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Original Research Article

Use of Dental Medications During Lactation

Sandrine Ribeiro Amarante[1*], Luana Martins Curcino[1], Kássia Justo Coelho Margute Thiago Quirino Mota da Silva[3], Túlio Garcia Margute[4], Max Soares Maione[5], Andrei Rabenschlag Rossato[6], Tiago Garcia Margute[7], Igor Fonseca dos Santos[8]

[1]ULBRA, Palmas, TO, Brazil.

[2]Department of Implantology, FACOP, SP, Bauru, Brazil.

[3]Department of Implantology, CEUMA, MA, São Luis, Brazil.

[4]Department of Phrostodontics, FACOP, SP, Bauru, Brazil.

[5]Medical student, Faculdade de Medicina, UFT, Palmas/TO, Brazil.

[6]Department of Implantology, São Leopoldo Mandic, SP, Campinas, Brazil.

[7]Department of Implantology, FACOP, SP, Bauru, Brazil.

[8]Department of Medicine and Dentistry, *UNIRG, Paraíso do Tocantins,* CEULP-ULBRA, IOA, Palmas, *Tocantins, Brazil*.

***Corresponding Author's E-mail: tiagomargute@hotmail.com**
Phone: +XX (48) 9 9919-9905

Abstract

There has been a growing number of women who use drugs during breastfeeding, with most of these drugs being compatible with this period. The objective of this research was to correlate the use of dental medications with the lactation period, and whether there were drugs passing through breast milk, as well as whether or not mothers should stop breastfeeding when they are taking medication. Among the drugs that were found, we highlight the antimicrobials, analgesics, local anesthetics, benzodiazepines and tricyclic antidepressants. These being like the drugs of greater consumption among the infants, according to the consulted literature. The study was carried out by means of a literature review of August 2018, in June 2019 in which articles were searched in Portuguese, Spanish, English language and books searched in the library of the Lutheran University of Palmas. We searched databases such as LILACS, ACADEMIC GOOGLE, PUBMED, LACTMED, and SCIELO, with articles from the years 1988 to 2019. It was noticed that the drugs were mostly compatible with breastfeeding, except that some drugs that have appeared in breast milk in small quantities, others have not presented enough research, but that until now are compatible with lactation.

Keywords: Breastfeeding, Lactation, Pharmacology

INTRODUCTION

Breastfeeding has well-defined benefits, for both the mother and the baby, in addition to creating a moment of affective relationship, it is rich food that protects the child from infections, decreased risks of diabetes, obesity, hypertension, and consequently helps in the development of the face and speech, and opting to stop breastfeeding should only be discouraged if there is any evidence of drugs ingested by the mother and present in the milk and does not have information about the drugs (Ministério da Saúde, 2010).

Although breastfeeding is of great importance, there are cases in which professionals must make exceptions and investigate the benefits and harms of the combination of medicines during lactation (Bedran, 1988).

The consumption of medication during pregnancy can become a common practice, as well as concern whether such drugs are excreted in breast milk, and if the breastfeeding mother's need to interrupt breastfeeding (Bedran, 1988).

Most drugs are compatible with the lactation period, even though they are eliminated in the milk, and generally their concentration does not exceed 1 to 2% of the dose ingested by the mother (Chaves, 2007).

The amount of medicines present in milk depends on several factors, among them, the volume and concent-

ration of breast milk, and the characteristics of the drug. If a lactating woman consumes medicines in therapeutic doses in short periods and even with the child breastfed by the mother who used these drugs becomes ill without cause, it is advisable to stop using the drug and breastfeeding (Bedran, 1988).

Although the notion of drug use during breastfeeding has been greatly expanded, it is not known about the effects caused on the infant by the intake of many drugs used by nursing mothers, especially new drugs that are constantly being renewed on the market. In fact, for several new drugs, there is still not enough information about passage into breast milk and safety for use during breastfeeding. However, it has no intention to restrict the number of drugs analyzed as incompatible with lactation (Ministério da Saúde, 2010).

During dental care, the dentist has the responsibility to decide on the procedures to be chosen in terms of drug therapy, provided that care of these patients must be more vigilant. Always aiming at choosing the best conduct, the professional must know which drugs can be prescribed for such patients, in addition to their effect and safety (Chaves, 2007).

Studies indicate that breastfeeding women's access to medicines in public and private health services is considered easy and they end up not having adequate indication, thus leading to an increase in the risk of adverse consequences. Most drugs administered during lactation can be found in breast milk, and certainly the concentration of drugs in milk is small. However, it is considered that it is better to avoid taking medication during breastfeeding and that the dental surgeon chooses the cautious administration of medication, in such a way that they know the risks and the amount considered safe for the mother and baby (Fragoso e al., 2014).

This study relates the use of dental drugs to the period of lactation, and whether there was passage of drugs through breast milk.

METHODOLOGY

The method chosen for this study was through a literature review, where the types of drugs to be ingested during breastfeeding and whether there are risks of passing these drugs through breast milk were analyzed.

With the help of records, the research was carried out by gathering articles in Portuguese, Spanish, English and books researched in the library of the Lutheran University of Palmas.

Databases such as LILACS, GOOGLE ACADÊMICO, PUBMED, LACTMED E SCIELO, were searched, with articles from the years 1988 to 2019 using terms such as "lactation", "breastfeeding" and "pharmacology", which addressed the subject.

RESULTS (REVIEW)

The use of drugs without proper guidance is risky for anyone. For women from pregnancy to breastfeeding, it is necessary to follow up with professionals who know which drugs are safe during each period. Almost all pharmacological drugs are excreted in milk, and most of them are compatible with breastfeeding (Ministério da Saúde, 2010; Bedran, 1988).

The concentration of drugs excreted in milk depends on its composition and volume, and for the passage of drugs into milk there are several factors such as the drug, the infant and the nursing mother (Ministério da Saúde, 2010). This table was prepared through a literature review and based on the articles (1, LAMOUNIER 2006,3,5,6, CHEBLI 2012, MINISTÉRIO DA SAÚDE 2014, ANVISA, 2019). Table 1-5

DISCUSSION AND CONCLUSION

After the union of different articles, it was found that there is a good part of lactating women who used some type of medication, be it an antimicrobial or even an anxiolytic.In a way, there were conflicts on the issue that highlights the lack of agreement between the package inserts and health professionals, in which the package insert may be warning of symptoms, and that were not observed, or even considered compatible with lactation and who were contraindicated during this period.

The results of this literature review found that the use of medication by women during breastfeeding is frequent, and about 99% of lactating women use medication postpartum (Chaves, 2007), and with this constant use there must be a concern if there is a need to take the drug or pause breastfeeding, and that it was found that self-medication during breastfeeding that occurs with about 29.4% of lactating women.

As analgesics are the most consumed drugs, use reaches 54.4%, with emphasis on paracetamol, which contains an intake of 17.9% and dipyrone 31.5%. The class of non-steroidal anti-inflammatory drugs was 15% and benzodiazepines 3%. Conversely, local anesthetics and tricyclic antidepressants were not reported by the same author (Chaves et al., 2009).

In order for medication intake to occur correctly, it is necessary to observe which types of drugs are indicated during breastfeeding, to obtain safety in its use and consequently not to cause harm to the lactating. Therefore there is amoxicillin which is the most indicated drug among antimicrobials, with bactericidal and bacteriostatic action was considered compatible with lactation [3,5, MINISTÉRIO DA SAÚDE, 2014; ANVISA, 2018, RAMINELLI, 2011].

Analyzing antimicrobials, self-medication reaches 0.9%, with amoxicillin being the drug of first choice, while erythromycin was rarely prescribed, because if this drug

Table 1. Antimicrobials

Drug	Dosage	Ingestion	Pharmaceutical Form	Notes
AMOXICILLIN	500 MG, 8 in 8 hours. for 5 to 7 days	Orally	Capsule	- Use compatible with breastfeeding.
ERYTHROMYCIN	500 MG, single dose or every 12 hours. For 7 days	Orally	Pill	- Used by those allergic to penicillins and cephalosporins. - It is excreted in breast milk, but the use of this drug must be judicious.
AZITHROMYCIN	500 MG, single dose. For 3 to 5 days.	Orally	Coated tablet	- Used by those allergic to penicillins and cephalosporins. - Take with milk or some food. - Compatible with breasteeding.
CEPHALEXIN	250 MG, every 6 hours. 500 MG every 12 hours. For 7 days	Orally	1 bottle of powder for oral suspension	- It is compatible with lactation, but use must be judicious and prescribed
CLINDAMICIN HYDROCHLORIDE	500 MG, every 6 hours. For 7 days.	Orally	Capsule	- First choice for penicillin and cephalosporin allergy sufferers. - Careful use as it is excreted in breast milk.
METRONIDAZOLE	250 MG, every 8 hours or, 400 MG, every 8 hours. For 7 days	Orally	Pill	- A drug considered compatible with breastfeeding, but its use must be judicious, as there is low concentration of it in breast milk.

Legend: Prepared by Amarante and collaborator (2021).

Table 2. Non-opioid analgesics and non-steroidal anti-inflammatory drugs

Drug	Dosage	Ingestion	Pharmaceutical Form	Notes
DIPYRONE	500 MG, from 4 to 6 hours. In case of pain	Orally	Pill	- It is a drug that appears in breast milk in small amounts, and breastfeeding is recommended to be discontinued within 48 hours after ingestion .
PARACETAMOL	500 MG, every 4 hours or, 750 MG every 6 hours. In case ofpain	Orally	Pill	- Use compatible with lactation, if you follow the recommended doses, they do not present risks to the infant.
IBUPROFEN	600 MG, every 12 hours. For 3 to 5 days	Orally	Coated tablet	- It is a drug that is poorly eliminated in breast milk, and must be used judiciously.
ACETYLSALICYLIC ACID	500 MG, from 4 to 6 horas. For 2 to 3 days	Orally	Pill	- Medication that is excreted in breast milk, but if the dosage is not exceeded, it is not necessary to discontinue breastfeeding.

Legend: Prepared by Amarante and collaborator(2021).

Table 3. Benzodiazepines

Drug	Dosage	Ingestion	Pharmaceutical Form	Notes
DIAZEPAM	5 MG – 10 MG. for 1 to 3 days.	Orally	Pill	- It was excreted in breast milk, judicious ingestion, as the disclosure in breast milk. - Treatment should not exceed 2 to 3 months. - Latency of 45 min.- 1 hour. - Breastfeeding women are recommended to be used 2 hours after breastfeeding.
CLONAZEPAM	0,5 MG For 1 to 3 days	Orally	Pill	-It is excreted in breast milk, use only if absolutely indicated, as breastfeeding should be discontinued. - Do not exceed recommended treatment. - Fast absorption.

Legend: Prepared by Amarante and collaborator (2021).

Table 4. Local anesthetics.

Drug	Dosage	Ingestion	Pharmaceutical Form	Notes
LIDOCAINE HYDROCHLORIDE	1 sterile tube with 20 MG/ml	Injectable	Ampoule	-Drug excreted in small amounts in breast milk, but use is compatible with lactation.
MEPIVACAINE HYDROCHLORIDE	1 sterile tube with 20 MG/ml	Injectable	Ampoule	-Its use is compatible, but it must be applied carefully, due to the lack of studies that prove its excretion in breast milk.

Legend: Prepared by Amarante and collaborator (2021).

Table 5. Tricyclicantidepressants

Drug	Dosage	Ingestion	Pharmaceutical Form	Notes
AMITRIPTYLINE HYDROCHLORIDE	75 MG, nighttime intake or when going to bed.	Orally	Coated tablets	- Drug excreted in breast milk, and despite being considered compatible, its use must be judicious
IMIPRAMINE HYDROCHLORIDE	25 MG, from 1 to 3 times a day	Orally	Coated tablets	-Drug excreted in breast milk, and despite being considered compatible, its use must be judicious.

Legend: Prepared by Amarante and collaborator (2021).

associates estolate with its composition, it causes hepatotoxicity in the newborn (Chaves et al., 2009).

Erythromycin is rarely prescribed and its use should be done with caution as it has been shown in breast milk. [3,MINISTÉRIO DA SAÚDE 2014 e ANVISA 2018].

With a lack of studies, azithromycin is still considered safe during lactation and indicated [3,RAMINELLI, 2011 MINISTÉRIO DA SAÚDE, 2014].

Cephalexin is compatible with breastfeeding, not exceeding a dosage of 500 MG, since from this concentration it is excreted in breast milk and reaches 4 MG/ml after 4 hours of ingestion, disappearing only 8 hours laters. [2,3,MINISTÉRIO DA SAÚDE 2014; RAMINELLI 2011; ANVISA 2018].

Clindamycin hydrochloride was the first choice for those allergic to penicillins and cephalosporins is a medication indicated during breastfeeding, but its use should be cautious as it has been detected in breast milk [MINISTÉRIO DA SAÚDE, 2000,3].

Metronidazole, being prescribed in case of periodontal diseases, is indicated during lactation as long as you stop breastfeeding for 2 hours after taking this drug. [CHEBLI 2012, MINISTÉRIO DA SAÚDE 2014 e ANVISA 2018].

Sodium dipyrone, which is a drug with analgesic action, considered compatible with breastfeeding for the (MINISTÉRIO DA SAÚDE, 2014), but that after its use there is a pause in breastfeeding within 48 hours. Though, (AMADEI, 2009 e RAMINELLI, 2011) emphasize that sodium dipyrone can cause agranulocytosis, which reduces the amount of granulocytes in the peripheral blood, leaving the patient susceptible to infections and, therefore, being considered possibly dangerous.

There is also paracetamol, being the only drug that was presented according to the package insert, pursuant to (LAMOUNIER, 2006), being one of the safest drugs for consumption during breastfeeding and the first choice among analgesics, and its use was considered compatible, presenting no risk to infants, even evidenced in breast milk in small amounts (MINISTÉRIO DA SAÚDE 2014 e ANVISA, 2018).

Ibupofren was considered one of the best drugs because of its short duration of action and deficiency of active metabolites (LAMOUNIER, 2006) and the same did not present any risk to the lactating [3, RAMINELLI 2011 e MINISTÉRIO DA SAÚDE, 2014).

Acetylsalicylic acid (ASA) should be used cautiously and in short periods of time,thus having no effect on nursing mothers, but if the use is regular, breastfeeding should be stopped. [2,LAMOUNIER, 2006, AMADEI 2009 e MINISTÉRIO DA SAÚDE 2014].

Lidocaine hydrochloride was the anesthetic solution of choice and has been approved for compatibility with breastfeeding, meaning that there are no risks to the are no risks to the infant wheningested in therapeutic doses. [2,3, MINISTÉRIO DA SAÚDE 2014].

Mepivacaine must be used judiciously, because no studies have yet been presented to verify the safety that it is not eliminated in breast milk. [3,8,MINISTÉRIO DA SAÚDE 2014].

Diazepam is an axiolytic that is rapidly absorbed (ANVISA, 2018) even this medication is not administered during breastfeeding, only with medical advice or a dentist surgeon, not exceeding the treatment that would take 2 to 3 months, and should be used judiciously in short periods and always observing the signs of the newborn [3,5,MINISTÉRIO DA SAÚDE, 2014].

Clonazepam its use may be contraindicated if there is no medical indication, its intake during lactation must be judicious and the signs of the newborn must be observed, (RAMINELLI 2011, MINISTÉRIO DA SAÚDE 2014, ANVISA 2015).

Conversely, amitriptyline hydrochloride, which has rapid absorption and long duration, and with elimination that takes 10 to 46 hours, is compatible with lactation. [3,6,9, MINISTÉRIO DA SAÚDE 2014].

Amitriptyline hydrochloride, like imipramine hydrochloride, has been found in breast milk in small amounts (Bedran, 1988).

finally, imipramine, which for [3,MINISTÉRIO DA SAÚDE, 2014] was considered to be a safe medication during breastfeeding, but for (ANVISA, 2017) was not recommended, so its use must be carefully and always observing the infant's signs of sedation and anticholinergic effects was not recommended, so its use should be carefully and always observing the infant's signs of sedation and anticholinergic effects.

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Conflict of Interest

The author declares no conflicts of interest.

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