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Case Report

Galactorrhea in infant induced by maternal antidepressants use: case report

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Abstract: Breastfeeding is essential in nutrition, newborn development and for the mother-baby bond. Evidence of increased depressive disorders and growing need for drug use in the postpartum period has made the use of antidepressants during lactation an important issue to be discussed. The infant presented a nipple lesion with phlogistic signs and galactorrhea. Initially, the diagnosis of infection secondary to excessive handling was suggested and antibiotic therapy was prescribed with the resolution of the condition. However, 2 more episodes occurred, and the patient was referred to a mastologist who raised the hypothesis of galactorrhea due to maternal antidepressant use. present study is notable for showing, for the first time in the literature, a case report of infant galactorrhea induced by maternal use of antidepressants. Although the chances of occurrence of this condition are low, due to the drugs' safety profile and the reduced concentration of these substances on breastmilk, it is important to consider this hypothesis in the presence of recurrent milk production with no other plausible explanation.

Keywords: Galactorrhea; Antidepressive agents; Side effects; Adverse reactions.

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1. Introduction

Breastfeeding is essential in nutrition, immune protection, newborn development and for the mother-baby bond [1, 2]. Although knowledge about medications and lactation has been expanding, the transmission mechanisms of many drugs have not yet been described or present divergences in the literature, and possible adverse effects for infants are still unknown. [3] The drugs used for psychiatric disorders stand out, as they are common in the postpartum and medical interference can be decisive [4].

Depression affects approximately 15% of mothers in postpartum and nearly 70% are treated with antidepressants [5]. If not managed, this condition can lead to damage to the maternal bond and the development of children [5, 6]. Most guidelines encourage breastfeeding regardless of the antidepressant used. Selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) are first-line therapeutic agents [6, 7]. The drugs with the best evidence for use during this period are: sertraline, paroxetine and nortriptyline [8, 9].

It is believed that the use of medications by nursing mothers is one of the factors responsible for the early interruption of breastfeeding [10,11]. Thus, professional evaluation is fundamental to avoid infant toxicity, early weaning, and interruption of psychiatric treatment [4]. A careful evaluation almost always makes it possible to reconcile drug treatment with breastfeeding [10]. In view of the undeniable benefit of breastfeeding and

evidence of increased incidence of depressive disorders in the postpartum, the use of antidepressants during lactation has become an important topic. This report presents an atypical case of galactorrhea in an infant secondary to maternal use of antidepressants.

2. Case Report

Female patient - at term (37 weeks), born by cesarean delivery with no intercurrences, APGAR 8/9, 2,355g of weight, 45cm of height - presented, at 3 months old, a whitish papule with phlogistic signs (erythema, edema, and heat) on the right nipple (Figure 1A), not associated with any systemic symptoms. After 7 days, the lesion evolved into an abscess with spontaneous drainage (Figure 1B). The mother, dermatologist, raised the hypothesis of excessive manipulation and secondary infection. After discussion with the pediatrician, who corroborated the hypothesis, a joint decision was made not to subject the infant to additional tests and to initiate empirical treatment with oral cephalexin 250mg/5ml, 1.5ml every 12h for 7 days, and topical use of cream containing fusidic acid and betamethasone (Verutex B®), twice a day for 7 days. There was complete resolution of the condition after treatment.

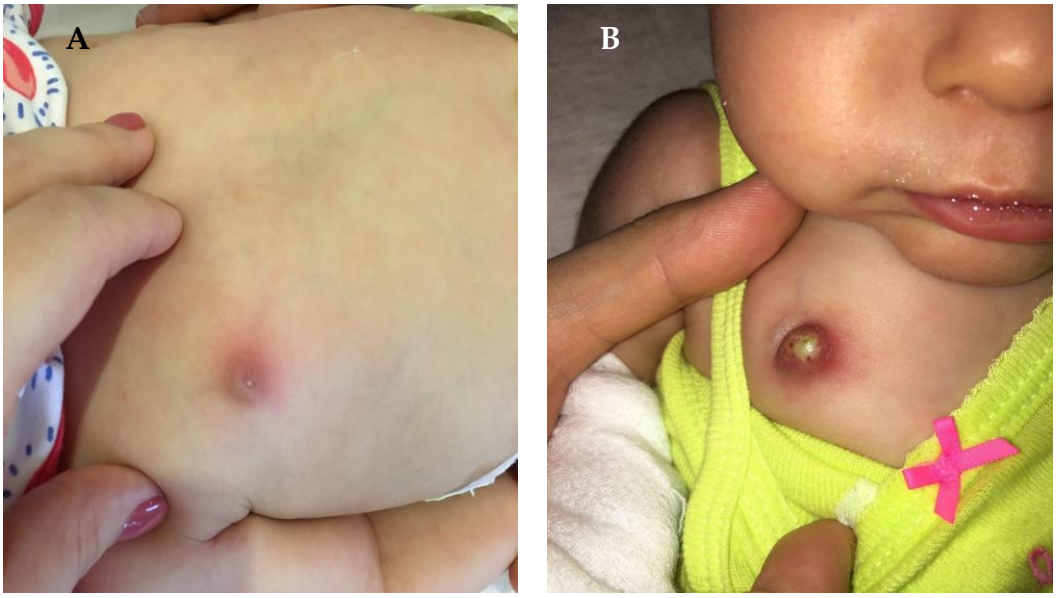

Figure 1: A. Whitish papule with phlogistic signs on right nipple. B. Abscess on right nipple.

At 5 and a half months, the infant presented a new episode in the right nipple, with abscess formation and galactorrhea (Figure 2). Two months after the second episode, the condition recurred on the left nipple (Figure 3). On the seventh day of evolution, the infant was evaluated by a mastologist. Physical examination revealed the presence of an abscess on the left nipple and no mammary gland development was detected. Contralateral breast unchanged.

The diagnostic hypothesis raised by the mastologist was milk production caused by the use of antidepressants by the mother, who was diagnosed with Generalized Anxiety Disorder — ICD-10 and had been undergoing pharmacological and psychotherapeutic treatment since before pregnancy, with her GAD in remission. When she became pregnant, the mother decided, together with husband, psychiatrist, and obstetrician, to maintain medication used: sertraline (Zoloft®) 100 mg/day and quetiapine (Seroquel®) 37.5 mg/day.

Two days before the child's first injury, mother was advised by the psychiatrist, due to complaints of increased anxiety, insomnia and irritability, to add 25 mg of sertraline per week until reaching a dose of 150 mg/day and quetiapine was adjusted to 50 mg/day. The child was breastfed from birth until the age of 7 months, when, given the last episode

and mastologist evaluation, breastfeeding was suspended. This episode was managed with 1.5ml of cephalexin 250mg/5ml 12/12h for 7 days, and local care. The infant was re-assessed 11 months after breastfeeding interruption and there was no recurrence. Currently, it's been 6 years with no reports of new episodes.

Figure 2: Abscess with necrotic center and presence of papule with whitish content on right nipple.

Figure 3: Erythema and edema on left nipple. Subsequently, lesion evolved to an abscess.

4. Discussion and conclusion

This article reports an atypical case of infant galactorrhea secondary to the use of maternal antidepressants. The mother was using sertraline and quetiapine when the episodes occurred. Both medications are compatible with breastfeeding.

4.1 SSRIs and breastfeeding

SSRIs are frequently prescribed during pregnancy and the puerperium, as these drugs bring on effective therapeutic response with low concentration in breast milk. Due to passage during breastfeeding, medications can result in side effects that are usually mild and self-limiting. Symptoms such as irritability, food refusal and changes in the sleep-wake cycle may occur and are more frequent after exposure to fluoxetine and

citalopram [6, 12]. The infant can receive up to 17% of the maternal dose of fluoxetine, while drugs such as sertraline, paroxetine and fluvoxamine reach low serum concentrations [13].

The relative infant dose is a parameter to assess the amount of drug offered to the infant by breast milk. Values lower than 10% of the dose adjusted for the mother's weight are considered safe for use in breastfeeding. The results found for paroxetine and sertraline vary from 0.5% to 3%, while fluoxetine, venlafaxine and citalopram present values close to or greater than 10% [14]. Measurement of drug concentration in infant plasma is the most reliable measure of infant exposure, though is usually unavailable.

A joint analysis of 57 studies evaluated the use of nortriptyline, paroxetine and sertraline during lactation and plasma levels were practically undetectable in more than 200 babies tested, a fact that reinforces safe indication of sertraline in the postpartum. Some mentioned side effects were irritability, hyporexia and decreased sleeping, which are subtle and non-specific symptoms, not necessarily caused by sertraline [15].

4.2 Antipsychotics and breastfeeding

About 1% of antipsychotics pass through breast milk, causing no toxic adverse effects for the infant [16]. An analysis of ten reports with 28 exposed newborns didn't show the occurrence of adverse effects [14]. Two cohort studies didn't show an increased risk of malformations in babies exposed to clozapine, olanzapine, risperidone, and quetiapine [14]. Infant exposure during breastfeeding was estimated, showing that olanzapine, risperidone, and quetiapine reach very low levels in infant plasma and present no evident adverse effects [17]. However, clozapine is contraindicated because it reaches relatively high concentrations and there are reports of agranulocytosis and drowsiness in infants [18]. Regarding amisulpride, aripiprazole and ziprasidone, there is little evidence.

4.3 Differential diagnoses

Physiological nipple secretion is caused by stimulation (expression, suction, or compression). It's usually bilateral, white, green, or yellow, self-limited and doesn't require intervention. Discharge is considered suspicious when it's spontaneous, unilateral, persistent and it has serous or bloody aspect [19, 20]. The most common causes are intraductal papilloma, ductal ectasia, and infections (5-23%) [20]. Galactorrhea is defined as milky discharge unrelated to pregnancy and lactation. It's a rare symptom in pediatrics, often associated with benign and self-limited causes, such as increased prolactin, which may result from hypothyroidism (most common cause in children), hypogonadism, hyperstimulation, prolactinomas and drugs (tricyclic antidepressants, antidopaminergics, cannabinoids) [19, 21].

The hypothesis of galactorrhea caused by trauma was not consistent due to the absence of suggestive clinical history, exuberant physical exercise or thoracotomy. The case's limitations include lack of information details in the patient's medical record and relyance on the infant's mother's report, which may not be accurate.

5. Conclusion

The present study is notable for showing, for the first time in the literature, a case report of infant galactorrhea induced by maternal use of the most recommended antidepressants during breastfeeding. Although the occurrence of this condition is low, due to the drugs' safety profile and the reduced concentration of these substances on breastmilk, it is important to consider this hypothesis when facing a case of recurrent milk production with no other plausible explanation. It's necessary to emphasize the role of the mastologist in the diagnostic elucidation.

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Research Ethics Committee Approval: We declare that the patient approved the study by signing an informed consent form and the study followed the ethical guidelines established by the Declaration of Helsink.

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Conflicts of Interest: None.

Supplementary Materials: None.

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