A case of recurrent re-admissions with severe hyperemesis Gravidarum

P. Jinadev¹, K. Jacob²

¹Department of Diabetes & Endocrinology
²Pilgrim Hospital, United Lincolnshire Trust, Boston, PE21 9QS

Case presentation

- Mrs XY, 29 years old, (gravida 3, para 2), was admitted under the obstetrician with severe hyperemesis at 8 weeks gestation. She had 3 admissions prior to this admission with similar complaint.
- She was treated with IV fluids, Ondansetron, Thiamine at all admissions.

Past History

- Autoimmune primary hypothyroidism
- Depression

Medications

- Levothyroxine 125 mcg once daily
- Sertraline

Endocrinology referral

- Endocrinology opinion was requested by the obstetrician for review of deranged TFTs

Clinical examination

- MRS XY was found to be hyper pigmented especially at elbows and buccal mucosa.
- She was dehydrated. Her BP 93/52 mm Hg.
- She was emotionally distressed (expressed the desire to terminate her pregnancy).

Investigations

- S.Sodium 136 mmol/l (134-146)
- S. Potassium 3.8mmol/l (3.5 – 5.3)
- Urea 0.5 mmol/l (2.5 -5.8)
- Random glucose 7.9 mmol/l (3-6)
- Hb 10.4g/l, MCV 87 fl, eosinophils normal
- Tissue transglutaminase antibodies IgA negative.

Endocrinology tests

- TSH 0.24 mu/l (0.35 – 4.94), FT₄ 15.8 pmol/l (9-19.1)
- S.Cortisol and ACTH

Short Synacten test

<table>
<thead>
<tr>
<th>Basal Cortisol</th>
<th>&lt;20 nmol/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 min Cortisol</td>
<td>&lt;20 nmol/l</td>
</tr>
</tbody>
</table>

ACTH elevated at > 1250ng/l.
Adrenal antibodies positive.
Plasma renin activity 2.4 nmol/hr/l

Diagnosis and Treatment

- Diagnosis of Addisonian crisis was made.
- She was immediately treated with IV Hydrocortisone 100mg followed by 100mg 6th hourly IM for 48 hours and IV fluids

Outcome and Follow up

- There was no further admissions during pregnancy.
- She delivered a healthy baby at 38 weeks gestation.
- The pigmentation had improved.
- Her medications consist of Hydrocortisone 10mg/5mg/5mg, Fludrocortisone 100mcg once daily and Thyroxine 125mcg once daily.

Discussion

- Addison’s disease in pregnancy can be easily missed due to similar presentation as in early pregnancy. (vomiting, fatigue, hyperpigmentation and low blood).
- This lady also had autoimmune hypothyroidism which can be associated with autoimmune adrenal insufficiency especially as part of polyglandular autoimmune syndrome Type 2.
- Addison’s disease developing in pregnancy may result in adrenal crisis if delay in diagnosis. Prior to the availability of glucocorticoids, hypoadrenalism was associated with significant mortality with almost 80% dying within 2 years. (1)
- Hyperpigmentation in pregnancy can be another source of confusion. Hyper pigmentation usually occurs in discrete localised areas including around areola, nipples, axillae and genitalia.
- Melasma in pregnancy typically affects the sun exposed areas of the face.
- The hyperpigmentation of chronic primary hypoadrenalism is usually generalised but also noticed on the mucosa, areas of frictions and old scars.
- In our patient the hyperpigmentation was considered due to pregnancy until reviewed by the endocrinologist on the ward.

Conclusion

- Our patient with known autoimmune hypothyroidism presented with severe hyperemesis gravidarum and hyperpigmentation in her 3rd pregnancy.

She was 8 weeks pregnant. She did not see these problems with her previous pregnancies. A high index of suspicion for adrenal insufficiency is necessary especially if other autoimmune conditions coexist.

Reference

Dunlop D - 86 cases of Addison’s Disease.
British Medical Journal 1963;2:887