

Introduction	Abstract
<p>Hip fracture is a highly prevalent condition which severely affects patient's quality of life and life expectancy mainly from the sixth decade of life.</p> <p>On occasions, the radiological diagnosis of hip fracture is not simple as it depends on many factors, for this reason, it is considered vitally important that all healthcare professionals involved in the diagnostic process are trained in the early identification of the condition.</p>	<p>- Background: This study aims to assess the accuracy of different groups of healthcare professionals involved in the hip fracture process in identifying hip fractures in plain radiographs.</p> <p>- Materials and methods: experimental study, where a sample of 50 healthcare workers directly involved in the diagnostic process was obtained, classifying them into 5 groups according to their specialty. Each participant was shown a set of 15 pelvis antero-posterior x-rays, where they had to indicate the existence or absence of a proximal femur fracture. Thais process was carried out in two stages to evaluate the degree of inter-observer consistency.</p> <p>- Results: there was no significant difference in the diagnostic accuracy of hi fractures between the professional groups. The mean percentage of correct diagnosis was 64.73%, being statistically similar in each of the groups. On the other hand, variables such us the time taken to complete the survey (p-value 0.0006) and years go experience (p-value 0.0054), showed significant differences.</p> <p>- Conclusions: all professionals involved in the process demonstrated similar accuracy in the identification of hip fracture.</p>
Objectives	
<div><div>1.</div><div>To analyze of the diagnostic accuracy in the identification of hip fracture in simple radiology of different professional groups involved in the initial care of a patient with a probable hip fracture.</div></div> <div><div>2.</div><div>To analyze variables that may influence the accuracy of identifying fractures on plain radiographs of the pelvis.</div></div>	

Results

Variable	Total (%)	PC	R	R.T.	H.E.	O.S.
Sex						
Male	25 (50)	4 (40%)	6 (60%)	2 (20%)	5 (50%)	8 (80%)
Female	25 (50)	6 (60%)	4 (40%)	8 (80%)	5 (50%)	2 (20%)
Average age	33	34	31.7	44.5	36.9	34.2
Average years of the experience	7	8.55	5.65	18.1	11.85	8´4
Average time of survey (sec)	253.45	271.10	389.00	201.60	248.40	157.15
Nº of hours worked						
1-6 hours	46 (92)	7 (70%)	10 (100%)	10 (100%)	9 (90%)	10 (100%)
24 hours	4 (8)	3 (30%)	-	-	1 (10%)	-
Q1						
Fracture (n=9)	-	6.35 (70.5%)	6.2 (68.8%)	6.55 (72.7%)	6.8 (75.5%)	8.05 (89.4%)
No fracture (n=6)	-	5.45 (90.83%)	5.05 (84.16%)	5.1 (85%)	5.3 (88.33%)	5.25 (87.5%)
Q2						
Left (n=3)	-	1.95 (65%)	1.9 (63.3%)	2.4 (80%)	2.35 (78.3%)	2.9 (96.6%)
Right (n=6)	-	3.95 (65.83%)	4.35 (72.5%)	3.9 (65%)	3.75(62.5%)	5 (83.3%)
Q3						
Subcapital (n=2)	-	-	-	-	-	1.7 (85%)
Pertrochanteric (n=7)	-	-	-	-	-	4.3 (61.43%)

Table 2. Summary results of the variables studied. PC: Primary Care Emergency Doctors. R: Radiologists. R.T.: Radiology Technicians. H.E.: Hospital Emergency doctor. O.S.: Orthopaedic Surgeons.



Figure 4. Accuracy based on the answers to Q1 and Q2.

SPECIALIST	MEDIA T1-T2 (%)
Primary Care Emergency Doctors	60.83
Radiology Technicians	62.83
Hospital Emergency Doctors	63
Radiologists	63.83
Orthopaedic Surgeons	73.17

Table 3. Percentage of correct scores for each of the groups.



Figure 5. Accuracy based on the answers to Q1, Q2 and Q3.

Conclusions

The diagnosis of a hip fracture is a process that involves the participation of multiple groups of healthcare professionals who must be adequately trained to be able to identify this pathology in time, thus reducing the morbidity and mortality of the patient due to the high impact it has on them. All this is achieved through formal training and compliance with an algorithm of action to be carried out by each of them.