IRON DEFICENCY ANEMIA

Exploring the decision making process in the treatment of Iron Deficiency Anemia by Gynecologists

Introduction

Anemia, is usually defined as a *decrease in the amount of red blood cells (RBCs) or hemoglobin in the blood*. It can also be defined as a lowered ability of the blood to carry oxygen. According to the World Health Organization (WHO), anemia is defined as a hemoglobin level of less than 13 g/dL in men and less than 12 g/dL in women.

Figure 1: Iron levels in body at various stages

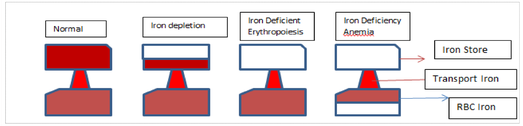


Table 1: Classification of anemia (W.H.O.)

Age groups	No Anaemia	Mild	Moderate	Severe
Children 6–59 months of age	≥11	10–10.9	7–9.9	<7
Children 5–11 years of age	≥11.5	11–11.4	8–10.9	<8
Children 12–14 years of age	≥12	11–11.9	8–10.9	<8
Non-pregnant women (15 years of age and above)	≥12	11–11.9	8–10.9	<8
Pregnant women	≥11	10–10.9	7–9.9	<7
Men	≥13	11–12.9	8–10.9	<8

Source: Haemoglobin concentration for the diagnosis of anaemia and assessment of severity, WHO

Objective

To explore the decision making process in the treatment of Iron Deficiency Anemia by gynaecologist

- To identify the need gaps in the treatment of IDA
- To identify the most suitable iron molecule/salt in clinical practice
- To identify the choice of brand of gynaecologists

Methodology

Sample Design: Descriptive study

Sampling: Cluster sampling

Sample population: Gynecologist and Obestritions

Sample Size: Respondents: 75

Sample area: Mumbai (Borivali,Kandivali,Dahisar,Andheri,Vile Parle)

Tool: Questionnaire to collect primary data

Microsoft Excel to carry out analysis

Data Collection: Primary- Through questionnaire and meeting with respondents

Secondary- To understand study topic and objectives information from various sources like articles, journals, reference books, previous relevant studies was collected. IMS data from Sun Pharma.

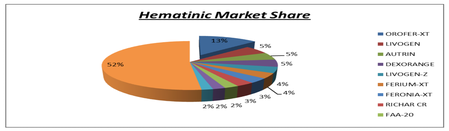
Study duration: Two (2) months

Hematinic Market

Table 2: Hematinic market

Hematinic	MAT APR -2015	MAT APR - 2016	Growth % Over 15-16
CONV.IRON SOLIDS	709	796	12
IPC ORAL SOL.	10	9	-3
CARBONYL IRON SOL.	39	48	22
Grand Total	**758**	**853**	**13**

Figure 2: Hematinic Market Share



Findings And Interpretation

Figure 3: Prevalence of IDA

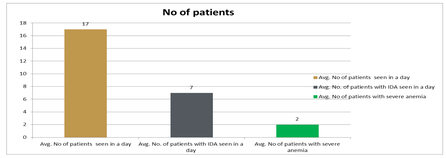


Figure 4: Diagnostic Tests performed

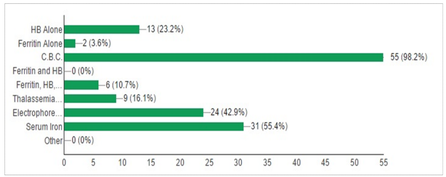


Figure 5: Preferred iron molecule for treatment of mild IDA

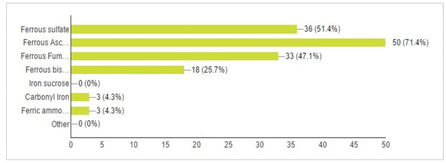


Figure 6: Preferred iron molecule for treatment of severe IDA

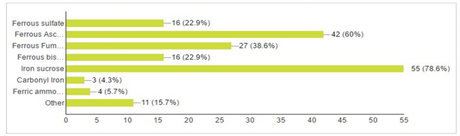


Figure 7: Formulations used with iron

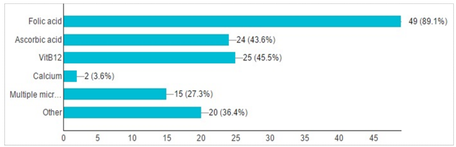


Figure 8: Disadvantages of the therapy

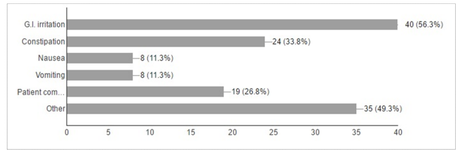


Figure 9: Most preferred brands

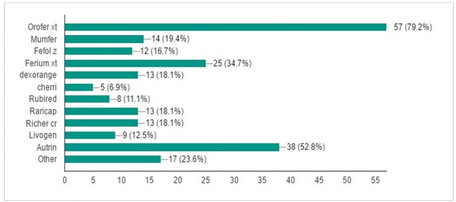
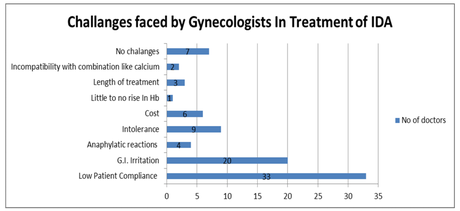


Figure 13: Challenges faced by gynecologists



Conclusion

- To market a hematinic brand, it is crucial to understand the decision making process of the gynecologists for the treatment of IDA.
- A hematinic formulation with a Ferrous Ascorbate molecule is more preferred by the doctors.
- Folic acid, ascorbic acid and zinc formulation is preferred due to enhancement in absorption.
- The main challenges faced by gynecologist in treatment of IDA are Non- compliance of patient.
- The other main challenge in the Iron therapy is Intolerance of Iron causing GI irritation.
- Shape and size of the solid dosage formulation should also be small.
- The length of the treatment is long.

Recommendations

- A hematinic formulation with a Ferrous Ascorbate molecule should be considered as the active ingredient.
- Folic acid, ascorbic acid B12 and zinc formulation could be used in addition to iron.
- A control release formulation could enhance the compliance.
- Shape and size of the solid dosage formulation should also be small.
- Strong promotional activities along with the clinical data support is required to influence gynecologists in the decision making process for the treatment of IDA.
- Focus could be given on a better packing of drug making it patient compliant. For example a calendar / days based packing of tablets.
- Using target drug delivery systems like liposomal iron will decrease the GI irritation.

Reference

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