



EPIDEMIOLOGY AND ITS RESULTS IN HIP FRACTURES FOLLOWED IN POSTOPERATIVE INTENSIVE CARE

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Introduction/Hypothesis: Hip fractures are one of the leading injuries in the elderly population all over the world. Although there are many current discussions about the use of intensive care to improve postoperative care of patients with hip fractures, data on this subject are limited. Postoperative follow-up is as important as preoperative follow-up of elderly patients with hip fractures who have more than one comorbidity. The mortality and morbidity of elderly patients with hip fractures can be reduced by careful preoperative preparation of elderly patients, not delaying the operation, follow-up in the postoperative intensive care unit (ICU) and transferring them to the service from the ICU in a short time. For this reason, we wanted to retrospectively evaluate the outcomes of patients with hip fractures followed in the postoperative intensive care unit at 30 days, 90 days and one year mortality.

Design/Methods: Age, gender, admission diagnosis, comorbidities, length of stay in ICU, APACHE II scores, NIM, IMV, length of stay on mechanical ventilator of 68 patients with femur fracture followed in the intensive care unit, need for inotropic support, RRT and HD requirement, blood transfusion, presence of central venous catheter , arterial catheterization status, length of stay in the intensive care unit, 30, 90-day and 1-year mortality, day of the operation and anesthesia technique performed was recorded.

Results: The approximate mean age of 68 patients included in the study was 78.52 (min: 57, max: 97). The mortality profile of the elderly patients followed in the postoperative intensive care unit at 30 days, 90 days and 1 year was calculated and found to be 34.48%-41.38% and 24.14%. There is a statistically significant difference in terms of mortality status of the patient and age, APACHE II scores, ICU length of stay and hospital stay values (Table 1 and Table 2).

Table 1: Demographic data and comorbidities of the patients, anesthesia method.

Age (n=68)		Mean±SD	Min-Max
		78.52±9.15	57-97
Variables	Categories	Frequency (n)	Percent(%)
Gender	Male	26	38.2
	Female	42	61.8
	Total	68	100
Comorbidities	Yes	65	95.6
	No	3	4.4
	Total	68	100
AT	General Anesthesia	8	11.8
	Spinal Anesthesia	58	85.3
	Spinal+Epidural Anesthesia	2	2.9
	Total	68	100

SD: Standart Deviation; AT: Anesthesia Technique

Conclusion: Among the factors affecting mortality after hip fracture in studies; age, gender, type of fracture, pre-fracture activity level of the patient, ASA score, time until surgery and anesthesia method are counted. As a result; Apart from the systemic changes due to aging, this patient group, who has an additional disease that impairs their life functions, requires careful preoperative preparation starting with hospitalization, ensuring that their co-morbidities are under control as much as possible, reviewing their nutritional status, and post-operative short-term intensive care follow-up with morbidity and mortality. There are several limitations in this study.

First, the study reflects the results of a single center after a retrospective review and therefore generalizations cannot be made.

Secondly, it was conducted in a limited number of cases. Studies with a prospective design and a large sample size will provide more accurate results to investigate the value of follow-up results and prognostic factors in intensive care units of patients with femur fractures. Stronger statistical results will be obtained with more participants.

Key words: Hip fracture; Elderly; APACHE; Intensive care units; Mortality

Table 2: Interventional procedures

Variables	Categories	Frequency (n)	Percent (%)
IMV	Yes	2	2.9
	No	66	97.1
	Total	68	100
NIMV	Yes	1	1.5
	No	67	98.5
	Total	68	100
Inotrope and Vasopressor Support	Yes	2	2.9
	No	66	97.1
	Total	68	100
RRT and HD	3 days in a week	2	2.9
	Yes	1	1.5
	No	65	95.6
Blood Transfusion	Yes	19	27.9
	No	49	72.1
	Total	68	100
CVC	Yes	15	22.1
	No	53	77.9
	Total	68	100
Arterial Catheter	Yes	18	26.5
	No	50	73.5
	Total	68	100

IMV: Invasive Mechanical Ventilation, NIMV: Noninvasive Mechanical Ventilation, CVC: Central Venous Catheter, RRT: Renal Replacement Therapy, HD: Hemodialysis

Li T, Li J, Yuan L, Wu J, Jiang C, Daniels J, Mehta RL, Wang M, Yeung J, Jackson T, Melody T, Jin S, Yao Y, Wu J, Chen J, Smith FG, Lian Q; RAGA Study [Effect of Regional vs General Anesthesia on Incidence of Postoperative Delirium in Older Patients Undergoing HipFracture Surgery: The RAGA Randomized Trial](#). Investigators.JAMA. 2022 Jan 4;327(1):50-58