# Soft Tissue Rheumatological Conditions of Patients Visited in An OPD of a Tertiary Care Hospital

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#### Abstract

**Background:** Soft tissue rheumatological conditions are common but largely unexplored. So the objective of the present study was to see the different soft tissue rheumatological conditions presenting in OPD of a tertiary care center.

**Materials and methods:** Present observational study conducted on 62 patients visiting the Physical Medicine OPD, Chattogram Maa-O-Shishu Hospital for different soft tissue rheumatological conditions were included in the study. Study period was six months from January 2020 to June 2020. After informed written consent patients were introduced a questionnaire and data was collected. Non-probability sampling method was adopted for the study. Data was analyzed by SPSS-20

**Results:** Among 62 patients gender distributions of patients revealed male was 24(38.7%) and female was 38(61.3%) and age group showing 15(24.2%) patients were at <30 years, 15(24.2%) patients were at 31-40 years, 13(21.0%) patients were at 41-50 years, 9(14.5%) patients were at 51- 60 years, 9(14.5%) patients were at 61-70 years and 1(1.6%) patient was at >71 years age group. Regarding occupations of the study patients 35(56.5%) patients were service holder, 24(38.7%) were doing business, 1(1.6%) patients was farmer, 1(1.6%) was fisherman and 1(1.6%) patients also has HTN. Diagnosis of the soft tissue rheumatological conditions revealed 13(21%) patients had patellar tendinitis, 6(9.7%) patients had trochantaric bursitis, 1(1.6%) had tennis elbow, 3(4.8%) had golfer elbow, 191.6%) had De Quarven's tenosinovitis, 5(8.1%) patients had suspinatus tendinitis, 5(8.1%) patients had retrocalcaneal bursitis and 1(1.6%) patient had prepatellar bursitis.

**Conclusion:** Soft tissue rheumatological diseases are common in OPD visits and needs proper attention for better patients care.

Key words: Bursitis; Rheumatology; Synovitis; Tendinitis.

## INTRODUCTION

Rheumatological diseases include a large variety of diseases, like inflammatory rheumatic and systemic diseases and also degenerative joint and spine diseases, soft tissue rheumatismand metabolic bone diseases.<sup>1</sup> The rheumatism is a common name for many pains and aches, which have yet no peculiar appellation, though owing to very different causes.<sup>2</sup> Rheumatic diseases are a common cause of disability and a large public health burden.<sup>3</sup>

In the United Kingdom, upto 1 in 4 new consultation in general practice is for musculoskeletalsymptoms.<sup>4</sup> It is also common in Bangladesh but subject was neglected for long time.

The prevalence of the major rheumatic diseases has been extensively studied in the West for several decades but figures from the third world are only just emerging.<sup>5</sup> Rheumatic disorders are neglected health problems in Bangladesh and probably no control program has been introduced so far mainly because of lack of necessary information. Non Communicable diseases were once the main causes of morbidity and mortality but due to the adoption of various public health measures, both at government and non-government levels, the morbidity due to these diseases are now reduced to a great extent.<sup>6</sup> The objective of the study was to see the different soft tissue rheumatological conditions presenting in OPD of a tertiary care center.

# MATERIALS AND METHODS

This study was an observational study done on 62 patients visiting the Physical Medicine OPD Chattogram Maa-O-Shishu Hospital for different soft tissue rheumatological conditions. Study period was six months from January 2020 to June 2020. After informed written consent patients were introduced a questionnaire and data was collected. Gender, age structures, occupations and presence of Diabetes Mellitus (DM) and Hypertension (HTN) and presenting soft tissue rheumatological conditions were noted. A total patients of 62 was taken in the study. In this study data were collected with the help of modified Community Oriented Program for Control of Rheumatic Disorders (COPCORD) questionnaire. The questionnaire was translated to Bengali, cross-cultural adaptation and validation were also done. Non-probability sampling method was adopted for the study. Prior IRB clearance was taken to conduct the study from IRB of Chattogram Maa-O-Shishu Hospital Medical College. Data was analyzed by SPSS-20.

# RESULTS

Table I Gender distribution of study patients

Gender	Frequency	Percent (%)
Male	24	38.7
Female	38	61.3
Total	62	100.0

Table I showing gender distribution of patients where male was 24(38.7%) and female was 38(61.3%)

#### Table II Age group distributions of study patients

Age groups	Frequency	Percent (%)
< 30 years	15	24.2
31-40 years	15	24.2
41-50 years	13	21.0
51-60 years	9	14.5
61- 70 years	9	14.5
>71 years	1	1.6
Total	62	100.0

Table II showing age group where 15(24.2%) patients were at <30 years, 15(24.2%) patients were at 31-40 years, 13(21.0%) patients were at 41-50 years, 9(14.5%) patients were at 51- 60 years, 9(14.5%) patients were at 61-70 years and 1(1.6%) patient was at >71 years age group.

#### Table III Occupation of study patients

Occupations	Frequency	Percent (%)
Service holder	35	56.5
Business	24	38.7
Farmer	1	1.6
Fisherman	1	1.6
Housewife	1	1.6
Total	62	100.0

Table III showing occupations of the study patients where 35(56.5%) patients were service holder, 24(38.7%) were doing business, 1(1.6%) patients was farmer, 1(1.6%) was fisherman and 1(1.6%) patients was housewife.

Table IV Diabetes Mellitus and Hypertension of study patients

Variables	Frequency	Percent
Diabetes Mellitus	9	14.5
Hypertension	9	14.5

Table IV showing 9(14.5%) patients had DM and same number of patients also has HTN.

Table V Soft Tissue Rheumatological conditons

Rheumatological conditions	Frequency	Percent (%)
Planter fascitis	13	21.0
Achillis tendinitis	1	1.6
Patellar tendinitis	4	6.5
Trochantaric bursitis	6	9.7
Tennis elbow	1	1.6
Golfer elbow	3	4.8
De Quarven's tenosinovitis	1	1.6
Trigger finger	5	8.1
Bicep tendinitis	18	29.0
Supraspinatus tendinitis	4	6.5
Retrocanlcaneal bursitis	5	8.1
Prepatellar bursitis	1	1.6
Total	62	100.0

Table V showing 13(21%) patients had panter fascitis, 1(1.6%) patient had achillis tendinitis, 4(6.5%) patients had patellar tendinitis, 6(9.7%) patients had trochantaric bursitis, 1(1.6%) had tennis elbow, 3(4.8%) had golfer elbow, 191.6%) had De Quarven's tenosinovitis, 5(8.1%) patients had trigger finger, 18(29.0%) patients had bicep tendinitis, 4(6.5%) patients had supraspinatus tendinitis, 5(8.1%) patients had retrocalcaneal bursitis and 1(1.6%) patient had prepatellar bursitis.

#### DISCUSSION

In the present study gender distributions of patients revealed female were dominant and it was 38(61.3%). The incidence of rheumatoid arthritis was 0.48%/100 person years with distinct female preponderance. The prevalence of rheumatoid arthritis in the developing countries has been ascribed to non-recognition of mild diseases, demographic variables such as reduced survival of women with and without Rheumatoid Arthritis (RA) or the absence of environmental causative factors.<sup>5</sup>

Regarding different soft tissue rheumatological conditions 13(21%) patients had panter fascitis, 1(1.6%) patient had achillis tendinitis, 4(6.5%) patients had patellar tendinitis, 6(9.7%) patients had trochantaric bursitis, 1(1.6%) had tennis elbow, 3(4.8%) had golfer elbow, 191.6%) had De Quarven's tenosinovitis, 5(8.1%) patients had trigger finger, 18(29.0%) patients had bicep tendinitis, 4(6.5%) patients had supraspinatus tendinitis, 5(8.1%) patients had retrocalcaneal bursitis and 1(1.6%) patient had prepatellar bursitis. The prevalence of rheumatological disorders vary considerably depending on environmental factors, ethnicity and even over times within the same geographic area among the same ethnic origins in Bangladesh and other countries of the world8.<sup>7-9</sup> In the United States, the incidence of Rheumatoid Arthritis (RA) progressively declined since early 1960s, while the prevalence of gout doubled from 1969to 1985 and it further increased by 80% from 1990 to 1999.9 In a COPCORD (Community Oriented Program for Control of Rheumatic Disorders) study it was seen that rheumatic disorders were common causes of morbidity, disability and work loss in Bangladeshi rural and urban communities.<sup>10</sup> This current study describes the spectrum of rheumatological disorders encountered in the newly established rheumatology clinic of Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders (BIRDEM) started from July 2009 and run by a team comprising Internists and Rheumatologists, Physical Medicine Specialist and Orthopaedic Surgeons.

Soft tissue rheumatism was common in our study and they were mostly related to DM. Social and economic conditions were the contributory factors in Nepal, whereas psycho-social and alcohol related factors were considered in western societies.<sup>11</sup>

Age group distribution revealed most were aggregated in <30 to 50 years. Mean age was 42.9 years (13-81). From two different rheumatology clinic registries in Dhaka, similar demographic pattern of patients was observed.<sup>12</sup>

### CONCLUSION

It can be said that, this study has shown variability among the different rheumatic diseases and its burden in different age groups and genders along with co morbidities. Among musculoskeletal disorders, soft tissue rheumatism is common and needs attention to explore more.

#### DISCLOSURE

All the authors declared no competing interest.

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