

Managing Congenital Adrenal Hyperplasia and Complex Comorbidities in Pregnancy: A Multidisciplinary Approach.

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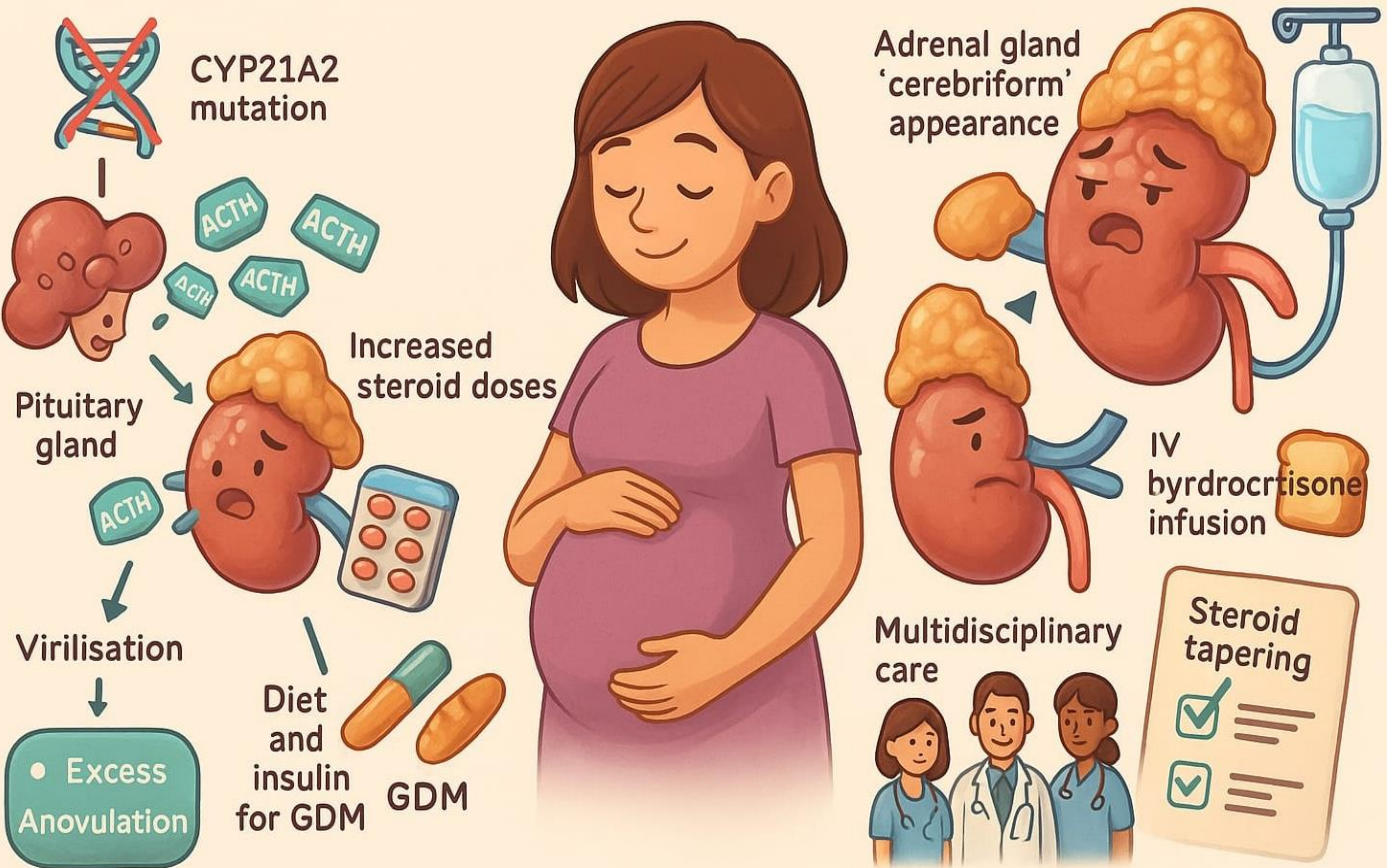
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Background

- **Congenital Adrenal Hyperplasia (CAH)** is a rare endocrine disorder that complicates pregnancy management.
- This case involves CAH alongside **hypothyroidism, gestational diabetes mellitus (GDM)**, and **epilepsy**, requiring robust interdisciplinary coordination.

Case Summary

- A 31-year-old woman with a known history of classical CAH since childhood, hypothyroidism, and focal epilepsy was referred to the high-risk antenatal clinic. She had been on lifelong glucocorticoid therapy (Hydrocortisone 10 mg AM / Prednisolone 2.5 mg PM) and Levothyroxine for hypothyroidism.
- **Preconception planning:**
 - Reviewed by endocrinology and fertility teams
 - Genetic counselling: partner not a carrier for CAH mutations
- **Pregnancy course:**
 - Hydrocortisone and prednisolone increased to meet gestational cortisol demands
 - Levetiracetam introduced at 250 mg BD → increased to 500 mg BD
 - Levothyroxine increased to 100 mcg daily
 - GDM diagnosed in the third trimester via home glucose monitoring (OGTT negative earlier)
 - Glycaemic control achieved with dietary modifications and insulin



Conclusion

Personalised, MDT-led care enables successful outcomes in high-risk pregnancies complicated by CAH and comorbidities. This case underscores the importance of proactive planning and collaborative antenatal management.

Intrapartum and Postpartum Management

A planned lower segment caesarean section (LSCS) was agreed upon to ensure optimal timing and preparation for adrenal support.

Intraoperative strategies:

- Continuous IV hydrocortisone infusion to prevent adrenal crisis
- MDT presence: obstetrics, endocrinology, anaesthetics, diabetes team

Postoperative care:

- Transition to oral steroids: Hydrocortisone 20 mg AM / 10 mg midday, Prednisolone 2.5 mg PM
- Steroid taper over one week postpartum
- Levothyroxine adjusted to 50 mcg daily

Clinical Challenges and Learning Points

- **Endocrine instability:** Steroid dose must be dynamically adjusted to meet metabolic stress.
- **Neurological safety:** Antiepileptic treatment must be fetal-safe yet effective.
- **GDM surveillance:** Continuous glucose monitoring vital in these cases.
- **Multidisciplinary Team approach :** MDT communication and pre-emptive planning reduced risk of decompensation.