

Title: Evaluation of treatment of hyperemesis gravidarum by using parenteral fluid with insulin



Introduction

Hyperemesis gravidarum (HG) is a severe and prolonged form of nausea and/or vomiting during pregnancy. HG affects 0.3–2% of pregnancies and is defined by dehydration, ketonuria, and more than 5% body weight loss. Initial pharmacologic treatment for HG includes a combination of doxylamine and pyridoxine. Additional interventions include ondansetron or dopamine antagonists such as metoclopramide or promethazine. The options are limited for women with HG. PUQE score classify HG patients in mild (4-6), moderate (7-12) and severe (>13). It is calculated by asking questions about duration and frequency of nausea, retching and vomiting over 24 hours

Aim – To investigate the efficacy of intravenous insulin in the treatment of moderate to severe hyperemesis gravidarum

Material and methods- It is a hospital based prospective interventional study done at SSMC Medical College in the duration of 6 month, from 1/6/24 to 30/11/24. 290 patients with gestational age 6 weeks to 14 weeks were included in the study and classified into mild (221), moderate (45) and severe (24) hyperemesis according to PUQE scoring system. Mild and moderate cases were treated in OPD. 40% of moderate and all severe cases (42) were admitted, investigated and treated with parenteral fluids and insulin. Patient in group A was treated with intravenous fluid (21) and another group B was treated with insulin infusion with DNS. Antiemetics given to all. Patients oral feeding time, 24 hours PUQE score and hospital stay was monitored.

Results-

Out of 290 patients 86.2(248) were of mild to moderate cases of hyperemesis who respond to oral medications and 14.48% (42) cases were of moderate to severe hyperemesis and were treated in hospital. Most of the patients in group A were primigravida (66.6% and 52.3%). Oral feeding was initiation time in group B was 11.9 hours while in group A was 51.4 hours. Hospital stay in group A was 4.9 days while in group B was 1.85 days. Readmission in the insulin group was none

	Gr. A	Gr. B	P value
Mean age	23(4.1)	24 (3.8)	t(2.15),P(0.03)
Parity	66.66%	52.38%	t(6.19),P(<0.001)

Table 1- Association according to mean age and parity

Before treatment	Gr.A (N)	Gr. A (%)	Gr. B (N)	Gr. B (%)
Mild	124	85.50%	124	85.50%
Moderate	10	6.90%	8	5.50%
Severe	11	7.60%	13	9.00%
Chi-square	0.389	P value	0.823	NS
After 24 hours of treatment	Gr.A (N)	Gr. A (%)	Gr. B (N)	Gr. B (%)
Mild	130	89.60%	139	95.90%
Moderate	9	6.20%	5	3.50%
Severe	6	4.10%	1	0.60%
Chi-square	5.015	P value	0.08	NS

Table 2- Association among all cases of group A and B before and after treatment

	Gr. A	Gr. B	P value
Initiation of oral feeding (Hours)	51.4 (11.2)	11.9 (2.1)	t(41.7), P(<0.001)
Hospital stay (days)	4.9(1.2)	1.85(0.4)	t(29.03), P(<0.001)

Table 3- Association according to mean hours of oral feeding and hospital stay

Conclusion- The addition of insulin to intravenous fluid in the treatment of HG is effective in reducing PUQE score and hospital stay of the patient. It can be an effective treatment option

References-

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