

Interesting case for Society for Endocrinology Clinical Cases Meeting – Manchester 5-7 November 2007, relating to the workshop on disorders of the parathyroid glands, calcium metabolism and bone

AP – A case of hypercalcaemia in pregnancy secondary to MEN1
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AP is a 30 year old solicitor who was under investigation for hypercalcaemia when she fell pregnant for the first time. PTH and serum corrected calcium had been found to be raised. Urinary calcium was high. A sestamibi scan showed uptake consistent with a parathyroid adenoma in the left superior parathyroid gland, with less marked uptake in the right inferior parathyroid also suspicious of adenoma. There was a family history of parathyroid adenoma, with her father having had 3 parathyroid glands removed. This raised the possibility of a familial disorder, such as MEN1. Fasting gut hormone levels were found to be low and prolactin was normal, but genetic studies confirmed the presence of genes associated with MEN1.

The literature suggests a significant rate of adverse pregnancy outcomes in patients with primary hyperparathyroidism, resulting in a recommendation for surgical correction of hyperparathyroidism during pregnancy. Reported case series have shown elective surgery to be well tolerated, with a significant reduction in adverse outcomes. However, many of the women in the case reports were symptomatic, and had suffered with nephrocalcinosis or renal insufficiency. These recommendations may not apply in the same way to women with milder hypercalcaemia, with adverse outcomes being over-represented and therefore the benefit of surgery exaggerated. In the case of AP surgery was considered very strongly but ultimately not performed, with the decision influenced by recent clinical experience. She was advised to drink at least 2 litres of clear fluids each day, and to avoid any calcium or vitamin D supplements.

The pregnancy proceeded without significant complication, and induction of labour was performed at 38 weeks gestation. A female baby weighing 3.49kg was born by normal vaginal delivery. There were no immediate complications, with APGAR scores of 9, 10 and 19 at 1, 5 and 10 minutes respectively. The baby has been developing well, although consistently hypercalcaemic since birth and under regular follow-up by the paediatric service. AP will be followed up in a MEN clinic at a local tertiary centre for surveillance for further endocrine neoplasia.

Reference

Kovacs C.S & Kronenberg H.M (1997) Maternal-Fetal Calcium and Bone Metabolism During Pregnancy, Puerperium and Lactation. *Endocrine Reviews* 18(6): 832-872.