

Severe Herpes Zoster Neuralgia in a Pregnant Woman Treated with Acetaminophen

Maryam Sadat Sadati¹, and Iman Ahrari^{2*}

¹ Department of Dermatology, Molecular Dermatology Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

² Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Iran

Received: 3 Dec. 2012; Accepted: 29 Apr. 2013

Abstract- There is no recommendation for the treatment of herpes zoster neuralgia in pregnancy, as it even sometimes needs administration of strong opioids. Main observation: Here, we report a pregnant woman with severe zoster neuralgia who responded favorably to acetaminophen. Due to the drug's safe profile and good efficacy, acetaminophen can be used as an alternative for herpetic neuralgia in pregnant women. However, controlled studies are still needed.

© 2014 Tehran University of Medical Sciences. All rights reserved.

Acta Medica Iranica, 2014;52(3):238-239.

Keywords: Herpes Zoster Neuralgia; Acetaminophen; Pregnant; Iran

Introduction

Herpes zoster is caused by activation of the varicella-zoster virus with a prodromal period of symptoms followed by a dermatomal rash lasting approximately 2-4 weeks, with possible subacute herpetic neuralgia for up to 3 months, followed, in some patients, by a period of post-herpetic neuralgia (1). Pain relief drugs that are used for neuralgia include acetaminophen/acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs), opioid analgesics, antidepressants, gabapentin, pregabalin, and topical analgesics. Acetaminophen, an acetaminophen venous drug has similar analgesic effect as that of NSAIDs, but the side effects is less than that of NSAIDs (2). It can be applied for the treatment when immediate venous injection is required due to the pain or high fever.

Here, we report the promising response of neuralgia zoster pain in a pregnant woman to acetaminophen.

Case Report

The patient was a 25-year-old woman, primigravida, 28 weeks of pregnancy, who came to the dermatology clinic with severe flank pain and dysesthesia and a skin rash. Examination revealed vesicles in right flank extended to perineum and labia majora and minora. Obstetric sonography was unremarkable. She was admitted to the hospital with the impression of herpes

zoster, due to severe pain and feeling of uterine contractions. Because of severe pain and extension of vesicles to the perineum intravenous acetaminophen 1 gram (delete po) and IV acyclovir were started, but the patient was still complaining of severe pain, even though to a lesser extent. To address herpetic neuralgia intravenous acetaminophen 500 mg four times daily was added and just after the first IV infusion the pain decreased by 50% and during next 3 days to 80%. At day 5, IV acyclovir and acetaminophen was discontinued due to improvements in both skin rash and pain. The patient was discharged with acyclovir (per oral) and acetaminophen (per oral for two days). Two months later she gave birth to a healthy neonate.

Discussion

Adequate analgesia during the acute phase of herpes zoster may even require strong drugs such as opioids (3). Our patient had herpes vesicles on the genital area, and it was accompanied by severe neuropathic pain that disturbed the sleep. She felt uterine contractions although it was not true contractions, yet prompt therapy was justified.

Po acetaminophen has a good safety record in pregnancy (4), and it has been used in the pregnant women as an OTC for many years. Acetaminophen shows a powerful analgesic effect by inhibiting cyclooxygenase I and II, III, and also inhibiting

Corresponding Author: I. Ahrari

Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Iran
Tel: +98 937 6933630, Fax: +98 711 2122970, E-mail address: ahararia@sums.ac.ir

prostaglandin synthesis. It has a weak anti-inflammatory effect (2). The suppression of nitric oxide synthesis and the antinociceptive mechanism are also proposed (5-6). To the best of our knowledge zoster neuralgia in pregnancy was not studied before, and no safe drugs were recommended. The patient responded dramatically to the drug that we could discontinue both acyclovir and acetaminophen in such a short time. Due to its safe profile and good efficacy it can be used as an alternative for herpetic neuralgia in pregnant women. However, controlled studies are still needed.

References

1. Johnson RW. Zoster-associated pain: what is known, who is at risk and how can it be managed? *Herpes* 2007;14(Suppl 2):30-4.
2. Cronberg S, Wallmark E, Söderberg I. Effect on platelet aggregation of oral administration of 10 non-steroidal analgesics to humans. *Scand J Haemato* 1984;33(2):155-9.
3. Johnson RW, Whitton TL. Management of herpes zoster (shingles) and postherpetic neuralgia. *Expert Opin Pharmacother* 2004;5(3):551-9.
4. Das BP, Joshi M, Pant CR. An overview of over the counter drugs in pregnancy and lactation. *Kathmandu Univ Med J (KUMJ)* 2006;4(4):545-51.
5. Amin AR, Vyas P, Attur M, et al. The mode of action of aspirin-like drugs: effect on inducible nitric oxide synthase. *Proc Natl Acad Sci U S A* 1995;92(17):7926-30.
6. Bonnefont J, Courade JP, Alloui A, et al. Antinociceptive mechanism of action of paracetamol. *Drug* 2003;63(Spec No 2):1-4.