

Severe Hyperemesis Gravidarum: A New Presentation of SARS-COVID-19. Case Series

K LESTAK¹, M SOER¹, S KENT¹, M BAUMGARTEN¹

THE ROSIE HOSPITAL, CAMBRIDGE UNIVERSITIES NHS FOUNDATION TRUST, CAMBRIDGE, UK

1. Introduction

- New variants of SARS-COVID-19 (COVID-19) continue to evolve in their symptom presentation^{1,2}.
- Three cases are presented reporting severe hyperemesis in early pregnancy as the principal symptom of COVID-19.
- Severity of symptoms are assessed by the "Pregnancy Unique Quantification of Emesis" or PUQE score (0-15)³.

2. Cases

A 30Y G1 P0 11 + 5 weeks

- Severe nausea and vomiting (PUQE: 15), 4+ urinary ketones.
- Single pyrexia 38°C.
- No other COVID-19 symptoms.

- Resolution of symptoms with IM Prochlorperazine.
- Found to be COVID positive the following day.
- No further admissions with hyperemesis. Established on Cyclizine and Prochlorperazine.

B 24Y G2 P1 7 weeks

- First presentation of hyperemesis in pregnancy to emergency department.
- Urinary ketones 4+. No COVID-19 features.

- Suffered from intermittent vomiting pre-pregnancy, seen under Gastroenterology.
- Resuscitated with intravenous fluids, anti-emetics (Ondansetron, Prochlorperazine and Cyclizine).
- Required 4-day inpatient stay.

C 33Y G2 P1 8+3 weeks

- Presented to emergency department with nausea and vomiting. PUQE: 11.
- Urinary ketones 1+.
- Inpatient admission for 24 hours requiring intravenous fluids and anti-emetics.

- Discharged with regular Cyclizine.
- Single further presentation with vomiting, given single dose intramuscular Cyclizine and recovered without further intervention.

3. Discussion

- No cases reported had any further features of COVID-19 infection aside from a single pyrexia (including breathlessness, anosmia or cough).
- Moreover, no women were re-admitted following their initial presentation, suggesting a peak of symptoms during COVID-19 infection.
- Possible mechanisms include the upregulation of inflammatory cytokines (including IL-6, IL-10 and TNF- α) which, in those susceptible, could trigger hyperemesis symptoms⁴.

4. Conclusion

- For women presenting with severe hyperemesis in early pregnancy, COVID-19 should be considered as a cause.
- Further research should focus on confirming this potential association and possible mechanisms underlying it.

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