EAS Journal of Dentistry and Oral Medicine
Abbreviated Key Title: EAS J Dent Oral Med
ISSN: 2663-1849 (Print) & ISSN: 2663-7324 (Online)
Published By East African Scholars Publisher, Kenya

OPEN ACCESS

Volume-6 | Issue-5 | Sep-Oct-2024 | DOI: https://doi.org/10.36349/easjdom.2024.v06i05.001

Original Research Article

Odontogenic Peri-Mandibular Cellulitis and Pregnancy about Five Cases at the Owendo University Hospital Center

Nimy Mmf[1*], Sima Ole B[2], Late Srb[1], Makungu Ap[1]

[1]Departement of Stomatology and Maxillofacial Surgery University Hospital Center Owendo
[2]Gynecology Obstetrics Departement University Hospital Center Owendo

Article History
Received: 28.07.2024
Accepted: 04.09.2024
Published: 07.09.2024

Journal homepage:
https://www.easpublisher.com

Quick Response Code

Abstract: Odontogenic perimandibular cellulitis are infections spreading into the celluloadipose tissues of the compartments of the perimandibular region. Promoted by taking non-steroidal anti-inflammatory drugs. They constitute an emergency for patients and especially pregnant women, because they are the cause of serious complications, which can endanger the maternal-fetal prognosis. To study the contributing factors, complications and management of odontogenic perimandibular cellulitis in pregnant women. ***Patients and method:*** This is a retrospective, descriptive and single-center study, focusing on patients hospitalized in the CMF Stomatology department from April 2022 to April 2024. The sources of information were the department registers and patient files. The study population, odontogenic cervico-facial cellulitis in pregnant women, included all patients with odontogenic perimandibular cellulitis during pregnancy; other locations were not included. The study parameters were age, history, contributing factors, maternal-fetal complication and treatment. ***Results:*** The study concerns five pregnant women. The average age was twenty-five years, two were carriers of HIV retrovirosis. They had all taken non-steroidal anti-inflammatory drugs, two were in the first trimester of pregnancy and three in the second trimester. All patients had diffuse perimandibular cellulitis, with cervical diffusion. Non-obstetric complications were dysphagia associated with odynophagia and obstetric complications were one threat of premature delivery. The treatment was medical-surgical. ***Conclusion:*** Odontogenic perimandibular cellulitis is more common in pregnant women in the second trimester of pregnancy. They are favored by taking non-steroidal anti-inflammatory drugs. The maternal-fetal complications found are dysphagia, odynophagia and a threat of premature delivery.

Keywords: Cellulite- odontogenic- pregnancy.

INTRODUCTION

Odontogenic perimandibular cellulitis is a serious condition. They are aggravated by contributing factors such as taking nonsteroidal anti-inflammatory drugs, cellular and humoral immunodepression (pregnancy) [1]. This use of nonsteroidal anti-inflammatory drugs in the second trimester is strictly prohibited because it presents fetal toxicity in addition to aggravating cellulite [2]. Odontogenic peri-mandibular cellulitis constitutes an emergency for all patients because it is life-threatening. This risk is even greater in pregnant women because it can compromise the maternal-fetal prognosis [3]. The care is multidisciplinary involving the Maxillofacial Surgeon, the gynecologist, midwife and the neonatologist.

OBJECTIVE

To study the contributing factors, complications and management of odontogenic cervico-facial cellulitis in pregnant women.

PATIENTS AND METHOD

This is a retrospective, descriptive and single-center study, covering patients hospitalized in the CMF Stomatology department from April 2022 to April 2024. The sources of information were department registers and patient files. The study population, odontogenic cervico-facial cellulitis in pregnant women, included all patients with odontogenic perimandibular cellulitis during pregnancy; other locations were not included. The

***Corresponding Author:** Nimy Mmf
Departement of Stomatology and Maxillofacial Surgery University Hospital Center Owendo

study parameters were age, history, contributing factors, location, maternal-fetal complication and treatment.

RESULTS

We selected five pregnant women, whose ages ranged from nineteen to thirty-two years old, with an average age of twenty-five years old. Gestational age ranged from eight weeks to twenty-eight weeks. Two pregnant women were in the first trimester, three in the second trimester. They all used non-steroidal anti-inflammatory drugs for self-medication. Two pregnant women were HIV positive. In three pregnant women, there were tartar deposits and at least one dental caries. The causal teeth were the lower molars. The five pregnant women presented perimandibular cellulitis in the diffuse stage with cervical diffusion (Fig 1 a&b). Two pregnant women presented odynophagia and dysphagia before treatment.

Fig1a and b: odontogenic perimandibular cellulitis in 19 week of pregnancy

The treatment was medical-surgical, consisting of amoxicillin-clavulanic acid, metronidazole and the two patients who presented odynophagia and dysphagia benefited from corticosteroid therapy for three days. The five pregnant women benefited from a drainage incision. The evolution under treatment of perimandibular cellulitis was favorable in the five pregnant women, but one pregnant woman who was at twenty-four weeks + three days presented a fetal complication such as the threat of premature delivery with pelvic pain and minimal metrorrhagia. During continued follow-up, three patients underwent tooth extraction and two were lost to follow-up. Not all patients had a dental panoramic performed. Indeed, dental panoramic represents a big risk for pregnancy [10].

DISCUSSION

Dental caries can be complicated during pregnancy by the occurrence of cellulite, which could be explained by the population's ignorance of the need good oral hygiene during pregnancy and by the absence of dental care during pregnancy [4] as in our study where tartar was found in three women in addition to dental caries. In our study, three pregnant women are in the second trimester of pregnancy, which is in line with the study by ORY O *et al.*, [5] which found a similar rate. Some authors explain the occurrence of oral infections in the second and third trimester of pregnancy to the high concentration of estrogen and progesterone. These high levels would lead to maximum modifications of the dental organ with the consequence of hyperemia, edema and bleeding which would increase the risk of bacterial contamination, this is periodontopathy [6], however, this periodontopathy has not been found in our study but rather dental caries. Our pregnant women all present circumscribed perimandibular cellulitis, which is consistent with ORY O and al, but differs from the study of NZOLO BD *et al.*, [7] who found rather more cases of diffuse cellulitis. Numerous studies incriminate the use of NSAIDs in perimandibular cellulitis as a favoring factor, facilitating the rapid transition from the serous stage to the collected stage, as demonstrated by MAKUNGU AP *et al.*, [9] who found a correlation between NSAIDs and this collected stage, showing that

taking NSAIDs favored the occurrence of collected cellulite. This relationship can be explained by the mechanism of action of NSAIDs on inflammation, which remains above all a non-specific means of defense the body against microbial invasions. In our study, all pregnant women used NSAIDs, which is higher than the rate found by BOUNGABEKA Trigo ERM *et al.,* (74%) [8], this despite the fact that NSAIDs and aspirin ≥ five hundred mg a day in pregnant women beyond twenty-four weeks are strictly contraindicated until delivery, including as a single dose, with the exception of eye drops due to the small quantities used as they may cause fetal toxicity and/or neonatal cardiovascular and/or renal, sometimes irreversible, even fatal, particularly from the start of the sixth month of pregnancy [2].

The fetal complication found is a threat of premature delivery, some studies describe several fetal complications and even maternal-fetal deaths [9].

CONCLUSION

Complications of cellulite of dental origin are common during pregnancy. They can be observed in the first and second trimester of pregnancy, leading to a threat of premature birth. It is important to prevent the occurrence of these complications by promoting hygiene and oral care during prenatal consultations.

REFERENCES

1. NICOT and al from Journal of Stomatology, Maxillofacial Surgery and Oral Surgery Volume 114, Issue 5, November 2013, Pages 304-309
2. The CRAT reference center on teratogenic agents: nonsteroidal anti-inflammatory drugs (NSAIDs) – pregnancy updated on 06.20.23
3. Kamath, A. T., Bhagania, M. K., Balakrishna, R., Sevagur, G. K., & Amar, R. (2015). Ludwig's Angina in pregnancy necessitating pre mature delivery. *Journal of Maxillofacial and Oral Surgery*, *14*, 186-189.
4. Bengondo, M.C., Ze, Mikande, J. … & Mengong, H.P. (2006). Oral pathology of pregnant women in Cameroon. *Clin Mother Child Health*, 3(1), 449-52
5. Ory, O. (2019). From Cervico-Facial Cellulitis of Dental Origin During Pregnancy: About 14 Cases. Educi.
6. Doumbia-Singare, K., Timbo, S. K., Keita, M., Ag Mohamed, A., Guindo, B., & Soumaoro, S. (2014). Cervico-facial cellulitis during pregnancy: about a series of 10 cases in Mali. *Bulletin de la Société de pathologie exotique*, *107*, 312-316.
7. 7- Nzolo, B.D., Dilu, N.J., Bolenge, I.J., Mboloko, E. & Makawani, N.M. (2009). From Pregnancy and cellulite of dental origin. About 9 cases and review of the literature. Volume 3 N1.
8. 8- Eboungabeka, Trigo, E.R.M., Mabika, B., Bancolé, Pognon, S.A., Moussa, M. & Magnomé, J.F. (2020). From Cervico-Facial Cellulitis in Pregnant Women at the University Hospital of Brazzaville: About 31 Cases Cervico-facial cellulitis during pregnancy at the University Teaching Hospital of Brazzaville: a report of 31 cases. *Health Sci*. Dis: Vol 21 (9) pp 82-87.
9. 9- Makungu, A. P., Moupab, M.S.A. & Nimy, M. M. F. (2023). From Odontogenic Peri-Mandibular Cellulitis in Adults: Clinical Profile and Treatment at Owendo University Hospital (CHUO). *Japan journal of research*.
10. 10- Schmidt, J., Lacroix, M. & Moustafa, F. (2011). From Radiology and pregnancy; SFMU: Emergencies.

Cite This Article: Nimy Mmf, Sima Ole B, Late Srb, Makungu Ap (2024). Odontogenic Peri-Mandibular Cellulitis and Pregnancy about Five Cases at the Owendo University Hospital Center. *EAS J Dent Oral Med*, *6*(5), 77-79.