CASE PRESENTATION

Pseudotumour Cerebri in Pregnancy: A Case Report

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ABSTRACT

Pseudotumour Cerebri is a rare disorder, which occurs in the reproductive age group. It is relatively rare in pregnancy. We report one case of Pseudotumour Cerebri which was diagnosed preconceptially and was initially treated with corticosteroids. When pregnancy was diagnosed, the corticosteroid was discontinued and treatment was changed to repeated lumbar punctures. Symptomatic relief was achieved and the patient had an unremarkable antenatal course. A 3050 g full term female was delivered vaginally with apgar scores of 9 and 10 at 1 and 5 minutes respectively.

Seven similar cases were reviewed which also diagnosed preconceptially. Clinical presentation, modalities of treatment and outcome of pregnancy are discussed.

Pseudotumour Cerebri (benign intracranial hypertension) is rare in pregnancy. The disorder is characterised by elevated intracranial pressure and symptoms such as headache, blurred vision and papilloedema, without intracranial mass lesions, obstruction of cerebral ventricles or intracranial infections.

To establish the diagnosis, one must demonstrate elevated cerebrospinal fluid (CSF) pressure, normal CSF composition and the absence of an intracranial mass on CT scan.

The pathogenesis of this disorder is unknown, but it was found to be associated with elevated CSF prolactin which may cause increased production of CSF. Others believe that it is due to a reduction of CSF absorption[1]. It had also been noted that there were associations between the occurrence of the disorder and the following conditions: corticosteroid therapy and its withdrawal, nalidixic acid therapy, nitrofurantoin therapy, tetracycline therapy, hypothyroidism, hyper and hypo vitaminosis A and iron deficiency anaemia[2].

We report one case of Pseudotumour Cerebri during pregnancy and review seven cases, all diagnosed preconceptially. Clinical presentation, modalities of treatment and outcome of pregnancy are discussed.

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THE CASE

A 27-year old black female patient with TPAL 2002 presented with complaints of headache, blurred vision and vomiting for one week duration.

She had taken oral contraceptives in between her previous two uneventful pregnancies and until seven months prior to presentation. The patient denied any other medications, infectious or trauma. Her past medical history was unremarkable.

Physical examination revealed an obese patient with bilateral papilloedema. The remainder of her examination was within normal limits.

Brain CT scan and skull films were normal, opening pressure at lumbar puncture was 255 mm H_2O. Cerebrospinal fluids (CSF) analysis revealed protein of 0.04 g/l, glucose of 3.0 mmol/l, chloride of 122 mmol/l and only one white blood cell. Culture was negative.

She was commenced on Prednisone, 40 mg per day. Her symptoms improved markedly and was discharged 2 weeks later.

The patient was readmitted after 12 weeks with the same complaints, and was found to be 9 weeks pregnant also. Treatment by repeated lumbar puncture to relieve symptoms was prescribed due to the patient being in the first trimester of pregnancy. Lumbar puncture was performed with an opening pressure of 258 mm H_2O. Marked improvement of headache, visual disturbance and papilloedema was noted.

Repeated lumbar punctures were performed when the patient was 13 and 21 weeks pregnant respectively. The patient's symptoms and papilloedema resolved and she had an unremarkable antenatal course.

At term, the patient went into spontaneous labour and delivered vaginally one 3050 g full term, baby girl, with an apgar scores 9 and 10 at 1 and 5 minutes respectively.

Table 1
Case histories of pseudotumour cerebri in pregnancy (preconceptial diagnosis)

Author	*Age (Yrs)*	*OB G*	*History TPAL*	*Presentation*	*Treatment*	*Outcome*
Paterson	25	N/A		headache, blurred vision enlarged blind spots, visual field loss	steroids	Term (delivery)
Powell	25	5	3013	headache, blurred vision enlarged blind spots	steroids	Spont. abortion 9 1/2 wks
Palop	21	1	0000	headache	lumbar puncture bed rest	Term (delivery)
Kontz	21	3	2002	headache	analgesics	Term (delivery)
	27	1	0000	headache	analgesics diuretics	Term (delivery)
	20	4	3003	headache	analgesics	Term (delivery)
	29	1	0000	headache	analgesics	Term (delivery)
	27	3	2002	headache blurred vision	repeated lumbar puncture	Term (delivery)

Postpartum, the patient made an uneventful recovery without recurrence and required no further treatment, and was followed in the postnatal clinic with no further complaints.

DISCUSSION

This patient represents another case of Pseudotumour Cerebri in pregnancy, diagnosed preconceptionally. In reviewing the other seven case reports[3-6] (Table 1), we found that the age ranged from 20 to 29 years with a mean of 24.3 years.

Four patients were multigravida and three primigravida. The gravidity was not mentioned in one case report[3].

Headache was the commonest presenting symptom, which occurred in all of the patients (8 out of 8). Only three patients presented with blurred vision. Papilloedema was the consistent finding (100%). Other findings less commonly noted include enlarged blind spots (2/8) and visual field defect (1/8).

Anecdotal reports suggested various therapeutic modalities, but unfortunately, there had been no prospective randomised studies to compare these modalities, because of the limited number of cases and the disease having a natural rapid spontaneous remission rate.

With regard to the treatment, the main objectives are relief of pain and preservation of vision. The most frequently recommended treatments are analgesics, steroids and lumbar puncture. Rarely, if ever, surgical treatment.

Four patients were treated effectively by analgesia, one of them required diuretics[4]. Two patients were treated with steroids and only one patient was treated with bed rest and lumbar puncture[5]. Our patient was treated effectively by repeated lumbar punctures (three times).

It has been pointed out that CSF pressure increases with contraction of the uterus during labour and that pain has an exaggerated effect. Therefore, epidural anaesthesia was recommended. It had been utilised in one of the seven reported patients[5].

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