Pituitary apoplexy in pregnancy: two case reports

M Zammit-Mangion¹, A Rogers², L Mackillop¹

¹John Radcliffe Hospital, Oxford, ²Churchill Hospital, Oxford

Background
We present two cases of women who suffered pituitary apoplexy during their pregnancy and were managed conservatively with a good outcome.

Case 1
31 year old lady, presented at 18 weeks gestation with a ten day history of headaches, nausea and vomiting. She was hypotensive and had right superior quadrantanopia. She was hyponatraemic (123 mmol/L, normal range 130-140 mmol/L) and hypothyroid: TSH 0.9mU/L (normal range 0.5-3.5 mU/L), T₄ 7pmol/L (normal value 9-15.5pmol/L in second trimester). MRI showed a pituitary lesion with a haemorrhagic component. She was treated with hydrocortisone intravenously followed by oral hydrocortisone 10mg-5mg-5mg, and 75mcg levothyroxine daily. The visual defect resolved after one week. She laboured spontaneously at 39 weeks and delivered vaginally with hydrocortisone cover. All MRI abnormalities resolved fully by ten weeks postpartum. Hydrocortisone replacement was stopped postpartum but she required continuation of levothyroxine at six weeks postnatally.

Case 2
28 year old lady, presented at 16 weeks gestation with frontal headaches, nausea and vomiting for three weeks. MRI showed an area of haemorrhage into a 9x6mm pituitary cyst or macroadenoma. At 35 weeks she presented with lethargy. Visual field testing showed no defects. Hormonal evaluation was normal and she did not require hormonal replacement. MRI showed a reduction in size of the cyst. She underwent a successful induction of labour at 37 weeks due to pre-eclampsia, with hydrocortisone cover. The patient was lost to follow-up in the post partum period.

Conclusion
Pituitary apoplexy in pregnancy is rare (only 13 cases reported since 1979), and more challenging to diagnose than in the non-pregnant patient. As shown in the above cases, once hormonal deficiencies are corrected, it is safe to proceed with vaginal delivery, provided adequate steroid cover is given during labour.