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Physiology

IRON DEFICIENCY ANEMIA & HOMEOPATHY MEDICINES

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ABSTRACT Anemia is defined as a state in which the blood hemoglobin is below the normal range for the patient's age and sex. Around 30% of the world's population may be affected sometime. The most common cause worldwide is iron deficiency and it is estimated that half a billion people are affected by it. Iron scarcity progresses from reduction of iron stores (mild iron deficiency) to iron-deficiency erythropoiesis (erythrocyte production) and finally into iron deficiency Anaemia (IDA). Iron deficiency anaemia not often causes death, but the impact on human health is considerable. In this paper the cause and symptoms of Iron Deficiency anaemia and its homeopathic treatment is discussed in detailed.

KEYWORDS: Anaemia, Iron Deficiency, Haemoglobin, Homeopathy, Treatment.

INTRODUCTION:

Anaemia is a global public health problem affecting around 1.62 billion people or about a quarter of the world's population in both developed and developing countries. Many types of anaemia exist in the world, and among these, iron deficiency anaemia (IDA) is the generally common. Iron deficiency anaemia has very harmful implications for affected persons, who are at danger of impaired growth and cognitive development, inferior mental and motor function, poorer work ability, and usually lower quality of life.

Anaemia is a condition that develops when blood in your body lacks healthy red blood cells or haemoglobin. Haemoglobin is a main part of red blood cells which binds oxygen. If your body have abnormal or too few red blood cells or your haemoglobin level is abnormal or low, the cells in your body will not get enough oxygen and which will leads to abnormal conditions in your body. It is the most common blood disorder in the general population. Symptoms can include headaches, chest pains, and pale skin.

Iron deficiency anaemia is the most common type of anaemia, and it occurs when your body doesn't have sufficient mineral iron. Your body needs iron to make haemoglobin. When there is no adequate iron in your blood flow, the rest of your body can't get the amount of oxygen it needs. Causes of iron deficiency anaemia are not enough iron intake, Pregnancy or blood loss due to menstruation, Internal bleeding, lack of ability to absorb iron, Endometriosis. Symptoms of iron deficiency anaemia are general fatigue, weakness, pale skin, shortness of breath, dizziness, strange cravings to eat items that aren't food, such as dirt, ice, or clay, a tingling or crawling feeling in the legs, tongue swelling or soreness, cold hands and feet, fast or irregular heartbeat, brittle nails, headaches.

CAUSES OF IRON DEFICIENCY ANAEMIA: DEFECTIVE INTAKE:

In children, psychiatric patients, patients having anorexia due to any cause.

DEFECTIVE ABSORPTION:

- 1. Gastrectomy
- 2. Gastrojejunostomy
- Sprue syndrome

EXCESSIVE DEMAND:

- Growing children
- Females during reproductive period of life, e.g., pregnancy, lactation.
- 3. Thyrotoxicosis

EXCESSIVE LOSS:

- 1. Hookworm anemia
- 2. Bleeding piles
- 3. Menorrhagia in females
- Recurrent haematemesis and malena from acute and chronic ulcerations of the GI tract or rupture of oesophageal varices, gastrointestinal malignancy
- 5. Hiatus hernia

- Recurrent blood donation, long standing haematuria, diverticulitis, drugs including ASPIRIN
- 7. Iron sequestration
- 8. Pulmonary haemosiderosis
- 9. Acute and chronic haemoglobinuria

SYMPTOMS DUE TO ANAEMIA:

Sr.	General	G.I Tract	Cardiovascular	Neurological	
No.					System
1	Weakness	Anorexia	Breathlessness	Dizziness	Amenorrhoea
2	Fatigue	Acidity	Anginal pain	Giddiness	Menorrhagia
3	Lassitude	Heart burn	Sinus tacchycardia (rarely bradycardia)	Tingling	Abortion
4	Swelling of the body and oedema	spleen and	Collapsing pulse	Numbness	Infertility
5	Pallor		Congestive cardiac failure	Insomnia	
6	Dry skin		Palpitation	Dimness of vision	
7	Lusturless hair			Forgetfulness	
8	White sclera			Lack of concentration	
9	Spoon shaped deformity of nails (koilonychia)			Loss of memory	

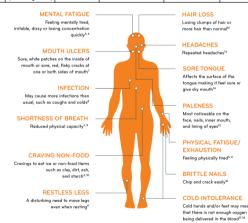


Fig. Symptoms of IDA

COMPLICATIONS OF IDA:

- Slow growth and developmental delays in children and infants
- Heart problems, including heart failure or an enlarged heart due to it compensating for lack of oxygen
- Pregnancy complications, including low birth weights and an

increased risk for premature birth

INVESTIGATIONS TO DETECT IDA: BLOOD EXAMINATIONS:

- Hb% low
- RBC count usually follows Hb%
- CI less than 1
- MCV low, 50-80 fL
- MCH low, 15-26 Pg
- MCHC low, 24-30 g/dl
- Peripheral blood film shows hypochromia, anisocytosis, poikilocytosis, ring or pessary cells, pencil shaped cells.
- Reticulocyte count is usually low.
- TLC & DLC are normal.
- Platelet count is normal.
- Hookworm infestation may be the cause in case of eosinophlia.

BLOOD BIOCHEMISTRY:

- Serum iron level = below 60 ug/dl
- Total iron binding capacity $= \ge 400 \text{ ug/dl } (47-70 \text{umol/L}).$
- Plasma ferritin level=≤30 ug/dl.
- Red cell protoporphyrin level = ≥ 100 ug/dl

BONE MARROW:

- It is hypercellular with hyperplasia showing micronormoblastic reaction with normal granulopoiesis and megakaryocytes.
- Iron content of the bone marrow is decreased or absent.

ENDOSCOPY:

- Doctors often check for bleeding from a hiatal hernia, an ulcer or the stomach with the aid of endoscopy.
- In this procedure, a thin, lighted tube equipped with a video camera is passed down your throat to your stomach.
- This allows your doctor to view the tube that runs from your mouth to your stomach (esophagus) and your stomach to look for sources of bleeding.

COLONOSCOPY:

- To rule out lower intestinal sources of bleeding, doctor may recommend a procedure called a colonoscopy.
- A thin, flexible tube equipped with a video camera is inserted into the rectum and guided to colon.
- Patient is usually sedated during this test.
- A colonoscopy allows doctor to view inside some or all of colon and rectum to look for internal bleeding.

Women may also have a pelvic ultrasound to look for the cause of excess menstrual bleeding, such as uterine fibroids.

PREVENTION OF IDA:

- When caused by inadequate iron intake, iron deficiency anemia can be prevented by eating a diet high in iron-rich foods and
- Mothers should make sure to feed their babies breast milk or ironfortified infant formula.
- Foods high in iron include:
- meat, such as lamb, pork, chicken, and beef
- beans
- pumpkin and squash seeds
- leafy greens, such as spinach
- raisins and other dried fruit
- seafood, such as clams, sardines, shrimp, and oysters
- iron-fortified dry and instant cereals
- Foods high in vitamin C include:
- fruits such as oranges, grapefruits, strawberries, kiwis, guavas, papayas, pineapples, melons, and mangoes
- broccoli
- red and green bell peppers
- Brussels sprouts
- cauliflower
- tomatoes
- leafy greens

MANAGEMENT OF IDA:

When Hb level is below 40% blood transfusion (packed RBC) is to

- Small amount of blood (100-150cc) to be transfused in a slow rate at an interval of 24 to 36 hours.
- When Hb level is between 40%-60%, iron should be given.
- Best route of iron is oral route
- Best form of oral iron is ferrous salt.
- Common oral preparations with doses are given below:
- Ferrous sulphate: 325 mg thrice daily.
- Ferrous fumerate: 200 mg thrice daily.
- 3 Ferrous gluconate: 300-600 mg thrice daily. Ferrous succinate: 150-300 mg thrice daily
- Diets that include the following foods can help treat or prevent iron deficiency:
- red meat
- dark green, leafy vegetables
- dried fruits
- iron-fortified cereals

HOMOEOPATHIC MANAGEMENT OF IDA:

ALETRIS FARINOSA:

- Aletris Farinosa is mainly given to women who are extremely weak and feel tired.
- Such patients always feel tired with minimal energy levels.
- Vertigo and fainting are quite common. Facial skin looks pale.

CINCHONA OFFICINALIS (CHINA)

- China is the best for one who experiences excessive bleeding.
- Bleeding could be due to traumatic injury, periods and so on.
- The person is usually tired and faints quite often.
- China is used to control haemorrhage as well as improves blood quantity after bleeding episodes.
- Cinchona also helps to treat anaemia due to blood loss.

FERRUM METALLICUM:

Ferrum Metallicum is considered to be the best homeopathic medicine for anaemia.

ACIDNITRICUM:

Nit-acid-One is given to anemic persons who have a desire to eat chalk, paper and earth.

NATRUM MURIATICUM:

- Natrum Mur helps to treat anemia due to grief.
- Reasons could be personal tragedy or any other circumstance.
- The condition worsens due to heat.
- One tends to ingest more of salt content food.
- Some other Homeopathic medicines can also be given on the basis of totality of symptoms:
- Ipecach
- Phosphorus
- Ferum Phos
- Hamamelis etc...

CONCLUSION:

Homeopathy can treat Iron deficiency anaemia. If the dosages of properly prescribed homeopathic medicines are taken regularly the Iron deficiency anaemia can be treated. The medicines like Aletris Farinosa, Nitric Acid, Ferrum Phoshoricum, Natrum Muriaticum, Cinchona Officinalis, Ferrum Metalicum, the Iron deficiency anaemia can be treated.

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