



A CUSTOMARY ON SHOULDER PAIN POPULATION USING SIMPLE SHOULDER TEST

Nithyanisha. R

Assistant Professor, Research scholar, Faculty of physiotherapy, Dr.M.G.R Educational and Research Institute, Velappanchavadi, Chennai- 600 077.

Dr. Jibi Paul

PhD. Professor, Research supervisor, Faculty of physiotherapy, Dr.M.G.R educational and research institute, Velappanchavadi, Chennai- 600 077.

Dr. Jagatheesan Alagesan

Professor & Principal, Saveetha College of Physiotherapy, Saveetha Institute of Medical and Technical Sciences, Chennai, India.

Dr. V. Rajalaxmi

M.P.T(Neuro) Ph.D, Professor & Vice Principal, Faculty of physiotherapy, Dr.M.G.R educational and research institute, Velappanchavadi, Chennai- 600 077.

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ABSTRACT

AIM: The purpose of the study is about to identify shoulder pain using a simple shoulder test among the population.

BACKGROUND: Shoulder pain is the third most common musculoskeletal complaint encountered in clinical practice. Out of that, rotator cuff tendonitis is one of causes of shoulder pain. Rotator cuff tendonitis is an inflammation of the rotator cuff tendons without a rotator cuff tear.

METHODOLOGY: This study is a prevalence study of pre and post test type that was conducted in 500 participants who have shoulder pain are selected and given simple shoulder test questionnaires. The participants with shoulder pain are between the age group of 18 and 60 years and both males and females were included in the study after getting their consent for participations. In these survey the person who is pregnant, who had history of surgery, presence of tumor, cardiac disease, person with cancer, mental disorder, recent fracture and dislocation of joints were excluded from the survey questionnaires. The questionnaires are based on the simple shoulder test, yes or no type with various clinical trials.

RESULT : Of the 500 people who completed baseline questionnaires 51% were female and 49% were male. The mean age group is between 18 and 60 years. The result indicates that simple shoulder test questionnaires interpreted 50% of the population with RCT, 26% with RA, and 24% with DJD.

CONCLUSION: The present concludes that simple shoulder test questionnaires are an excellent tool to analyse shoulder pain. Out of 500 patients, 50% of shoulder pain is due to RCT, 26% of pain is due to RA, and 24% is due to DJD.

KEYWORDS: Simple shoulder test(SST), Rotator cuff tear(RCT), Degenerative joint disease (DJD), Rheumatoid arthritis (RA).

INTRODUCTION

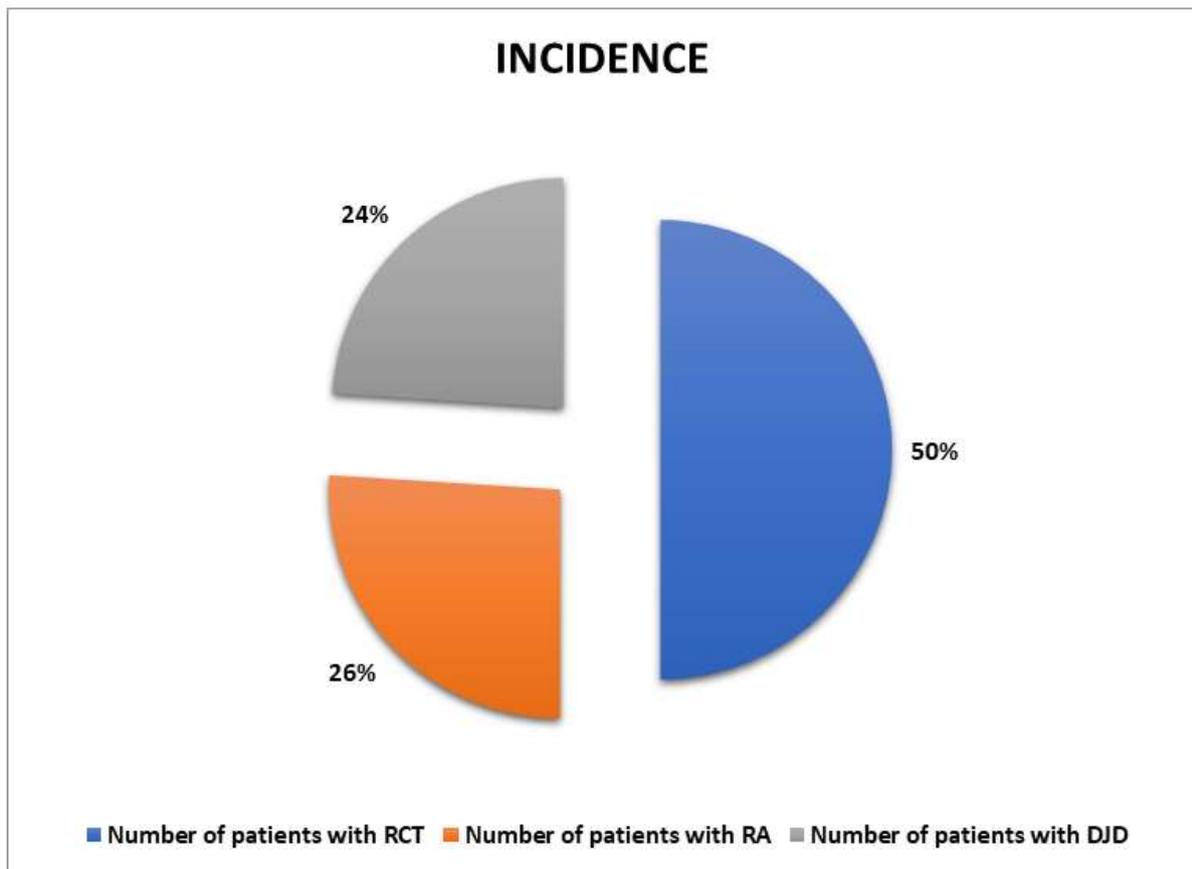
Shoulder pain is a common complaint, with point prevalence and lifetime estimates as high as 26% and 67% respectively¹. Various risk factors of shoulder pain like age, gender, diabetes and alcoholism have been considered in the literature. Shoulder pain is more common among adults. Various authors concluded that the prevalence of shoulder pain increases with age^{2,3}. Occupations as diverse as construction work and hairdressing are associated with a higher risk of shoulder disorders. Physical factors such as lifting heavy loads, repetitive movements in awkward positions, and vibrations influence the level of symptoms and disability, and psychosocial factors are also important. Recent studies suggest that chronicity and recurrence are common. Recovery from shoulder pain can be slow and long-lasting. Approximately 50% of patients with new episodes of shoulder pain report full recovery within 6 months^{4,5}, but 40%–50% of patients with shoulder pain still report persistent pain 6–12 months after consulting their primary care clinician. Approximately 50% of all patients with shoulder pain are diagnosed with rotator cuff-related shoulder pain⁶. A rotator cuff tears account for almost 50% of major shoulder injuries. The prevalence of partial or full-thickness ruptures increases markedly after 50 years of age. A rotator cuff tear is a common injury in middle aged and older adults. The interesting thing is that only 1/3 of the tears cause pain and 2/3 are without pain⁷. The primary function of the rotator cuff is to keep the head of the humerus depressed and centred into the glenoid fossa abduction or forward elevation of the arm^{8,9}. The incidence of shoulder pain in 6.6 to 25 cases per 1000 patients, with a peak incidence in the fourth through sixth decades¹⁰. The literature is deficient regarding prevalence of shoulder pain indian population. Shoulder pain has been found to be more prevalent among females¹¹. However, some prevalence studies did not find any difference in prevalence of shoulder pain among men and women^{12,13}. The simple shoulder test (SST) scale is a tool designed to evaluate functional limitations of an injured shoulder that compromise an individual's daily activities. The simple shoulder test is a short, easy to use self report questionnaire which consists of 12 questions with response options of “1=yes” or “0=no”¹⁴.

MATERIAL AND METHOD:

This is a prevalence study design with pre- and post-test types conducted in 500 subjects who were affected by shoulder pain were selected based on inclusion criteria. Patients in the age group of 18–60 years with a body mass index of 19–25 kg/m² were included and given the survey questionnaires. And both males and females are included in this study. In these surveys, the person who is pregnant, who has had a history of surgery, the presence of a tumor, cardiac disease, a person with cancer, a person with a mental disorder, a recent fracture, and a dislocation of joints were excluded from the survey questionnaires. The questionnaires are based on the simple shoulder test.

Simple Shoulder Test is a standardized instrument developed to systematically document shoulder function. This questionnaire consists of 12 questions with “yes” or “no” answers about the function of the affected shoulder. Answers to these questions provide a standardized way of recording shoulder function before and after treatment. It also provides a functional assessment of the outcome of a specific treatment for certain conditions of the shoulder. For each question, the patients indicate that they are able or unable to do the activity. The scores range from 0 (worst) to 1 (best).

After approval from the institutional review board, 500 patients aged between 18 and 60 who fulfilled the inclusion criteria were selected, and consent forms were collected. Each patient is given simple shoulder test questionnaires and asked to select between “yes” and “no”. Each question asks the patient to decide whether the shoulder joint disability affects overall physical ability in performing daily living tasks. There are two questions on pain; four on range of motion; three on muscle strength; two on sports motions using the shoulder joint, and one on the workplace use of the shoulder. The calculation method is 1 point for each item, and 12 points is a perfect score.



INCIDENCE	NUMBER	PERCENTAGE
Total number of participants	500	100%
Number of patients with RCT	250	50%
Number of patients with RA	130	26%
Number of patients with DJD	120	24%

RESULT :

The total number of participants was 500, out of which 51% were female and 49% were male. The average age group is between 18 and 60 years old. From the data collected and analyzed, the result indicates that simple shoulder test questionnaires interpreted 50% of the population with RCT, 26% with RA, and 24% with DJD. The majority of the patients with shoulder pain reported rotator cuff tears.

DISCUSSION:

Shoulder pain is prevalent and a common cause of disability at work and daily activities (Mitchell et al., 2005; Walker-Bone et al., 2004). Age and physical load factors are the main determinants for shoulder pain and disorders (Walker-Bone et al., 2003; van der Windt et al., 2000). The shoulder is also liable to injuries, which may result in long-term problems and disability (Mäkelä et al., 1999). In the community as many as 20% of the adult population experience shoulder symptoms at any one time, many of whom do not consult their doctor, and these complaints seem to be increasing in incidence. It is important to investigate shoulder pain in the community to understand the full impact such complaints have on the general population¹⁵. The classification of a case of ‘shoulder pain’ has been approached in various ways in studies of its occurrence. Many studies have asked directly about the presence of pain in the shoulder¹⁶. The prevalence of shoulder pain in the general population may be as high as 6%–11% under the age of 50 years, increasing to 16%–25% in elderly people¹⁷. The

rotator cuff is a tendon structure that degenerates with age. Non-enzymic glycation and impairment of vascular supply have been suggested as the major pathologies initiating and enhancing degeneration (Arkkila and Gautier, 2003; Riley, 2004). Rotator cuff tears (RCT) are a common causes of shoulder complaints and one of the leading causes of time lost from work or athletic activity. The reported prevalence of RCT can be up to 40% of all RCT. In general, they tend to be a common cause of morbidity in the elderly. RCT occur in patients of all ages and have the potential for both short and long-term disability if they are not appropriately managed¹⁸. The Simple Shoulder Test is an instrument for assessing functional limitations of the shoulder affected by injuries that interfere with an individual's daily activities. Simple Shoulder Test (SST): a series of 12 "yes" or "no" questions the patient answers about the function of the involved shoulder. The answer to these questions provides a standardized way of recording the function of a shoulder before and after treatment.

CONCLUSION :

The present study concludes that simple shoulder test questionnaires are an excellent tool to analyse shoulder pain. Out of 500 patients, 50% of shoulder pain is due to RCT, 26% of pain is due to RA, and 24% is due to DJD.

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