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Intrathecal baclofen for dystonia treatment during pregnancy: A case report[☆]



Baclofeno intratecal para el tratamiento de la distonía durante el embarazo: un caso clínico

Dear Editor:

Baclofen is an anti-spasmodic drug and muscle relaxant indicated for treating spasticity.^{1,2} The exact mechanism of action is unclear, although it is believed to be a GABA agonist; it decreases the amount of free aspartate and glutamate, thereby reducing the excitability of alpha motor neurons.³ Typically, baclofen is administered orally to treat spasticity produced by certain conditions. For cases which do not respond adequately to oral administration, or which come with intolerable side effects, there are continuous infusion pumps that administer baclofen intrathecally.⁴ Baclofen has also been used to treat some cases of dystonia, whether focal or generalised, in patients who do not respond to conventional oral treatments or botulinum toxin injection.^{5,6} To date, the effects of baclofen use during pregnancy have yet to be fully examined. The FDA has identified baclofen as a category C risk for pregnant women: 'Animal studies have revealed adverse fetal effects but no controlled studies in women have been done, or no studies in women or animals are available.' In animal studies completed thus far, baclofen was administered orally and at high doses. No prospective controlled studies evaluating the safety of intrathecal delivery of this drug during pregnancy have been carried out. Furthermore, this medication is prescribed only infrequently in clinical practice.⁷ The purpose of our letter is to provide additional information

about baclofen use during pregnancy by presenting a clinical case.

The case is that of a 30-year-old woman with autosomal dominant DYT1-positive generalised dystonia, with symptoms beginning when she was 11. After various oral medications and an injection of botulinum toxin type A elicited no response, doctors opted to implant an intrathecal baclofen pump at the lumbar level (SynchroMed® II 40 ml, as she had responded to a test dose of 100 µg). After implantation, the patient remained essentially asymptomatic for 3 years, at which point she became pregnant. She was informed of the possible risks and disadvantages, and decided with her doctors not to have the pump removed, given the good response up to that point. She therefore received a continuous infusion of baclofen dosed at 200 µg/day (8.3 µg/h) during her entire pregnancy. The patient's pregnancy progressed uneventfully and she gave birth at week 39 to a healthy 3080 g baby girl through vacuum-assisted vaginal delivery, without an epidural or any other complications. The patient reported no increases in dystonia symptoms either during or after her pregnancy. The patient breastfed for the first month after which she stopped for personal reasons. Four years later, the patient had an ectopic pregnancy which required surgery and the removal of a fallopian tube. Later, her dystonia symptoms worsened, and her medication was increased to control them (current dose, 600 µg/d). The patient remains essentially asymptomatic and is planning another pregnancy. Her daughter is now a healthy 7-year-old with psychomotor development within normal limits.

Articles addressing the effect of baclofen during pregnancy are scarce. Our literature search revealed only 10 reported cases, and there were no prospective controlled studies.^{7–14} In all of them, the treatment was indicated for a diagnosis of spasticity secondary to a variety of illnesses, such as cerebral palsy (5 cases),^{7,9,13,14} spinal cord injury (3 cases),^{7,8,11} tetanus (1 case),¹⁰ and multiple sclerosis (1 case).¹² Nearly all the patients had their pumps implanted between 15 months and 6.5 years before pregnancy, although in 2 cases the pumps were implanted during the third trimester (week 28–30) due to an increase in spasticity. Most of them underwent planned early caesarian

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sections, except for 3 patients who gave birth spontaneously and vaginally at term. In our case, as in all the reviewed literature, the newborn did not display any type of illness, anomaly, or disorder, whether neurological, psychomotor, or respiratory. The baclofen dose used in the reported cases ranged between 140 and 1400 $\mu\text{g}/\text{day}$ (our patient received 200 μg). None of the newborns, including our case, showed any teratogenic effects due to baclofen. Although there are no conclusive controlled studies, the information gathered to date appears to show that the use of intrathecal baclofen during pregnancy is completely safe for both mother and baby.

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Superficial siderosis of the central nervous system as a presentation of stage IV melanoma[☆]



Meningosiderosis como forma de presentación de un melanoma en estadio IV

Dear Editor:

Superficial siderosis of the central nervous system consists of deposits of haemosiderin in the meninges, spinal cord, and cranial nerves due to repeated or chronic bleeding in the subarachnoid space. The characteristic clinical triad includes sensorineural deafness, cerebellar

ataxia, and myelopathy.^{1,2} Superficial siderosis may be secondary to trauma, haemorrhagic tumours, vascular malformations, aneurysms, or meningovascular amyloidosis.³ To date, no cases related to metastatic melanoma have been published. We present the case of a patient with superficial siderosis and metastatic intraventricular melanoma.

A 71-year-old man was admitted to the hospital after experiencing progressive headache and gait instability over the preceding 2 months. The headache was oppressive, predominantly frontal, exacerbated by postural changes and the Valsalva manoeuvre, and it did not respond to a level one analgesic. He also mentioned hearing loss in the right ear in the preceding year. Nineteen years previously he had undergone wide resection of a localised melanoma in the dorsal region. In addition, he had a history of arterial hypertension, diabetes mellitus type 2, dyslipidaemia, smoking, and left-sided hypoacusis since childhood.

Physical examination revealed enlarged lymph nodes in the left lateral cervical and right retroauricular regions; both were hard in consistency, adherent to deep tissues, and not painful. Examination of the skin revealed no signs of malignancy. Neurological examination revealed peripheral

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