Homoeopathy in Haemophilia - A project Work

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An attempt for the betterment of these Haemophilics

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DEDICATED TO….
All Haemophilic children
"Reaching out to needy children, Showing them our love and care.
Is one way that God can use us,To bring hope in their despair" - Sper
Helping through…….Our Hearts… Our Hands… and Homoeopathy

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PREFACE
"Keep me faithful, keep me grateful, This my earnest plea each day! Keep me serving, keep me telling Of his love while yet I may!" - Thiessen

"WE TREAT, HE CURES!"

Thanks to Almighty for giving me this opportunity to work in his garden for the betterment of His creation.
One fine day I attended the lecture on Haemophilia by Dr. Mrs. Ranjana Kulkarni, M.D., Pathologist, President of Haemophilia Society, Nashik Chapter. After knowing the available treatment and understanding the real pain behind Haemophilia, a question came in my mind that, "What physicians do to help the patient during the non bleeding phase with the help of conventional medicine?"
The answer was, "Nothing can be done except for the post bleeding physiotherapy."
Then I asked that, "Can we do something for these patients during this phase?"
The query was gladly received and supported by Dr. Sudhir Kulkarni, M.S. Secretary of Haemophilia Society, Nashik Chapter and Dr. Mrs. Ranjana Kulkarni, M.D., Pathologist, President of Haemophilia Society, Nashik Chapter. We owe our thanks to them for their support.

This is how we started with this work,
"Homoeopathy in Haemophilia"
This is a work undertaken on a charitable basis to help haemophilic children and to find out the effect of Homoeopathy in Haemophilia for the betterment of haemophilics.
We are grateful to the motivator and Coordinator of this project Dr. Mrs. Rita Kundu.

INTRODUCTION

When we meet someone, it is our culture to greet them and ask about their well being and our usual first question remains, "How are you?"

Same thing happens in the Doctor-patient relationship. Every day patients come to physician, to get relief of their pains and problems…. and the first usual question asked to patients…….

"How are you?"

They answer in different ways as….

"Fine" OR "…..O...K…" OR "...Not... Fine"

What we actually expect when we ask such a question generating a variety of answers?

We expect the real feeling of the patient and that also as a spontaneous reaction on that particular occasion. Though as a physician we expect a positive reaction, which makes our efforts fruitful, it is always difficult to find out the reality behind these answers.

How to get rid of this still remains an unanswered question, but… have we ever thought that…

"Can we even dare to ask this question to a haemophilic patient?"

"HAEMOPHILIA"

…Where the true pain and sorrow lay, embracing not only to the patient but also the parents, especially the mother, the whole family and also the surroundings.

…Where the childhood of the innocent child is lost in blood.

…What is so fragile that drains out the life out of vessels leaving behind the empty vessel of mind filled with pain and pain?

When other children play, study and enjoy their daily life…the haemophilic child is caged every second, by thousands of unseen bonds, leaving him as good as handicapped, in an unbreakable glass jar… looking at the reality around, as if in a dream. Facing the reality, which perishes all dreams?

Then a question arises in mind "Why it is so?"

A TALE ON HAEMOPHILICS

Introduction:

- Also spelled as hemophilia
- from the Greek *haima* "blood" and ***philia*** "to love"
  - It is a group of hereditary genetic disorders that impair the body's ability to control blood clotting or coagulation.
  - In its most common form, Hemophilia A, clotting factor VIII is deficient.
  - In Haemophilia B, factor IX is deficient.

Type	Incidence
Hemophilia A	about 1 in 5,000–10,000 male births
Hemophilia B	about 1 in about 20,000–34,000

SEX AFFECTED:

The effects of this sex-linked, X chromosome disorder are manifested almost entirely in males.

CARRIER:

The gene for the disorder is inherited from the mother.

Females have two X chromosomes while males have only one, lacking a 'back up' copy for the defective gene.

Females are therefore almost exclusively carriers of the disorder, and may have inherited it from either their mother or father.

In about 30% of cases of Hemophilia B, however, there is no family history of the disorder and the condition is the result of a spontaneous gene mutation.

A mother who is a carrier has a 50% chance of passing the faulty X chromosome to her daughter, while an affected father will always pass on the affected gene to his daughters. A son cannot inherit the efective gene from his father.

PATHOLOGY

These genetic deficiencies may lower blood plasma clotting factor levels of coagulation factors needed for a normal clotting process.

When a blood vessel is injured, a temporary scab does form, but the missing coagulation factors prevent fibrin formation which is necessary to maintain the blood clot.

Thus a haemophiliac does not bleed more intensely than a normal person, but for a much longer amount of time.

In severe haemophiliacs even a minor injury could result in blood loss lasting days, weeks, or not ever healing completely.
The critical risk here is with normally small injuries which, due to missing factor VIII, take long time to heal.
In areas such as the brain or inside joints this can be fatal or permanently debilitating.
The bleeding with external injury is normal, but incidence of late re-bleeding and internal bleeding is increased, especially into muscles, joints, or bleeding into closed spaces.
Major complications include hemarthrosis, hemorrhage, gastrointestinal bleeding, menorrhagia.

Hemophilia Cause
Hemophilia is nearly always caused by a genetic error causing the lack of a normally functioning clotting factor.
While these disorders are typically congenital and present from birth, in rare cases, they may be acquired at some point later in life due to various health complications.

Types
Hemophilia A is an X-linked genetic disorder involving a lack of functional clotting Factor VIII and represents 90% of haemophilia cases.
Hemophilia B is an X-linked genetic disorder involving a lack of functional clotting Factor IX.
Hemophilia C is an autosomal recessive genetic disorder involving a lack of functional clotting Factor XI.
Females possess two X-chromosomes, whereas males have one X and one Y chromosome. Since the mutations causing the disease are recessive, a woman carrying the defect on one of her X-chromosomes may not be affected by it, as the equivalent allele on her other chromosome should express itself to produce the necessary clotting factors.
However the Y-chromosome in men has no gene for factors VIII or IX. If the genes responsible for production of factor VIII or factor IX present on a male's X-chromosome are deficient there is no equivalent on the Y-chromosome, so the deficient gene is not masked by the dominant allele and he will develop the illness.
Since a male receives his single X-chromosome from his mother, the son of a healthy female silently carrying the deficient gene will have a 50% chance of inheriting that gene from her and with it the disease; and if his mother is affected with haemophilia, he will have a 100% chance of being a haemophiliac.
In contrast, for a female to inherit the disease, she must receive two deficient X-chromosomes, one from her mother and the other from her father (who must therefore be a haemophiliac himself). Hence haemophilia is far more common among males than females.
As with all genetic disorders, it is of course also possible for a human to acquire it spontaneously through mutation, rather than inheriting it, because of a new mutation in one of their parents' gametes. Spontaneous mutations account for about 33% of all haemophilia A and 20% of all hemophilia B cases. Genetic testing and genetic counseling is recommended for families with haemophilia. Prenatal testing, such as amniocentesis, is available to pregnant women who may be carriers of the condition.

Management and precautions
Though there is no cure for hemophilia, it can be controlled with regular infusions of the deficient clotting factor, i.e. factor VIII in haemophilia A or factor IX in hemophilia B. Factor replacement can be either isolated from human blood serum, recombinant, or a combination of the two. Some hemophiliacs develop antibodies (inhibitors) against the replacement factors given to them, so the amount of the factor has to be increased or non-human replacement products must be given, such as porcine factor VIII.

PHYSIOTHERAPY:
It is recommended that people affected with Hemophilia do specific exercises to strengthen the joints, particularly the elbows, knees, and ankles.
Exercises include elements which increase flexibility, tone, and strength of muscles, increasing their ability to protect joints from damaging bleeds. These exercises are recommended after an internal bleed occurs and on a daily basis to strengthen the muscles and joints to prevent new bleeding problems. Many recommended exercises include standard sports warm-up and training exercises such as stretching of the calves, ankle circles, elbow flexions, and Quadriceps sets.

TYPES
Haemophilia A
Haemophilia A (also spelled Hemophilia A or Hæmophilia A) is a blood clotting disorder caused by a mutation of the factor VIII gene, leading to a deficiency in Factor VIII.
It is the most common hemophilia.

Inheritance is X-linked recessive; hence, males are affected sexually while females are carriers or very rarely display a mild phenotype. 1 in 5,000 males are affected.

Signs & Symptoms

Hemophilia leads to a severely increased risk of bleeding from common injuries. The sites of bleeding are: joints, muscles, digestive tract, brain.

The muscle and joint hemorrhages are quite typical of hemophilia, while digestive tract and cerebral hemorrhages are also germane to other coagulation disorders.

FIRST SIGNS

With the exception of circumcision, babies seldom have problems before they reach around nine months of age. The first signs of a bleeding problem are likely to occur in early infancy when crawling and walking are first attempted.

These activities will produce the inevitable knocks and twists, which could result in bruises or bleeds into the joints. Painful swelling or a reluctance to use an arm or a leg is an indication that a bleed has occurred. Infant immunisation and other injections should be given subcutaneously.

As children grow, they learn to recognise that bleeding may be occurring. Even before pain or swelling becomes obvious they may recognise a 'funny feeling', which is one of the earliest signs of a joint bleed.

People with haemophilia suffer differing degrees of severity of their disorder. The clinical severity of haemophilia is related to the level of deficiency of the clotting factor.

For people without haemophilia, the normal range of Factor VIII and Factor IX activity varies between 50% and 200%.

NO.	GRADE	ACTIVITY OF FACTOR VIII or IX	CLINICAL PRESENTATION
1	Mild	5% to 25%	Bleeding problems associated with tooth extractions, surgery or severe accident.
2	Moderate	1% to 5%	Haemorrhages are usually related to some injury
3	Severe	less than 1%	Frequent and often spontaneous haemorrhages into joints, muscles and tissue. No injury is necessary for bleeding to begin in people with severe haemophilia.

Tools for Diagnosis

The diagnosis done by factor assay.

A family history is frequently present, although not essential. Recently, genetic testing has been made available to determine an individual's risk of attaining or passing on Haemophilia.

THERAPY

Most haemophilia patients require regular supplementation with intravenous recombinant or plasma concentrate factor VIII. This is highly individually determined.

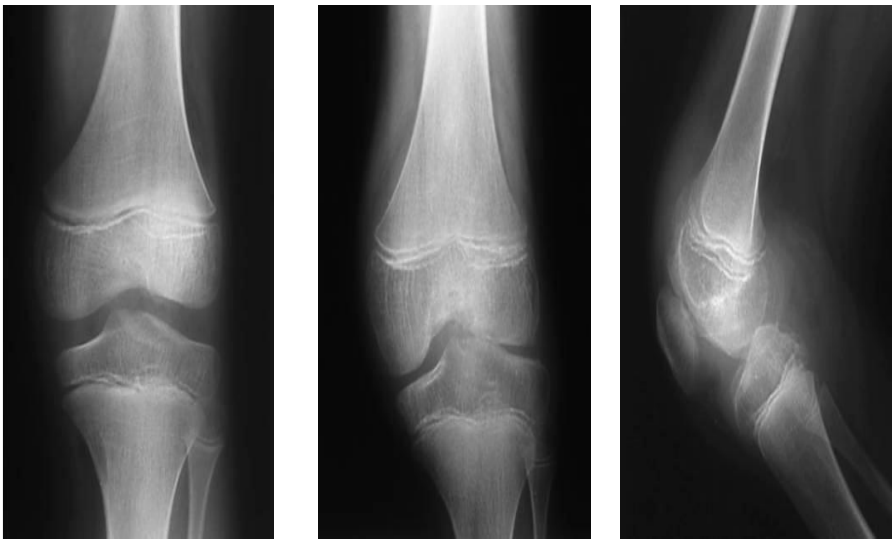
Some may manage on desmopressin, if the clotting factor is still partially active.

STAGES OF ARTHROPATHY

The features considered in the classification system are related to the destruction of articular cartilage and subsequent underlying bone erosion. Figures A, B and C illustrate the various stages of arthropathy.

Figure B demonstrates Stage III with early narrowing of the joint space from loss of cartilage and spur formation on the margins of the condyles. The patella demonstrates early squaring from hyperemia and overgrowth.

Figure C demonstrates more advanced cartilage destruction with more loss of the joint space, cyst formation within the condyles and the articular surface of the patella. The destruction is no longer reversible.



Haemophilia B

Haemophilia B (also spelled Hemophilia B or Hæmophilia B) is a blood clotting disorder caused by a mutation of the Factor IX gene, leading to a deficiency of Factor IX. It is the least common form of haemophilia, rarer than haemophilia A. It is sometimes called Christmas disease after Stephen Christmas, the first patient described with this disease.

GENETICS

The factor IX gene is located on the X chromosome . It is an X-linked recessive trait, which explains why, as in haemophilia A, only males are usually affected.

PATHOPHYSIOLOGY

Factor IX deficiency leads to an increased propensity for haemorrhage. This is in response to mild trauma or even spontaneously, such as in joints (haemarthrosis) or muscles.

TRAETMENT

Treatment (bleeding prophylaxis) is by intravenous infusion of factor IX. Factor IX has a longer half life than factor VIII (Deficient in Haemophilia A) and as such factor IX can be transfused less frequently.

PROTOCOL

SELECTING THE PROBLEM:

Then we think that "This is the life which is more painful than death."
"Is there any solution for this?"
With the same question in mind, this research work was started.
There is treatment available for haemophilics during the bleeding phase, but the procedures are very costly and out of reach of many common people.
Nothing else acts as a conservative therapy except for the physiotherapy which helps in increasing the mobility of the patient in post bleeding phase.
After understanding this situation, a question came in mind, "Can we do anything for such patients with Homoeopathy?"
With this specific question in mind the research work was started with following objectives.

OBJECTIVES:
1) To fulfill the objectives of HFI i.e CHILD WITHOUT PAIN AND DISABILITY.
2) To reduce the frequency of bleeding and subsequent reduction in factor infusion and dependency.
3) Efficacy of Homoeopathic treatment to increase the compliance of the patient in non-bleeding stage- .
4) To improve the general condition and tolerance of the patients.
5) To find the cost effectiveness of Homoeopathy.

SCOPE OF STUDY:
1) Haemophilic patients do not undergo any medication other than Physiotherapy during non bleeding phase.
2) Since Homoeopathy treats the patient as a whole, i.e. spirit, mind and body, the scope of this therapy do remain in this phase also.
3) As Homoeopathy is very economical and today's scientific world promotes interpathy research, so why not to use this golden opportunity for the betterment of these patients.
4) The drug proving protocol allows Homoeopathy to treat the patients from phase two medication, i.e. directly on human beings without undergoing the animal trial phase.

METHODOLOGY:
It is a double arm clinical trial under the umbrella of interpathy research aimed at improvement of the quality of life of the haemophilic patients.
First camp held on 21st December 2007 at Lifeline Hospital, Nashik.
Every monthly follow ups planned.
Case Report Format (CRF) prepared.
Patients were informed as per their contact details available from the register of Haemophilia Society, Nashik Chapter.
First Sunday of every month the camp used to be held at my clinic in upnagar.

The complaints of patients were recorded as per the CRF.
In every follow up the complaints of patients were evaluated taking in consideration the following points:-
Changes in the behaviour
General condition
Episodes of spontaneous bleeding, swelling or ecchymosis or any injury.
Bleeding time and control measures
Healing time
As per homoeopathic principles one month medicine given to all the patients.
Trial Period : 1Year (21st December 2007 to 7th December 2008)

STUDY GROUP:
SEX: Male
AGE GROUP: Our patients are within the age group of 6 months to 40 years
PURPOSEFUL INTERVENTION:
Preventive & therapeutic.

INTERVENTIONS SELECTED:
1) Selecting the population for study: Haemophilia patients of Nashik Chapter.
2) Taking thorough case as per CRF based on Homoeopathic principles.
3) Administration of Homoeopathic Medicine based on Homoeopathic principles.
4) Follow up.
5) Verification and Documentation of the data obtained.
6) Outcome
7) Statistics
8) Conclusion

CASE REPORT FORMAT
1) PRELIMINARY DATA:
2)PRESENTING COMPLAINTS with H/O PRESENTING COMPLAINTS (Particulars):
(From child and his mother/attendant)
3) MIND STATE AND BEHAVIOUR OF THE CHILD (Mental generals):
Mind symptoms
Behaviour:
a) In the Clinic

b) At Home
c) At school
d) On playground, about the favorite sport
- Study:
(Reading, study, school performance of the child etc)
4) MODALITIES (Physical generals):
- Desire:
- Aversion:
(Regarding food, drinks, chocolates, ice creams, cold drinks etc)
Thirst
Thermals
Sleep
Stool
Urine
Perspiration

5) Constitution:
a. Physical Make up: (Built, Complexion etc)
b. General Characters:
c. Manner of entering:
d. Manner of sitting:
e. Activity (In Children):
6) Bleeding/ Disease phase:
(Behaviour and the child as a whole in the disease phase)
7) Disease evolution:
Disease evolution
Paternal H/o & diseases Maternal H/o & diseases

8) Evaluation Criteria for Prescription (Case Extract):

This gives us:
1) Reasonable disease diagnosis
2) Miasmatic diagnosis:
¨ Fundamental mias
¨ Dominant miasm.
3) Mental generals
4) Physical generals
5) Characteristic particulars.

EVALUATION OF PATIENTS
SCALES USED
1. Wong Baker Pain rating scale.
2. Child adaptive /maladaptive behavioural scale.

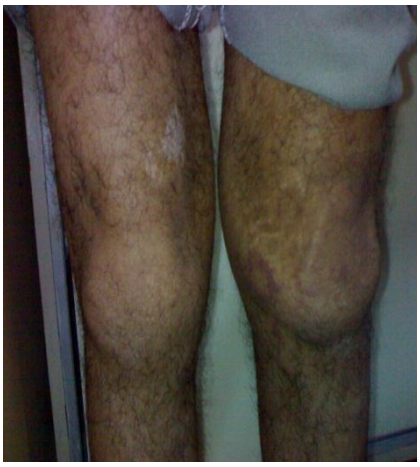
3. Joint mobility assessment SF-32 scale.

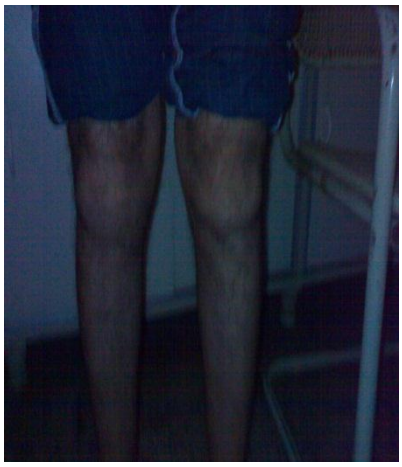
UNDERSTANDING THE ACTION OF HOMOEOPATHIC MEDICINE IN HAEMOPHILIA

It is well understood that Haemophilia is nearly always caused by a genetic error causing the lack of a normally functioning clotting factor.
By giving Homoeopathic medicine we can expect following things to happen:
1) Raising the actual amount of the factor (as there is some source which may not be fully competent), so that the patient will be able to overcome the disease condition.
2) To increase the adaptability of the patient to the same amount of the factor, so that the patient will be able to cope up with the disease condition with the same small amount of the factor.

Case Study (Details of Outcome)
1. All the patients have been improved, evaluated as per the Pain Rating Scale.(Wong- Baker)

2. The disabilities caused due to recurrent haemarthroses has been reduced as the bleeding episodes reduced and recovery also enhanced with homoeopathic medicines.
3. There are significant changes in the social, academic and behaviour of patients.





CONCLUSION

We have successfully achieved our objectives behind this project.
1 .Frequency of requirement of factor VIII and IX reduced.
2. By Homoeopathic treatment the compliance of patients in non-bleeding phase increased.
3. General condition and tolerance of the patients also improved.
4. It is cost effective.
5. Above all the objective of HFI i.e CHILD FREE OF PAIN AND DISABILITY also achieved.

Points to be Remembered By Hemophilics :-

Don't't panic during the episode of any type of bleeding
Try to control bleeding by pressure immediately
Apply ice locally
Use local thrombostatic agents, HamamelisQ locally along with ice
Consult your doctor whenever necessary

Thus it is rightly said, "Research is RE-SEARCH of the established or the partially established facts in altered situations".

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