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Worsening neurological status in late pregnancy: consider meningioma

Sir,

We would like to report a case of worsening neurological status in late pregnancy due to a meningioma. A single 34 year old primigravida was admitted at 35 weeks gestation complaining of depression and right-sided headaches. The depression was of acute onset whereas the headaches occurred 5 weeks ago but had worsened over the previous week. A preliminary diagnosis of an acute depressive disorder was considered by the psychiatrist. She was afebrile and normotensive. The uterine size was equivalent to a 36 weeks gestation with a single live fetus.

As a result of her refusal or inability to eat and the detection of ketonuria, there was rapid infusion of fluids. Subsequently her condition worsened and neurological reassessment detected a left hemiplegia and ptosis with early bilateral papilloedema. A diagnosis of a right cerebral space occupying lesion was made. Intravenous fluids were restricted to 1 litre in 24 hours, and parenteral dexamethasone administered. She improved but with persistence of the left hemiparesis. An elective caesarean section was performed with delivery of a healthy 2,650 g male infant. There was immediate improvement and by the third post-operative day, she was able to attend to her baby.

One week postpartum, she travelled to nearby Venezuela for magnetic resonance imaging (MRI) scan and angiography of the brain. These revealed a right temporal lobe lesion. Three weeks later, craniotomy removed a right sphenoidal wing oedematous meningioma. Her recovery was uneventful.

The symptoms of headaches, nausea and vomiting are often encountered in pregnancy leading to complacency in the evaluation of neurological systems of pregnant patients. The consideration of an intracranial lesion at this time was extremely remote. In retrospect, it appeared that the liberal infusion of fluids unmasked the cerebral tumour. Her mood improvement after delivery could be explained by the recognized course of meningiomas in pregnancy. They tend to grow rapidly becoming symptomatic close to term.¹ Progesterone receptors are present on meningioma tissue² so that under the influence of progesterone they enlarge by fluid retention and enhanced vascularity; similar to that of fibroids. Delivery with fall in progesterone levels led to shrinkage of the neoplasm. Her recovery thereafter makes this hypothesis plausible and is in keeping with findings of others.³

Although the diagnosis was not confirmed initially we considered her clinical condition to be of such severity as to require caesarean section, a policy advocated by

others.^{1,2} Even though this is the first case to be reported in the West Indies, it is worth noting that the above symptoms occurring especially in the absence of pre-eclampsia warrants a thorough neurological evaluation. Meningiomas in the Caribbean constitute 21% of all neurological lesions, they are particularly prevalent in the 31–50 year age group and females outnumber males 1.68 to 1.⁴ Given these statistics, its presence in West Indian women presenting with worsening neurological symptoms in late pregnancy should always be considered.

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Intra-operative seeding of tumour cells

Sir,

A 74 year old heavy smoker presented with chest pain, anorexia, clubbing and an irregular right lung mass on chest X-ray and computed tomographic scan. Bilobectomy was performed and the histology showed adenosquamous carcinoma. Within three months of the operation, two large subcutaneous masses appeared on both the anterior and posterior edges of the thoracotomy scar (Figure 1). Fine needle aspiration revealed malignant

Figure 1 Thoracotomy scar.