

A Rare Case Of Autoimmune Progesterone Anaphylaxis

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Background

Autoimmune Progesterone Anaphylaxis (AIPA) and Autoimmune Progesterone Dermatitis (AIPD) are rare phenomena involving allergic reactions of varying intensity to endogenous (and sometimes exogenous) Progesterone. The classic presentation is AIPA (rare) or AIPD (uncommon) in the luteal phase of the menstrual cycle.

Case

A 47 yo para 3 presented to our Emergency Department (ED) with a severe anaphylactic reaction requiring admission to the Intensive Care Unit (ICU) and treatment with repeated doses of IM and nebulised Adrenaline, Hydrocortisone and anti-histamines. The clinical suspicion was food allergy.

Methods

She presented with two further similar episodes, each 4 weeks apart, requiring ICU. Food allergy tests were negative. A cyclical pattern was recognised and the gynaecology team involved. It was identified that these episodes had occurred during her mid luteal phase. Following a working diagnosis of AIPA, she was started on the combined oral contraceptive pill (COCP) with a view to suppressing her ovulation and thereby the mid luteal progesterone rise. She responded well. Her progesterone skin test was positive. Two months later, on her request, we performed Total Abdominal Hysterectomy + LEFT salpingo-oophorectomy (she had undergone RSO before for a torted cystic ovary) as a permanent cure. Oestrogen only HRT was commenced post oophorectomy.

Conclusion

AIPA, as described in our case, is extremely rare with only around 10 cases reported. It manifests as an anaphylactic reaction to endogenous progesterone rise in the luteal phase. AIPD is relatively common and manifests as various dermatological lesions (eg: erythema, urticaria, angioedema, erythema multiforme) in the luteal phase. Pathogenesis is poorly understood. One school of thought is that naturally formed antibodies against food, medications or viral antigens can eventually cross react with endogenous progesterone. Treatment of AIPA is ovulation suppression with agents such as COCP, Progesterone Sub dermal implant, Danazol or GnRH analogues. Permanent cure is by oophorectomy.

References

1. AIPA in a 24 year old woman – A case report
Mohammad Eli Magen et al IMAJ Volume 14 ; 2012