COMMON NON-ARTICULAR SYNDROMES AMONG NIGERIANS

¹Oguntona S.A., ²Adelowo O.O. and ¹Edunjobi S.A.

¹Rheumatology Unit Department of Medicine Olabisi Onabanjo University Sagamu, Ogun State. Nigeria ²Arthrimed Specialist Clinic Ikeja, Lagos E- mail- oguntonasa@yahoo.com

Abstract: Background- non-articular pain syndrome forms a broad spectrum of health problems. Most of the conditions are poorly defined according to diagnostic criteria. The impact of these conditions on health care and society is high. Aetiological factors are poorly understood, however, many physical, psychosocial and work related factors are implicated. Lack of good knowledge on the risk factors does not allow for a good prevention strategies. Methods- this is a prospective study of all the patients seen in the rheumatology clinic over a period of three years (July 2009 - June 2012). Detailed history and examination were carried out to rule out articular problems. Those with articular disease and past history of injury or trauma to the affected joint region were excluded from the study. Results- sixty patients were diagnosed with non-articular pain syndrome out of a total of 336 that presented within the study period. Upper limb non-articular syndromes were the commonest. Generalized non-articular syndrome was predominantly found in females and the condition was positively associated with psychosocial disturbances. Conclusion- non-articular pain syndrome is very uncommon among the adolescents. Non-articular pain disorders are diagnosed based on clinical grounds. Imaging and laboratory testing is usually not necessary unless the diagnosis is in question. Most nonarticular pain syndrome can be managed conservatively and rarely is surgical intervention necessary.

Keywords: Non Articular Syndromes, Soft Tissue Rheumatism, Out-Patient Clinic, Nigeria.

INTRODUCTION

Non-articular pain syndromes have been called various names such as non-joint rheumatism, soft tissue rheumatism, regional pain syndrome, and peri-articular pain syndrome ^[1]. Non-articular pain syndrome refers to a group of conditions characterized by musculoskeletal aches and pains which do not arise from joints. They are classified either as generalized or localized conditions ^[2]. Non- articular pain syndrome can be classified into five general categories, as follows

- i. Tendinitis and Bursitis
- ii. Structural disorders, such as pain syndrome resulting from flatfoot and the Hypermobility syndrome.
- iii. Neurovascular entrapment
- iv. Regional myofacial pain syndromes, with trigger points similar to those of fibromyalgia but in a localized distribution.
- v. Generalized pain syndrome.

This condition is common in persons aged 45-64 years and occurs with equal distribution between males and females ^[8]. It causes significant discomfort. More often than not, this diagnosis is made when the pain condition does not fall into any of the other diagnoses ^[4]. There are a lot of overlaps with the other syndromes. The more generalized and chronic the syndrome, the more difficult it is to treat ^[5]. The initial therapy is analgesics, however, some of them may not respond well to the standard pain killers, and may need other adjuvant

Common Non-Articular Syndromes Among Nigerians

Oguntona S.A., Adelowo O.O. and Edunjobi S.A.

medications such as membrane stabilizers, anti-depressants, and muscle relaxants ^[6]. Intralesional corticosteroid injection or Surgery may occasionally be needed ^[7].

MATERIALS AND METHODS

Patients - the subjects were the patients seen at the rheumatology out-patients clinic of the Olabisi Onabanjo University Teaching Hospital in the South West, Nigeria. Study period-this is a prospective study carried out over a period of three years from July 2009 to June2012. Methods- all patients seen in the clinic were evaluated for non-articular rheumatism. Detailed medical, occupational and family history was obtained to determine any risk factors. Physical examination was carried out to determine any articular involvement and also to rule out systemic inflammatory disorders.

Classification Criteria

Prior to diagnosis of non-articular pain syndrome, definite rheumatic diseases such as rheumatoid arthritis, osteoarthritis, gout and others were excluded. Neck and upper extremity non-articular pain syndrome were diagnosed according to the Netherland classification criteria (2001). Lower extremity non-articular pain syndrome were diagnosed according to the soft tissue rheumatic pain; recognition, management, and prevention (3rd edition Baltimore 1996). Fibromyalgia was defined by the American College of Rheumatology (ACR) 1990 Criteria for the classification of fibromyalgia.

RESULTS

Three hundred and thirty- six (336) patients were seen over the study period. There were 160 (47.6%) males and 176 females (52.4%) with a ratio of 1:1.1. Sixty patients comprising 26 males and 34 females presented with various non-articular pain syndrome. Male to female ratio was 1: 1.3 and the age range was 21 years to 90 years with a mean age of 56 years.

Age/Sex Distribution

People above 40 years (80%) were predominantly affected by non-articular pain syndrome, while no one was affected below 20 years. As shown in table 2, there was a tendency that the prevalence of non-articular pain syndrome was increased with age, more obviously so after age 40, reaching a peak at around 60 years. The prevalence was higher in females than that in males.

Occupation Distribution

As shown in table 3, the highest prevalence of non-articular pain syndrome was seen in farmers, followed by manual workers. House keepers were least affected.

Disease Distribution

The leading non-articular complaints were trigger finger (26.7%), shoulder pain syndrome (20%), archilis tendinitis (13.3%) and planter faciitis (11.7%). Least in distribution were the epicondylitis as shown in table 1. Localized non-articular pain syndrome constituted the bulk comprising of 54 (90%) cases while generalized (fibromyalgia) non-articular cases constituted 6 (10%) cases. Localized non-articular cases were fairly distributed between males and females, whereas, females were predominantly affected by the generalized pain syndrome.

Clinical Findings

The main symptom in all the patients was pain in the affected site. Other symptom panels included disturbance of sleep patterns, difficulty in lifting the affected painful site. Peri-articular

tenderness and restricted movement of the affected site were the main physical findings. Depressive mood was found in some patients. Patients with fibromyalgia presented with exaggerated tenderness and psychological disturbances.

Investigations

Marker of inflammation (ESR) was generally within normal limit in all the patients. Few patients with anaemia showed normocytic normochromic picture. Other blood parameters were essentially normal. Plain radiograph of the affected areas showed non-specific findings. Few elderly patients showed calcification around the shoulder joint.

DISCUSSION

The epidemiologic impact and the socioeconomic consequences of non-articular rheumatism are significant, it is estimated that its prevalence varies between 3% and 15% according to the case-definition and the population, in which the survey was carried out, surpassing that for rheumatoid arthritis and systemic lupus erythematosus ^[8]. From the studied population, localized non-articular rheumatism was found to be fairly equal in distribution among the males and females, while generalized non-articular rheumatism as typified by fibromyalgia was seen mainly among females. Literatures have attributed the increased prevalence of generalized nonarticular rheumatism in females to hormonal influence 191. As earlier documented in the literatures, psychosocial problems were mainly found in patients with generalized non-articular pain syndrome. Up to a third of fibromyalgia patients have depression. Disturbances in mood and concentration are also very common. Studies have reported higher numbers of severe emotional and physical abuse in patients with fibromyalgia compared with the general population [10]. Non-articular rheumatic disorders tend to be episodic and recurrent, making measurement of incidence methodologically challenging [11]. Until recently, therefore, most surveys have been cross sectional and focused on prevalence [12]. Forty-eight (48) cases of nonarticular rheumatism were seen in people older than 40 years in this study. Earlier findings have documented that non-articular rheumatism is most common in persons aged 45 and above and very uncommon below age 20 years [13]. The result of this study further corroborated that the condition is uncommon below 20 years because no less than 20 years individual was affected in this study. The therapeutic modalities administered for these cases included simple analgesics, non-steroidal anti-inflammatory drugs, intra-lesional injection of steroid, and physiotherapy where necessary. However, the treatment of most of these conditions is expectant, because, they tend to be self-limiting and improves despite therapeutic interventions 114]. The usual sequence in non-articular pain syndrome initially consists of the suppression or modification of the causal factor, the use of anti-inflammatory medications and physiotherapy ^[15]. In cases that are resistant to therapy, the local injection of glucocorticoids or even surgery is performed . A good prevention policy does not exist for most conditions due to the lack of knowledge on risk factors. To improve the epidemiological research on regional and generalized pain disorders, research should focus on clear and relevant definitions of cases or pain sub groups and on specific risk factors [16]. Generally, non-articular pain syndrome is not life threatening but can be a cause of significant functional disability [17]. In conclusion, nonarticular pain syndrome tends to be generalized, transient and easily treatable. Significant pain and disability can be avoided by early recognition and appropriate therapy.

ACKNOWLEDGEMENT

Thanks to the unit Nurses who helped in the collection of data.

Oguntona S.A., Adelowo O.O. and Edunjobi S.A.

REFERENCES

- 1. McCarty DJ, ed. Arthritis and Allied Conditions. A Textbook of Rheumatology, 11th ed. Philadelphia: Lea & Febiger, 1989;55–68.
- 2. Raskin RJ, Lawless OJ. Articular and Soft Tissue Abnormalities in a "Normal" Population. J Rheumatol 1982; 9:284.
- 3. Silman A, Hochberg MC, (editors): Epidemiology of the Rheumatic Diseases Oxford, UK: Oxford University Press; 1993:16-20.
- Canoso JJ, Alvarez-Nemegyei J. Soft Tissue Rheumatology. In: Lahita RG, Weinstein A, editors. Educational Review Manual in Rheumatology. 3rd ed. New York: Castle Connolly Graduate Medical; 2006..
- 5. MaefarIane GJ. Generalized Pain, Fibromyalgia and Regional Pin: Ar Epidemiologicalview. Baillieres Best Pract Res ClinRheumatol 1999;13:403-414.
- 6. Reveille JD: Soft-tissue Rheumatism: Diagnosis and Treatment. Am J Med 1997;102:23S-29S
- 7. Hay EM, Paterson SM, Lewis M, Hosie G, Croft P. Pragmatic Randomized Controlled Trial of Local Corticosteroid Injection and Naproxen for Treatment of Lateral Epicondylitis of Elbow in Primary Care. BMJ 1999; 319: 964-968.
- 8. Cardiel MH, Rojas-Serrano J: Community Based Study to Estimateprevalence, Burden of Illness and Help Seeking Behaviorin Rheumatic Diseases in Mexico City. a COPCORD Study. ClinExpRheumatol 2002, 20:617-624.
- 9. Minh Hoa TT, Damarwan J, Shun Le C, van Hung N, ThiNhi C, Ngoc An T. Prevalence of the rheumatic diseases in urban Vietnam: a WHOILAR COPCORD study. J Rheumatol. 2003;30:2252-2256.
- 10. CelikerR, Borman P, Oktem F, Gokce-Kutsal Y, Basgoze O. Psychological disturbance in fibromyagia: relation to pain severity. Clin. Rheumatol 1997; 16: 179-184.
- 11. Zhang NZ: A Resume of epidemiological surveys of severalmain rheumatic diseases in China. Chin Med J 1998,111:195-196.
- 12. Natvig B, Picavet HSJ. The Epidemiology of Soft Tissue Rheumatism. ClinRheumatol 2002; 16: 777-93.
- 13. Canoso JJ. Musculoskeletal Conditions, In: Rheumatology in Primary Care. Philadelphia: WB Saunders; 1997, P. 20-96
- 14. Mary-Ann F, Yoram S. Management of Chronic Pain in the Rheumatic Diseases with Insights for the Clinicians. TherAdv Musculoskeletal Dis 2011; 3: 179-190.
- 15. Rees JD, Wilson AM, Wolman RL. Current Concepts in the Management of Tendon Disorders. Rheumatology (oxford) 2006; 45: 508-521.
- 16. Minaur N, Sawyers S, Parker J, Darmawan J. Rheumatic Disease in an Australian Aboriginal Community in North Queensland, Australian. A WHO-ILAR COPCORD survey. J. Rheumatol 2004; 31: 965-972.
- 17. Chopra A, Saluja M, Patil J, Tandale HS. Pain and Disability Perceptions and Belief of a Rural Indian Population: a WHO- ILAR COPCORD study. J. Rheumatol; 29: 614-621.

Table 1: Case Distribution of Non-Articular Pain Syndrome Seen Over Three Years.

Case	Male (Percentage)	Female	Total
Shoulder pain	6 (50%)	6 (50%)	12
syndrome			
Fibromyalgia	0 (0%)	6 (100%)	6
Bursitis	3 (75%)	1 (25%)	4
Trigger finger	6 (37.5%)	10 (62.5%)	16
Lateral epicondylitis	2 (100%)	0 (0%)	2
Medial epicondylitis	2 (100%)	0 (0%)	2
Plantar fasciitis	3 (42.9%)	4 (57.1%)	7
Carpal tunnel	1 (33.3%)	2 (66.7%)	3
syndrome			
Achilis tendinitis	3 (37.5%)	5 (62,5%)	8
	26 (44.3%)	34 (56.7%)	60

Table 2: Age Distribution of Cases

Year	Male	Female	Percentage
Less than 20	0	0	0
21-30	2	2	6.7
31-40	3	5	13.3
41-50	5	7	20
51-60	6	7	21.7
61-70	4	5	15
71-80	4	5	15
81-90	2	3	8.3
	26	34	100

Table 3: Occupation Distribution of Non-Articular Pain Syndrome

Occupation	Subject N (%)	Mean Age (Year)
Factory worker	8 (13.3)	42
Manual worker	12 (20)	47
White collar job	10 (16.7)	36
Farmer	18 (30)	55
House wives	10 (16.7)	49
House keeper	2 (3.3)	32

Reference to this paper should be made as follows: Oguntona S.A., Adelowo O.O. and Edunjobi S. A. (2015), Common Non-Articular Syndromes among Nigerians. *J. of Sciences and Multidisciplinary Research*, Vol. 7, No. 1, Pp. 52 – 56.