A BASELINE ASSESSMENT OF PHYSICAL DISABILITIES IN 372 HAEMOPHILIA PATIENTS IN NORTHERN INDIA

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OBJECTIVES

To determine subjective and objective physical disabilities in patients with hemophilia (PWH) visiting or referred to our Hemophilia Centre in New Delhi, Northern India. The study parameters included the pain, its provocation, local swelling, musculoskeletal involvement and physical limitations, and their impact on the activities of daily living (ADL).

METHODS

Out of 1,156 patients registered in our haemophilia centre in New Delhi, the initial 372 consecutive haemophilia patients undergoing detailed neuro-musculoskeletal assessment since April 2009 were analyzed for subjective and objective disabilities including the pain, its provocation and relief, VAS score, neural manifestations, and detailed assessment of all the affected joints/ muscles in the body. Patients with acute bleed were excluded.

OBSERVATIONS AND RESULTS

Of the 372 subjects, 305 (82%) were Haemophilia A with 50% having severe and 46% moderate Factor VIII deficiency whereas this distribution in Haemophilia B was 2:1 The age ranged 1- 57 years, mean 16.8 years ±10, with 7l% in the first two decades of life.

Fig-1
TYPE OF HEAMOPHILIA
(n-372)

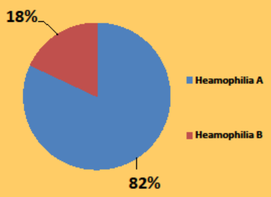


Fig-2
CONFIRMED SEVERITY OF HEAMOPHILIA
(n-342)

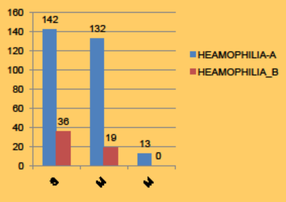
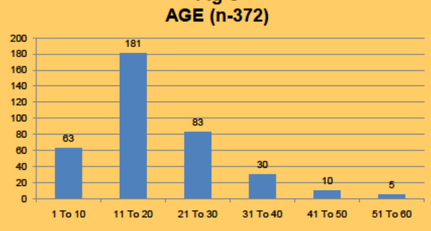


Fig-3
AGE (n-372)



Subjectively the pain, joint swelling, deformity, and weakness were present in 277 (74.5%), 195 (52.4%), 171 (46%), and 107 (28.8%) cases respectively.

Fig-4
MUSCULOSKELETAL COMPLAINTS IN
HEAMOPHILIA (n-372)

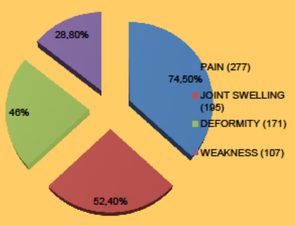


Fig-6
JOINT DISABILITIES IN HEAMOPHILIA
(n= 586 instances in 372 patients)

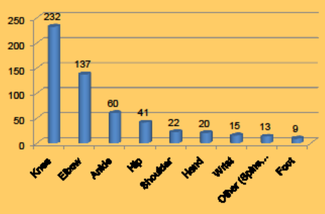
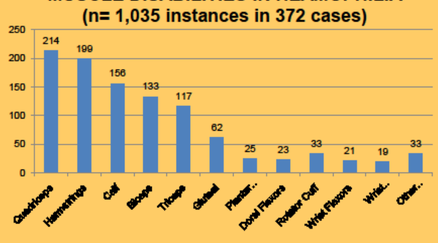


Fig-7
MUSCLE DISABILITIES IN HEAMOPHILIA
(n= 1,035 instances in 372 cases)

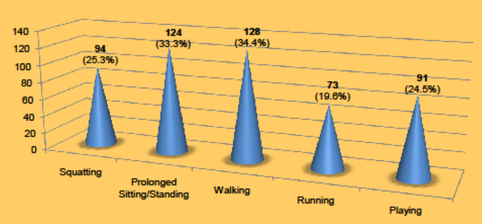


Specific symptoms like stiffness, overexertion/ fatigue, difficulty in bending limbs, moving, climbing and other ADL were present in 172 (46.2%) subjects. These affected the ambulation in 142 (38.2%) cases.

Weakness was localized to affected parts in 92 cases.

The VAS score deteriorated on physical activity in 97.3% of cases. Provocation of pain occurred from squatting, prolonged sitting/ standing, walking, running, and playing in 94(25.3%), 124(33.3%), 128(34.4%), 73(19.6%), and 91 (24.5%) respectively.

Fig-5
PROVOCATION OF PAIN IN HEAMOPHILIA
(n-372)



Most of the patients were relieved by rest, icing, crepe bandage and exercises while number of patients gets relief in pain by medication swimming using external aids (cane, crutch, splint and modified shoes etc).

Detailed assessment on 586 instances in 12 different types of joints affected in 372 cases with haemophilia are detailed in Fig-6. Knees and elbows were the commonly afflicted joints, 232 (62.3%) and 137 (36.8%) respectively. Small joints of hands and feet were affected in 20 and 9 cases respectively.

Correspondingly 1,035 muscles affected from haemophilia in 372 cases are depicted in Fig-7. Most frequently affected muscles were in the lower limbs quadriceps (57.5%), hamstrings (53.4%), calf (41.9%)- and biceps (35.7%) in the upper limb.

Forty of the cases had neural involvements.

Muscular skeletal disabilities resulted in significant difficulty at their work place or undue anxiety or in 53 (14.2%).

CONCLUSIONS

1. Musculoskeletal involvement are common amongst our segment of 1,156 patients with haemophilia.
2. Severe haemophilia B is more likely to have musculoskeletal involvement.
3. Ninety percent had such involvement in their 1st three decades of their life. Half of the young population in their second decade of life had it.
4. Pain, swollen joints, deformities and weakness were frequent presenting features- often multiple - in more than half of the cases.
5. Pain was provoked by common activities in 20- 35% cases.
6. Knees and elbows were commonly involved joints, in 62% and 37% respectively
7. So also the muscles around these two joints were involved most frequently.
8. Neural involvements were encountered in 11.5% of 372 cases.

REFERENCES/ BIBLIOGRAPHY

1. World Federation of Haemophilia. Global report 2001. http://www.wfh.org
2. Hoffman R, Benz EJ, Shattil SJ et al. Hematology. Basic principles and practice, 3rd edn. Churchill Livingstone, 1999
3. Aznar JA, Magallon M, Querol F, Gorina E, Tusell JM. The orthopedic status of severe hemophiliacs in Spain. Haemophilia 2000; 6: 170-6
4. Mulder K, Llinas A. The target joint. Haemophilia 2004; 10: 152-6

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