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INSTITUTIONAL CLINICAL PROFILE OF HEMOPHILIC ARTHROPATHY IN TRIVANDRUM

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ABSTRACT

Background: Hemophilic Arthropathy is a major complication in patients with hemophilia but studies highlighting it are limited in India. The study was planned to understand Demography and Clinical Profile of Hemophiliac Arthropathy.

Aim: The present study was designed to evaluate clinical profile and pattern of joint involvement in haemophilia patients attending our centre.

Material & Method: Retrospective Observational study using records of 72 patients of last three year registered in Hemophilia Clinic of Department of PMR, Govt. Medical College Hospital, Trivandrum.

Results: Factor Ⅷ found to be the most deficient factor (86.15%). Arthropathy of joints was seen in 32 i.e. 49.2% of patients with knee being most commonly involved joint.

Conclusion: The study concluded high prevalence of Arthropathy in Hemophilia patients with knee as most common site.

KEYWORDS : Arthropathy, Hemophilia, Rehabilitation

INTRODUCTION

Hemophilia is a hereditary disorder in which bleeding is due to deficiency of coagulation factor Ⅷ and Ⅸ (1). Hemophilia A occurs in approx. one in 5000 male live births and is 5-6 times more common than hemophilia B (2). It is a classic example of X linked recessive trait. Those with less than 1% of normal activity develop severe disease, 2-5% moderate disease, 6-50% mild disease (1).

Hemophilic Arthropathy (HA) is a major complication among patients with hemophilia. Arthropathy is secondary to recurrent hemarthrosis and chronic synovitis(1,2).

Most commonly affected joints are ankle, knee and elbow. Hemophilic Arthropathy can be prevented by prophylaxis with coagulation factors.

Hemophilic Arthropathy treatments include synovectomy, arthroplasty, arthrodesis and total joint replacement with pre and post procedure rehabilitation. Prevalence and other clinical correlates of HA may provide useful data for medical resource management and allocation particularly in developing countries (3).

Despite therapeutic advances definitive investigation into pattern and prevalence of HA is scarce in India. The present study was done to understand clinical profile and pattern of joint involvement in chronic hemophilia Arthropathy patients attending our center.

MATERIAL AND METHODS

We conducted a retrospective observational study at Dept. of Physical Medicine and Rehabilitation, Government Medical College, Trivandrum. Records of patients of (2005-2008) years registered in hemophilia clinic were analyzed for the study. Data of only those patients who had deficient factor estimation done were included in the study. Data in the form of age, type and severity of factor deficient, pattern and frequency of joint involvement were collected and submitted for analysis on Windows 8 os.

RESULTS

In our study 72 patients were registered in Hemophilia Clinic in last three years. Only 65 patients had factor assessment done and were included in the study. In our study 55 patients i.e (86%) has deficiency of factor Ⅷ and 9 patients (14%) had factor Ⅸ deficiency. Study population ranged from 9 months to 60 years with maximum number of patients i.e. 51 (78%) under age of 30 years 10 patients were in age group of 31-45 years and only 4 patients in age group of 42-60 years (Figure1).

Among 65 patients 57 had severe hemophilia, 4 patients each were in mild and moderate category. 32 patients (49.2%) i.e. almost half of patients had arthropathy of one or more joints. 21 patients i.e. more than half of them were under age group of 30 years. Knee was the most common joint involved contributing 67.50% followed by elbow (17.5%), ankle (12.5%) and shoulder (2.5%) of the total number of joints involved (Figure 2).

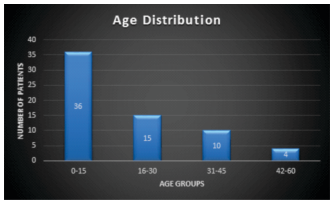

Figure 1

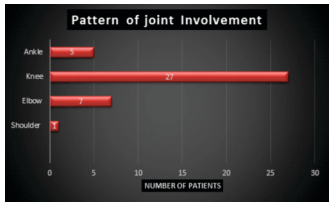

Figure 2

DISCUSSION:

In our study we only included patients attending Hemophilia Clinic at a Government run Medical College. Thus the data represent hemophilia patients mostly of Low and Middle Income Groups. In this study we found factor Ⅷ as most common deficient factor and approximately 80% of patients were under age of 30 years. Similar results were obtained by Ling SC et al. (4) who in their study observed that 83.3% had Hemophilia A and 16.65 were with Hemophilia B. C Y Chang et al (3) in their study in Taipei found that 84.8% had Hemophilia A and 7.6% had Hemophilia B. Similarly Rawand Polers (5) found 89% with Haemophilia A and 11% with Haemophilia B.

Our study population ranged from 9 months to 60 years with maximum number of patients under 30 years. Similar results were obtained in study by Rawand Polers (5) who found age range between 9 months and 51 years and more than 82% were below 20 years of age.

We found that 49.2% had hemophiliac arthropathy with knee being the most common joint involved. Miodray Vucic (6) in their study on Hemophiliac arthropathy in Prophylaxis vs Non Prophylaxis group found arthropathy in 86.67% and 75.00% patients had knee as the most frequently involved joint**.** Chang et al (3) found Hemophiliac arthropathy in 42.8% patients of their study. Rawand Polers (5) in their study on magnitude of arthropathy in hemophilia from Iraq found joint involvement in 41% patients with knee being most common joint involved.

CONCLUSION:

Hemophiliac Arthropathy is commonly seen in patients with

Hemophilia. Knee Joint is the most common affection. It stresses the need for Holistic rehabilitation of Hemophilic Arthropathy patients for their participation in Activities of Daily Living.

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