The Importance of Radiology and Physical Therapy in Treating People with Fractures in Traffic Accidents

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Abstracts

The aim of the current study is, What are the types of fractures that affect humans in traffic accidents, what is the role of x-rays in diagnosing fractures for patients, treatment methods for those with fractures in traffic accidents., The questionnaire was created electronically via the Google Drive program, and then it was distributed via mobile phone on the social networking program (WhatsApp). Using e-mail for all participants to respond to the questionnaire. 600 questionnaires were distributed to all mobile groups, and 550 questionnaires were received on the researcher's e-mail. (The target group is residents of the Holy City of Mecca and Taif, aged 25-55 years from men and females). The research boils down to the fact that radiography is an important opportunity in diagnosing fractures (of all types), and thus gives the treating physician a wide scope to diagnose the injury. Physical therapy also plays a major role in

gradually returning patients to their normal state through the treatment plan followed with the patient and his psychological rehabilitation.

Keywords: the importance of radiology, and physical therapy, in treating people with fractures in traffic accidents.

1. Introduction

A traffic incident, also called a motor car clash, traffic accident, or crash, place when a vehicle collides with another car, a pedestrian, animal, road debris, or other stationary hurdle, such as a tree, pole, or building. Traffic accidents often outcome in injury, disability, passing, and property destroy as well as financial costs to both society and the personals implicated. Land transportation is the most risk situation that people deal with on a daily basis, but the wound numbers resulting from these accidents do not attract media attention like other kinds of less frequent tragedies (1). agents that contribute to accident danger are: vehicle design, operating speed, road design, weather, road environment, driving skills, impairment due to alcohol or medicines, and behavior, especially attacker driving, moonstruck driving, speeding, and street racing. In 2013, 54 million people worldwide were wound from traffic accidents (2). This consequence in 1.4 million passing in 2013, while the number of deaths was 1.1 million in 1990 (3). About 68,000 of these incidents occurred to children under the age of five. Almost all high-income countries have declining death rates, while the majority of low-income countries have reducing death rates due to traffic accidents. Middle-income countries have the highest fatality rate with 20 deaths per 100,000 population, accounting for 80% of all road deaths with 52% of all motor vehicles. While the death rate in Africa is the highest (24.1 per 100,000 population), the lowest is found in Europe (10.3 per 100,000 population) (4)(5). In outpatient physical therapy settings, neck suffering is a popular condition for which patients seek curing. Although a specific pathoanatomical source cannot be routinely identified in the vast majority of patients with mechanical neck pain,1 a small number of patients may have a serious underlying medical condition that may be causing the neck pain, which would preclude physical therapy intervention.(2–7) Fractures of the cervical spine are one example of a serious underlying medical condition that can reason neck pain. Fractures of the cervical spine should be considered in the presence of major trauma (ie, motor vehicle accident) or in the presence of small trauma for older individuals.8,9 In an effort to recognize cervical spine fractures in a timely and accurate manner, patients who have sustained trauma and have the possibility of a cervical spine fracture should routinely receive conventional radiographs initially.(12–14). Some cases of missed cervical spine fractures in patients with neck pain following trauma have been reported in the chiropractic literature.(7–11) These cases involved patients with neck pain following trauma who were seeking chiropractic treatment and whose radiographs taken early after their injury were found to be negative for a fracture. In some of the cases, the chiropractors demand repeat radiographs after the initial checking but before applying treatment, (7–9) and the cervical spine fractures were uncovered. In other cases, chiropractic or physical therapy treatment was initiated without repeat radiographs, and the fractures were not detected until later in the course of care. (10,11) We were not able to set any reported cases of missed cervical spine fractures in the physical therapy literature. If physical therapists suspect an underlying cervical spine fracture, it

would be necessary to require or recommend diagnostic imaging before initiating curing for patients with neck pain following trauma. The purpose of this case report is to describe a patient referred for physical therapy treatment of neck pain who had an underlying hangman's fracture that precluded physical therapy intervention.

2. Material and Methods:

The study started in (the holy city of Mecca and Taif in Saudi Arabia), began writing the research and then recording the questionnaire in February 2024, and the study ended with data collection in July 2024. The researcher used the descriptive analytical approach that uses a quantitative or qualitative description of the social phenomenon (The importance of radiology and physical therapy in treating people with fractures in traffic accidents). This kind of study is characterized by analysis, reason, objectivity, and reality, as it is concerned with individuals and societies, as it studies the variables and their effects on the health of the individual, society, and consumer, the spread of diseases and their relationship to demographic variables such as age, gender, nationality, and marital status. Status, occupation (15), And use the Excel 2010 Office suite histogram to arrange the results using: Frequency tables Percentages (16). A questionnaire is a remarkable and helpful tool for collecting a huge amount of data, however, researchers were not able to personally interview participants on the online survey, only answered the questionnaire electronically, it consisted of seventeen questions, all of which were closed.

3. Results and discussion

The percentage of approval to participate in the research questionnaire was 100%, and the percentage of ages of 25-34 years old and 35- 44 years old was equal, 42,9 %, 45-55 years was 57.1%, the percentage of participating males was 71.4%, and the percentage of participating females was 28.6%. As for their nationalities, they were all 100% Saudi. As for their tasks, they were as follows: Student: 0%, government employee: 57.1%, private sector employee: 0%, housewife: 28.6%, freelancer: 11.3%, entrepreneur: 0%. As for the situation Educational: Primary 0%, Intermediate 0%, Secondary 15%, University 75%, Diploma 5%, Doctorate 5%. The first question: What are the signs and symptoms of fractures? Choose a paragraph from the following? Severe fracture in the area of injury 0%, swelling, bruising, bluish or pain when pressing on the injury 14.3%, sometimes, presence of some deformities, when the fractured organ is out of place 0%, tingling feeling, Numbness in the affected area: 0%, all of the above: 85.7%. The second question is about what types of fractures are: fixed fractures, open or compound fractures, transverse fractures, oblique fractures, and comminuted fractures? The answer is 100% yes and 0% no. The third question is about whether the location of the fracture differs, whether it is in the upper limbs or the lower limbs. She may be under one goal and perspective in her treatment after the injury? Yes 85.7% and no 14.3%. The fourth question: What methods do doctors use to treat fractures? Fixed splints, splints or braces, popular, external fixation of the fractured part, internal fixation? Yes 85.7% and no 14.3%. The fifth question: Where does the actual role of the physical therapist begin in helping the patient return to his normal functions

and lead his life after the fracture? Yes 100% and no 0%. The questions from the sixth to the last question also had the same answer (yes 100%, and no 0%). (table.no.1)(figure No.1).

Table.no.1:percentage of males and females

males	females
71.4%	28.6%

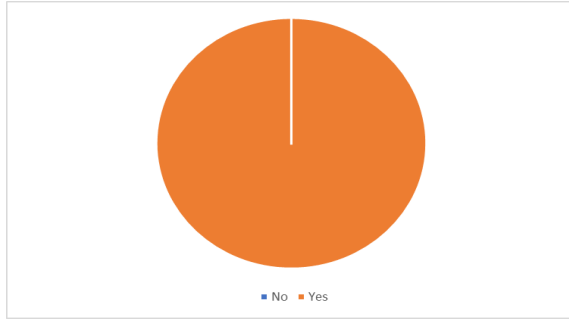

Figure No.1: Through the opinions and trends of the participants about evaluating the role of radiology and physical therapy in treating people with fractures in traffic accidents

4. Conclusion:

The location of the fracture varies, whether it is in the upper limbs or the lower limbs. They may be under one goal and one perspective in their treatment after injury 85.7%, methods that doctors use to treat fractures, fixed splints, splints or braces, braces, external fixation of the fractured part, internal fixation. Yes 85.7%. The actual role of the physical therapist begins with helping the patient return to his normal functions and live his life 100% after the fracture.

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