 9201; E-mail: amischatt@gmail.com

Received Date: *10 Apr 2020*
Accepted Date: *23 Apr 2020*
Published Date: *27 Apr 2020*

Citation:
Schattner A, Dubin I. Perforation of the Cecum after a Simple Fall. Clin Surg. 2020; 5: 2808.