



West Middlesex University Hospital

Query: Facial Palsy in Pregnancy subsequent to commencing Methyldopa

Date of Search: 10/06/2016-13/06/2016

Sources Searched: Medline, Embase, BNF, DynaMed, Google Scholar

Summary:

According to BNF (May 2016) of cited adverse effects the frequency of facial paralysis/Bell's palsy associated with Methyldopa is not known:

Amenorrhoea; arthralgia; asthenia; **Bell's palsy**; bone-marrow depression; bradycardia; decreased libido; depression; dizziness; drug fever; dry mouth; eosinophilia; exacerbation of angina; failure of ejaculation; gastro-intestinal disturbances; gynaecomastia; haemolytic anaemia; headache; hepatitis; hyperprolactinaemia; hypersensitivity reactions; impaired mental acuity; impotence; jaundice; leucopenia; lupus erythematosus-like syndrome; mild psychosis; myalgia; myocarditis; nasal congestion; nightmares; oedema; pancreatitis; paraesthesia; parkinsonism; pericarditis; postural hypotension; rashes; sedation; sialadenitis; stomatitis; thrombocytopenia; toxic epidermal necrolysis

Source BNF May 2016: https://www.medicinescomplete.com/mc/bnf/current/PHP1077-methyldopa.htm?q=METHYLDOPA&t=search&ss=text&tot=37&p=1#_hit [accessed 13/06/2016]

Prevalence of Bell Palsy in pregnancy:

- Prevalence in pregnancy is estimated to be about 4–5 per 10 000, about 10 times more frequent than in the non-pregnant population.

- It is common in the third trimester and immediate postpartum period. Most women who develop Bell's palsy have no risk factors before pregnancy, including diabetes or chronic hypertension

Aetiology:

- Several studies have suggested that Bell's palsy in pregnancy is due to similar causes as in non-pregnancy, such as altered susceptibility to herpes simplex viral reactivation, Epstein–Barr virus, or cytomegalovirus during the third trimester of pregnancy. Bell's palsy may be secondary to latent herpes simplex infection.
- Other studies have shown an association of Bell's palsy with pregnancy-induced hypertension and pre-eclampsia, more than 4–5 times in the general obstetric population.
- Various theories have been proposed to establish a link between Bell's palsy and pre-eclampsia including an increase in the extracellular fluid volume in the third trimester or thrombosis of the vasa nervorum, leading to nerve ischaemia and paralysis.
- Increased perineural oedema, as seen in carpal tunnel syndrome may be involved in impingement of the facial nerve leading to facial nerve palsy.
- Some studies report 100% recovery in those with incomplete Bell's palsy or only a 52% improvement in those with complete palsy, which is significantly worse than in the general population.
- Bell's palsy can recur in more than one pregnancy in the same woman.
- ***Ramsay–Hunt syndrome is herpes zoster (shingles) infection of the geniculate ganglion. This can cause unilateral facial nerve palsy that mimics Bell's palsy, except that there are ear vesicles present.***

Source: Narayan, H.(201507). Maternal neurological conditions. In Compendium for the Antenatal Care of High-Risk Pregnancies. Oxford, UK: Oxford University Press. Retrieved 13 Jun. 2016, from

<http://oxfordmedicine.com/view/10.1093/med/9780199673643.001.0001/med-9780199673643-chapter-10>

Database Search History:

1. EMBASE; exp FACIAL NERVE PARALYSIS/; 20506 results.
2. EMBASE; (facial adj2 pals*).ti,ab; 6073 results.
3. EMBASE; 1 OR 2; 21539 results.
4. EMBASE; exp METHYLDOPA/; 12338 results.
5. EMBASE; 3 AND 4; 8 results.
6. EMBASE; methyldopa.ti,ab; 2615 results.
7. EMBASE; 3 AND 6; 0 results.
8. EMBASE; exp BELL PALSY/; 2632 results.
9. EMBASE; 4 AND 8; 1 results.
10. Medline; (facial adj2 pals*).ti,ab; 4986 results.
11. Medline; exp FACIAL PARALYSIS/; 11069 results.

12. Medline; 10 OR 11; 13438 results.
13. Medline; methyldopa.ti,ab; 2640 results.
14. Medline; exp METHYLDOPA/; 5627 results.
15. Medline; 13 OR 14; 6489 results.
16. Medline; 12 AND 15; 1 results.
17. Medline; (bell* adj2 pals*).ti,ab; 2153 results.
18. Medline; exp BELL PALSY/; 995 results.
19. Medline; 17 OR 18; 2362 results.
20. Medline; 15 AND 19; 1 results.
21. Medline; exp ANTIHYPERTENSIVE AGENTS/; 240374 results.
22. Medline; 12 AND 21; 20 results.
23. Medline; exp PRE-ECLAMPSIA/; 25840 results.
24. Medline; 12 AND 23; 14 results.
25. Medline; 19 AND 21; 6 results.
26. EMBASE; exp ANTIHYPERTENSIVE AGENTS/; 577137 results.
27. EMBASE; *FACIAL NERVE PARALYSIS/; 7621 results.
28. EMBASE; 26 AND 27; 25 results.
29. EMBASE; exp PRE-ECLAMPSIA/; 43118 results.
30. EMBASE; 3 AND 29; 35 results.
1. EMBASE; *METHYLDOPA/; 5509 results.
2. EMBASE; exp FACIAL NERVE PARALYSIS/; 20554 results.
3. EMBASE; exp BELL PALSY/; 2639 results.
4. EMBASE; 2 OR 3; 20554 results.
5. EMBASE; 1 AND 4; 0 results.
6. EMBASE; exp METHYLDOPA/; 12351 results.
7. EMBASE; 4 AND 6; 8 results.
8. EMBASE; exp PREGNANCY/; 618371 results.
9. EMBASE; 4 AND 8; 322 results.
10. EMBASE; exp HYPERTENSION/; 559238 results.
11. EMBASE; 9 AND 10; 26 results.

Title: Antepartum acute facial paralysis and obstetric analgesia: Case-report

Citation: Regional Anesthesia and Pain Medicine, September 2014, vol./is. 39/5 SUPPL. 1(e297), 1098-7339 (September-October 2014)

Author(s): Correia M.J., Oliveira M.I., Franco S.

Language: English

Abstract: Background and aims: Bell's palsy (BP) has an increased incidence during pregnancy. Its etiology is idiopathic but association has been found with hypertensive disorders in pregnant women. Maximal weakness could progress within three days, differential diagnosis is required and imaging is often precluded in obstetric population. Despite not being considered absolute contraindication for a neuroaxial technique, the decision is controversial and particularly the use of opioids. We present a successful case of

epidural analgesia in a patient with antepartum acute diagnosis of BP. Methods: 24 year-old primigravida, with the diagnosis of gestational hypertension, at 39 weeks of gestation, on active labor stage proposed for labor analgesia. Past medical history included sudden facial hemiparesis with onset two days before, diagnosed as BP after neurological observation and with indication for corticoid therapy in ambulatory. At physical examination we confirmed peripheral facial paralysis, without any other neurological signs, including headache or nausea. Clinical signs and medical history were presumptive of BP. Radiologic workup was not timely during the labor. Results: We decided to proceed with epidural analgesia with levobupivacaine and sufentanil, which ensued without interurrences. At 48h post-partum she was discharged home, without noticed interurrences. Conclusions: Antepartum acute BP poses an anesthetic challenge concerning neuroaxial analgesia for labor. Accurate clinical presumptive diagnosis could enable safe epidural analgesia for labor to pregnant women with acute BP.

Publication Type: Journal: Conference Abstract

Source: EMBASE

Full Text:

Available from *Ovid* in [Regional Anesthesia and Pain Medicine](#)

Title: Bilateral bell palsy as a presenting sign of preeclampsia

Citation: Obstetrics and Gynecology, August 2014, vol./is. 124/2 PART2(459-461), 0029-7844;1873-233X (August 2014)

Author(s): Vogell A., Boelig R.C., Skora J., Baxter J.K.

Language: English

Abstract: BACKGROUND: Bell palsy is a facial nerve neuropathy that is a rare disorder but occurs at higher frequency in pregnancy. Almost 30% of cases are associated with preeclampsia or gestational hypertension. Bilateral Bell palsy occurs in only 0.3%-2.0% of cases of facial paralysis, has a poorer prognosis for recovery, and may be associated with a systemic disorder. CASE: We describe a case of a 24-year-old primigravid woman with a twin gestation at 35 weeks diagnosed initially with bilateral facial palsy and subsequently with preeclampsia. She then developed partial hemolysis, elevated liver enzymes, and low platelet count syndrome, prompting the diagnosis of severe preeclampsia, and was delivered. CONCLUSION: Bilateral facial palsy is a rare entity in pregnancy that may be the first sign of preeclampsia and suggests increased severity of disease, warranting close monitoring. © 2014 by The American College of Obstetricians and Gynecologists. Published by Lippincott Williams & Wilkins.

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *Obstetrics and Gynecology* in [Patricia Bowen Library and Knowledge Service West Middlesex university Hospital](#)

Available from *Ovid* in [Obstetrics and Gynecology](#)

Available from *Ovid* in [Obstetrics and gynecology.](#)

Title: Relapsing Guillain-Barre syndrome in pregnancy and postpartum

Citation: Annals of Indian Academy of Neurology, July 2014, vol./is. 17/3(352-354), 0972-2327;1998-3549 (July-September 2014)

Author(s): Meenakshi-Sundaram S., Swaminathan K., Karthik S.N., Bharathi S.

Language: English

Abstract: Guillain-Barre syndrome (GBS) rarely complicates pregnancy, but can be associated with high maternal and perinatal morbidity if not properly identified and treated. A high index of suspicion, supportive measures, access to intensive care unit and intravenous immunoglobulin (IVIG) therapy are cornerstones of management in GBS complicating pregnancy. Neurologists and Obstetricians should be aware of the risks of relapsing GBS in the immediate postpartum period. Surgery and anesthesia may be triggers for relapse in association with an overall increase in pro-inflammatory cytokines in the postpartum period. We report a unique case of GBS complicating pregnancy in the third trimester followed by a relapse in the postpartum period. She made a good recovery with supportive measures and a repeat course of IVIG during the relapse.

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *National Library of Medicine* in [Annals of Indian Academy of Neurology](#)

Available from *ProQuest* in [Annals of Indian Academy of Neurology](#)

Available from *Free Access Content* in [Annals of Indian Academy of Neurology](#)

Available from *National Library of Medicine* in [Annals of Indian Academy of Neurology](#)

Title: Mona Lisa syndrome, or peripheral facial palsy occurring during pregnancy. Report of six cases and review of the literature

Citation: Journal of Neurology, May 2014, vol./is. 261/(S357), 0340-5354 (May 2014)

Author(s): Parmentier C., Dupuis M., Raymackers J.-M.

Language: English

Abstract: Introduction: Mona Lisa syndrome is referring to the famous work of Da Vinci. The woman's enigmatic smile has been attributed to a sequel of peripheral facial palsy (FP), having occurred during pregnancy. The higher prevalence of FP in pregnant women is acknowledged since the first description of Charles Bell in 1830, however the mechanisms underlying this association are not fully understood. We present a series of 6 cases of FP occurring during pregnancy, their specific features, and a review of the literature. Methods: case report, retrospective study and review of the literature. Results: Of six patients presenting FP during pregnancy, two had diabetes, two were suspected of having a demyelinating disease, and two idiopathic FP. Although an increased risk of preeclampsia has been suggested in women with FP, no case was observed in our series. Recovery was good for all but one, but it is said that prognosis is worse in pregnant patients than in the general population. As usually described, FP occurred during the third trimester of pregnancy in all cases. At that moment, corticosteroids are generally not contraindicated, for the foetus. Fast diagnosis and subsequent treatment with corticosteroids are thus mandatory. The risk of recurrence of FP in a subsequent pregnancy is not known, but probably low. Conclusions: During pregnancy, risk of FP increases, secondary causes are more frequent and recovery is poorer. Careful maternal and foetal surveillance and specifically blood pressure measurements is recommended for pregnant women who develop FP.

Publication Type: Journal: Conference Abstract

Source: EMBASE

Full Text:

Available from *ProQuest* in [Journal of Neurology](#)

Available from *Springer Link Journals* in [Journal of Neurology](#)

Title: Peripheral facial nerve palsy in severe systemic hypertension: A systematic review

Citation: American Journal of Hypertension, March 2013, vol./is. 26/3(351-356), 0895-7061;1941-7225 (March 2013)

Author(s): Jorg R., Milani G.P., Simonetti G.D., Bianchetti M.G., Simonetti B.G.

Language: English

Abstract: Background Signs of nervous system dysfunction such as headache or convulsions often occur in severe systemic hypertension. Less recognized is the association between severe hypertension and peripheral facial nerve palsy. The aim of this study was to systematically review the literature on the association of peripheral facial palsy with severe hypertension. Methods Systematic review of Medline, Embase, Web of Science, and Google Scholar from 1960 through December 2011 and report of two cases. Results The literature review revealed 24 cases to which we add two cases with severe hypertension and peripheral facial palsy. Twenty-three patients were children. Palsy was unilateral in 25 cases, bilateral in one case, and recurred in nine. The time between the first facial symptoms and diagnosis of hypertension was a median of 45 days (range, 0 days-2 years). In five case series

addressing the complications of severe hypertension in children, 41 further cases of peripheral facial palsy were listed out of 860 patients (4.8%). Conclusions The association between severe hypertension and peripheral facial palsy is mainly described in children. Arterial hypertension is diagnosed with a substantial delay. Outcome is favorable with adequate antihypertensive treatment. The pathophysiology is still debated. © 2013 American Journal of Hypertension, Ltd 2013. All rights reserved.

Publication Type: Journal: Review

Source: EMBASE

Full Text:

Available from *ProQuest* in [American Journal of Hypertension](#)

Available from *Oxford University Press* in [American Journal of Hypertension](#); Note: ;

Collection notes: To access please select Login with Athens and search and select NHS England as your institution before entering your NHS OpenAthens account details.

Title: Bell's palsy in pregnancy

Citation: Archives of Gynecology and Obstetrics, January 2013, vol./is. 287/1(177-178), 0932-0067;1432-0711 (January 2013)

Author(s): Ragupathy K., Emovon E.

Language: English

Publication Type: Journal: Letter

Source: EMBASE

Full Text:

Available from *Springer Link Journals* in [Archives of Gynecology and Obstetrics](#)

Title: Uncommon becoming common - Bell's palsy in pregnancy

Citation: BJOG: An International Journal of Obstetrics and Gynaecology, June 2012, vol./is. 119/(56), 1470-0328 (June 2012)

Author(s): Ragupathy K., Emovon E.

Language: English

Abstract: Incidence of Bell's palsy is reported to be 50 per 100 000 pregnancies. We report two cases of Bell's palsy seen within a month in our busy district general. Case 1: Forty years old Caucasian primigravida presented at 39 weeks of gestation with sudden onset of right sided facial weakness and numbness. Examination revealed loss of wrinkles on forehead, deviation of lip towards left side and excessive lacrimation in the right eye owing to non-

closure of the eye. She was reviewed by the medics who confirmed Bell's palsy and started on a course of steroids. Post admission, the blood pressure was labile with urine showing 1+ protein and labetalol was started. Liver function and renal function tests were normal except for elevated urates. Induction of labour was organized 4 days later for pre-eclampsia. A day later, she delivered a 3.2 kg baby with good APGARS and cord gases. Case 2: Twenty-six year old Asian lady in her second pregnancy was admitted at 37 weeks of gestation with spontaneous rupture of membranes and early labour. She was noted to have Bell's palsy and was on steroids started by her general practitioner 8 days before. She had a normal vaginal delivery. Postnatally she developed pre-eclampsia with elevated blood pressure and impaired liver and renal function tests. Her blood pressure stabilized on labetalol 100 mg three times a day and she was discharged home on the third postnatal day. Discussion: Our hospital has 15 senior obstetricians and 4000 deliveries per year. If we consider the reported incidence of 45.1/ 100 000 pregnancies, on an average, an obstetrician in our hospital might see a case of Bell's palsy once in 7 years. Hence management could be challenging. Appropriate recognition, involvement of medics and steroid cover are the essential steps in treating a woman with Bell's palsy. The very pathogenesis of extracellular oedema predisposing to Bell's palsy is shared by preeclampsia as well. Hence there is a strong association between the two with 22% of women with Bell's palsy developing preeclampsia in pregnancy. So any woman presenting with Bell's palsy has to be actively screened for pre-eclampsia. Conclusion: Every obstetrician should be aware of this rather uncommon neurological complication. Often pregnant women with any medical concern consult the obstetricians first and we must be able to recognize Bell's palsy, initiate steroid cover and mount.

Publication Type: Journal: Conference Abstract

Source: EMBASE

Full Text:

Available from *Wiley* in [BJOG: An International Journal of Obstetrics and Gynaecology](#)

Available from *Wiley* in [BJOG: An International Journal of Obstetrics and Gynaecology](#)

Title: Bell's palsy during pregnancy: Is it associated with adverse perinatal outcome?

Citation: Laryngoscope, July 2011, vol./is. 121/7(1395-1398), 0023-852X;1531-4995 (July 2011)

Author(s): Katz A., Sergienko R., Dior U., Wiznitzer A., Kaplan D.M., Sheiner E.

Language: English

Abstract: Objective: To determine whether an association exists between Bell's palsy during pregnancy and adverse perinatal outcomes. Methods: A retrospective study comparing all singleton pregnancies of patients with and without Bell's palsy was conducted. Multiple logistic regression model was performed to control for confounders. Results: Out of 242,216 deliveries, 0.017% (n = 42) were diagnosed with Bell's palsy during pregnancy. Risk factors for Bell's palsy were chronic hypertension (9.5% vs. 1.5%, P <.001) and maternal obesity

(7.1% vs. 0.8%, $P < .001$). Patients with Bell's palsy during pregnancy had higher rates of severe preeclampsia (9.5% vs. 1.1%, $P < .001$) and Cesarean deliveries (31.0% vs. 13.3%, $P = .001$) compared to the comparison group. In contrast, no significant association was documented between Bell's palsy and adverse perinatal outcomes such as low Apgar scores (<7) at 5 minutes (4.8% vs. 3.1%; $P = .524$) and perinatal mortality (2.4% vs. 1.4%; $P = .57$). Using multivariable analysis, controlling for confounders such as maternal age, fertility treatments, and ethnicity, Bell's palsy during pregnancy was significantly associated with obesity (odds ratio [OR] = 9.08 95% confidence interval [CI] 2.8-29.46; $P < .001$), chronic hypertension (OR = 6.69 95% CI 2.38-18.76; $P < .001$), and severe preeclampsia (OR = 9.46 95% CI 3.37-26.53; $P < .001$). Conclusions: Chronic hypertension and obesity are independent risk factors for Bell's palsy. Bell's palsy during pregnancy is significantly associated with severe preeclampsia. Nevertheless, no significant association exists between Bell's palsy and adverse perinatal outcomes. Copyright © 2011 The American Laryngological, Rhinological, and Otological Society, Inc.

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *Wiley* in [Laryngoscope, The](#)

Title: Bell's palsy associated with herpes infection in 33-year old pregnant woman: A case report

Citation: Journal of Neurology, June 2010, vol./is. 257/(S186), 0340-5354 (June 2010)

Author(s): Kaprelyan A., Deleva N., Tzoukeva A.

Language: English

Abstract: Background: Bell's palsy is a unilateral, peripheral facial paresis or paralysis that has a sudden onset. Its occurrence during pregnancy is about three times higher. Although the early description of the syndrome in 1821, the recognition of etiologies and successful management of patients still present a great challenge. High blood pressure, diabetes, preeclampsia, vascular, infectious, genetic, and immunological causes are most likely thought to be associated with this neurological disorder. Case report: A 33-years old woman presented to our hospital with sudden onset of inability to close the right eye, excessive tearing, asymmetrical appearance of the mouth, facial twitching, and impaired sense of taste. The patient was pregnant in the third trimester. Medical history revealed an occurrence of herpetic rash around the upper lip one week ago. Checking of facial nerves function recognized unilateral right-sided paralysis. The diagnosis was based on patient's history, physical and neurological examination, as well as laboratory tests. Conclusion: Although the etiology of Bell's palsy often remains unclear and several causes have been proposed, this case confirms that the development of peripheral facial nerve paralysis during pregnancy might be associated with the increased susceptibility to herpes simplex viral infection.

Publication Type: Journal: Conference Abstract

Source: EMBASE

Full Text:

Available from *ProQuest* in [Journal of Neurology](#)

Available from *Springer Link Journals* in [Journal of Neurology](#)

Title: Bell palsy and preeclampsia superimposed on chronic hypertension

Citation: Taiwanese Journal of Obstetrics and Gynecology, June 2010, vol./is. 49/2(223-224), 1028-4559;1028-4559 (June 2010)

Author(s): Juan Y.-C., Au H.-K., Hsu J.-J., Ma P.-C., Liu W.-M., Jeng C.-J.

Language: English

Publication Type: Journal: Letter

Source: EMBASE

Full Text:

Available from *Free Access Content* in [Taiwanese Journal of Obstetrics and Gynecology](#)

Title: Idiopathic facial paralysis (Bell's palsy) in the immediate puerperium in a patient with mild preeclampsia: A case report

Citation: Archives of Gynecology and Obstetrics, September 2005, vol./is. 272/3(241-243), 0932-0067 (September 2005)

Author(s): Mylonas I., Kastner R., Sattler C., Kainer F., Friese K.

Language: English

Abstract: Introduction: Idiopathic peripheral facial palsy is the most common and frequent unilateral cranial neurological disorder characterized by an isolated facial nerve paralysis. Case report: We report a case of an idiopathic facial paralysis (Bell's palsy) in the immediate puerperium in a patient with mild preeclampsia and diagnosed fetal IUGR. Additionally, the presence of Bell's palsy in the puerperium of the mother of our patient suggests a familiar tendency. Discussion: Every gynaecologist and obstetrician should be aware of this quite uncommon complication during pregnancy and the puerperium. This case report illustrates that Bell's palsy can occur in the immediate post-partum after mild preeclamptic symptoms. For these women, a maternal surveillance can be recommended. A fast and accurate diagnosis with a subsequent immediate treatment might be very important in avoiding

worsening of the symptoms and therefore improve the recovery prognosis. © Springer-Verlag 2005.

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *Springer Link Journals* in [Archives of Gynecology and Obstetrics](#)

Title: Bell's palsy: The spontaneous course of 2,500 peripheral facial nerve palsies of different etiologies

Citation: Acta Oto-Laryngologica, Supplement, 2002, vol./is. /549(4-30), 0365-5237 (2002)

Author(s): Peitersen E.

Language: English

Abstract: Objective - The Copenhagen Facial Nerve Study aims to explain the spontaneous course of idiopathic peripheral facial nerve palsy which occurs without any kind of treatment. In this study Bell's palsy and idiopathic palsy are considered to be synonymous and specify an acute, monosymptomatic, unilateral peripheral facial paresis of unknown etiology. Material and methods - The material includes 2,570 cases of peripheral facial nerve palsy studied during a period of 25 years. It includes 1,701 cases of Bell's palsy and 869 of non-Bell's palsy. In the total patient sample, 116 had herpes zoster, 76 were diabetic, 46 were pregnant and 169 were neonates. A total of 38 different etiologies were observed. At the first consultation a standard ENT examination was performed, including a thorough description of the grade and localization of the paresis, taste, stapedius reflex and nasolacrimal reflex tests and acoustic-vestibular examination. Follow-up was done once a week during the first month and subsequently once a month until normal function was restored or for up to 1 year. Results - The initial examination revealed 30% incomplete and 70% complete palsies. Follow-up showed that in 85% of patients function was returned within 3 weeks and in the remaining 15% after 3-5 months. In 71% of patients normal mimical function was obtained. Sequelae were slight in 12% of patients, mild in 13% and severe in 4%. Contracture and associated movements were found in 17% and 16% of patients, respectively. Conclusion - A survey of the literature showed that no kind of treatment, including prednisone, was able to give a better prognosis. The use of prednisone raises a big ethical problem because no evidence of its efficacy exists and the euphoric side-effect induces a false feeling of benefit in the patients.

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *EBSCOhost* in [Acta Oto-Laryngologica \(Supplement\)](#)

Title: Association between Bell's palsy in pregnancy and pre-eclampsia

Citation: QJM - Monthly Journal of the Association of Physicians, 2002, vol./is. 95/6(359-362), 1460-2725 (2002)

Author(s): Shmorgun D., Chan W.-S., Ray J.G.

Language: English

Abstract: Background: Previous published case series have suggested an association between the onset of Bell's palsy in pregnancy and the risk of pre-eclampsia and gestational hypertension. Aim: To evaluate the period of onset of Bell's palsy in pregnancy and the associated risk of adverse maternal and perinatal events, including the hypertensive disorders of pregnancy. Study design: Case series study of consecutive female patients. Methods: Women presenting with Bell's palsy during pregnancy or the puerperium were identified by a hospital record review at five Canadian centres over 11 years. Information was abstracted about each woman's medical and obstetrical history, period of onset of Bell's palsy, and associated maternal complications, including preeclampsia and gestational hypertension as well as preterm delivery and low infant birth weight (<2500 g). These rates were compared to those previously described for the province of Ontario or for Canada. Results: Forty-one patients were identified. Mean onset of Bell's palsy was 35.4 weeks gestation (SD 3.9). Nine (22.0%, 95%CI 10.8-35.7) were also diagnosed with pre-eclampsia and three (7.3%, 95%CI 1.4-17.1) with gestational hypertension, together (29.3%, 95%CI 16.5-43.9) representing nearly a five-fold increase over the expected provincial/national average. There were three twin births. The observed rates of Caesarean (43.6%) and preterm (25.6%) delivery, as well as low infant birth weight (22.7%), were also higher than expected, although the rate of congenital anomalies (4.5%) was not. Conclusions: The onset of Bell's palsy during pregnancy or the puerperium is probably associated with the development of the hypertensive disorders of pregnancy. Pregnant women who develop Bell's palsy should be closely monitored for hypertension or pre-eclampsia, and managed accordingly.

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *Highwire Press* in [QJM](#)

Available from *Oxford University Press* in [QJM: An International Journal of Medicine](#); Note: ;

Collection notes: To access please select Login with Athens and search and select NHS England as your institution before entering your NHS OpenAthens account details.

Title: Bell's palsy and tinnitus during pregnancy: Predictors of pre-eclampsia? Three cases and a detailed review of the literature

Citation: Acta Oto-Laryngologica, 1999, vol./is. 119/6(647-651), 0001-6489 (1999)

Author(s): Shapiro J.L., Yudin M.H., Ray J.G.

Language: English

Abstract: We present two cases of Bell's palsy, and another with tinnitus, all in association with pre-eclampsia in the third trimester of pregnancy. We also systematically reviewed the published literature on both Bell's palsy and tinnitus in pregnancy and the puerperium using Medline from January 1966 to October 1998, and searched through the references from review articles and original research publications for further studies. Studies were limited to those published in the English language. We then pooled the rates of occurrence for Bell's palsy according to trimester of pregnancy, and postpartum, as well as the associated prevalence of pre-eclampsia or gestational hypertension. We found that the majority of cases of Bell's palsy arose during the third trimester (pooled event rate 71.1%, 95% confidence interval (CI) 64.1-77.2), while almost none arose in the first trimester. During the postpartum period, the distribution of Bell's palsy was 21.3% (95% CI 15.7-28.1) of all cases, with the majority arising within days of delivery. Gestational hypertension or pre-eclampsia was present in 22.2% of cases (95% CI 12.5-36.4), well above the 5% rate in the general population. Only one paper provided data on tinnitus in pregnancy, with the distribution equal across all three trimesters. When compared to non-pregnant controls, the odds ratio for the development of tinnitus during pregnancy was 2.8 (95% CI 1.0-8.1). In conclusion, Bell's palsy, and perhaps, tinnitus, occur more frequently during the third trimester of pregnancy. Both may be presenting prodromal signs of underlying early pre-eclampsia. The pathophysiologic mechanism relating these two entities to pre-eclampsia is also discussed.

Publication Type: Journal: Article

Source: EMBASE

Full Text:

Available from *EBSCOhost* in [Acta Oto-Laryngologica](#)

Title: Idiopathic facial palsy in pregnancy and the puerperium.

Citation: Surgery, gynecology & obstetrics, Oct 1989, vol. 169, no. 4, p. 337-340, 0039-6087 (October 1989)

Author(s): Falco, N A, Eriksson, E

Abstract: An association between pregnancy and idiopathic facial palsy has been observed previously. A five year review of patients admitted to the Brigham and Women's Hospital disclosed 18 new instances of pregnancy associated Bell's palsy. Twelve patients became symptomatic during the third trimester and six during the first two weeks post partum. Primiparity was not a risk factor for pregnancy-associated facial palsy, but pre-eclampsia was six times more prevalent among patients in this study than among the general population of gravid women. Of 14 patients observed, eight had complete return of mimetic

function within three months of the onset of symptoms. The remaining six patients had only mild residual facial weakness after a mean interval of 22 months. The administration of steroids did not appear to influence recovery.

Source: Medline

Title: 'Bell's palsy' in accelerated hypertension.

Citation: Postgraduate medicine, Jun 1985, vol. 77, no. 8, p. 165-166, 0032-5481 (June 1985)

Author(s): Lavin, P J, Weissman, B M

Source: Medline

Title: Idiopathic Bell's palsy in pregnancy

Citation: The Journal of the Florida Medical Association, April 1970, vol./is. 57/4(25-27), 0015-4148 (Apr 1970)

Author(s): Bezjian A.A., Spellacy W.N., Little W.A.

Language: English

Publication Type: Journal: Article

Source: EMBASE

Title: Bell's palsy in pregnancy

Citation: Archives of otolaryngology (Chicago, Ill. : 1960), June 1969, vol./is. 89/6(830-834), 0003-9977 (Jun 1969)

Author(s): Pope Jr. T.H., Kenan P.D.

Language: English

Publication Type: Journal: Article

Source: EMBASE

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responsibility of the requestor to determine the accuracy, validity and interpretation of the results
