BREAST DIFFUSION OF PERIMAXILLARY CELLULITIS OF DENTAL ORIGIN IN THE FEMALE POPULATION AT THE HOSPITAL AND UNIVERSITY CENTER OF BOUAKE (IVORY COAST)

Original Article

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ABSTRACT

Introduction Breast spread of perimaxillary cellulitis of dental origin is a rare but serious complication. It involves the vital prognosis and the prognosis of the mammary organ. The objective of this study was to study the clinical, therapeutic and evolutionary aspects

*Material and MethodsThis was a retrospective study with a descriptive aim carried out in the Odontostomatology and Maxillofacial Surgery department of the Bouaké Hospital and University Center over a period of 04 years (January 2019 – December 2022). Patients admitted for perimaxillary cellulitis dental origin diffused secondarily to the mammary region, were included in our study.*Results *13 cases collected, representing a frequency of 1.66% among all cervico-facial cellulitis of dental origin. The average age was 25.8 years. Traditional therapy was the most noted antecedent (69% or n=9). The average consultation time was 3.6 days. The left genital region was involved in 5 cases (39%) among the initial locations of this cellulitis. Clinically, skin necrosis was found in 7 cases (54%). Therapeutically, necrosectomy was performed in 6 patients (46%) and mastectomy in 1 case (8%). The clinical outcome was satisfactory in 8 patients after thin skin grafting (62%). 3 cases of after-effects were noted (2 breast retraction and 1 cervical retraction).

Conclusion

Perimaxillary cellulitis of dental origin and spread to the breast seems to be the prerogative of women during periods of genital activity. Surgical treatment is most often mutilating, leading to numerous after-effects. It requires special psychological support.

Key Words: cellulite, tooth, breast,

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INTRODUCTION

Perimaxillary cellulitis of dental origin is an inflammation of the fatty tissue of the head and neck, propagated from a septic inoculation whose causal etiology is "the tooth" ^[1]. From one sector of the face, it is capable of diffusing towards another facial and sometimes extrafacial sector ^[2]. Breast diffusion of this cellulite is a rare but formidable complication because it involves the vital prognosis of the patient but also the functional and aesthetic prognosis of the mammary organ. This diffusion specific to the mammary gland is exceptional and rarely described in the literature ^[3]. It constitutes a medical-surgical emergency ^[1].

The treatment is most often multidisciplinary, most often involving the maxillofacial surgeon, the gynecologist and sometimes intensivists and psychologists.

In developed countries, the frequency of this condition and these complications are in clear decline. Their prognosis has been improved by the use of new classes of antibiotics and the promotion of oral hygiene [4]

In Mali, two cases of descending necrotizing cellulitis of dental origin spreading to the breast were recorded [3].In Bouaké (Ivory Coast), recent studies have been devoted to suppurative cervico-facial cellulitis of dental origin [4,5].

However, no specific study has focused on the mammary spread of perimaxillary cellulitis of dental origin. The objective of our study was to identify the epidemioclinical and therapeutic aspects of perimaxillary cellulitis of dental origin with mammary spread.

MATERIALS AND METHODS:

This is a retrospective study with a descriptive aim carried out in the Odontostomatology and Maxillofacial Surgery department of the Bouaké Hospital and University Center over a period of 4 years (January 2019-December 2022).

Patients admitted for perimaxillary cellulitis of dental origin with mammary spread to a previously healthy breast were included in our study.

perimaxillary cellulitis of dental origin spreading to the

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breast in previously injured healthy patients and cellulitis of non-dental origin were not included in our study.

The parameters studied were:

- -Epidemiological (Frequency, Age, History, Profession, Consultation time)
- -Clinics (initial location of cellulite, incriminated teeth, breast clinical appearance)
- -Bacteriological
- -Therapeutics
- -Scalable

RESULTS

Frequency

13 cases collected during our study period, i.e. a hospital frequency of 1.66% compared to all patients admitted for cervico-facial cellulitis of dental origin

Αge

The average age was 27.8 years with extremes of 17 and 52 years

Antecedents

6 cases of traditional therapy.

5 cases of taking Non-Steroidal Anti-Inflammatory Drugs

+ traditional therapy

2 cases of taking Non-Steroidal Anti-Inflammatory Drugs.

Profession

9 housewives and 4 shopkeepers

Consultation deadline

The average consultation time was 6.3 days with the extremes of 2 and 17 days.

Initial location of cellulite

The left genital region was the initial location of the cellulite most affected in 5 cases (39%), followed by the right genital regions in 3 cases (23%), above and below mylohyoid region in 3 cases (23%) and the cervical region in 2 cases (15%)

Causal teeth

All causal teeth were mandibular molars

Teeth 38 (4 cases) ,teeth 37 (2 cases) , teeth 36 (1 case) , teeth 48 (2 cases),teeth 47 (2 cases) and teeth 46 (2 cases)

Mammary clinical aspects

Skin necrosis was the most noted breast clinical appearance (54%)

Breast aspects	Numbers	Percentage (%)
Isolated skin necrosis	7	54
Cutaneoglandular necrosis	3	23
Loss of skin substances and necrosis	2	15
Isolated suppuration	1	8
Total	13	100

Therapeutic aspects

Therapeutically, necrosectomy was the most commonly performed surgical procedure (46%).

Treatment	Numbers	Percentage (%)
Isolated necrosectomy	6	46
Necrosectomy and incision-drainage	5	38
Isolated necrosectomy	1	8
Mastectomy	1	8
Total	13	100

A honey dressing was put in place for the loss of substances resulting from necrosectomies in 10 cases (67%). We performed a thin skin graft in 8 cases (53%).

Bacteriology

Streptococcus sp was the most common bacterial agent found on bacteriological examination in 3 cases, Staphylococcus aureus in 2 cases and 1 case of Proteus mirabilis

Evolution

The evolution was satisfactory in 8 patients after skin grafting (62%).

3 cases of after-effects were noted (2 cases of breast retraction and 1 cervical retraction)

DISCUSSION

The frequency of this breast diffusion cellulite compared to all cervico-facial cellulite remains relatively low. This frequency varies from one country to another. The social stratum affected by this condition were young mothers. These young women in full maternal activity had habits linked to poor oral hygiene and used the vast majority of non-steroidal anti-inflammatories and traditional therapy. This state would be linked to socio-cultural habits and mystical considerations and precariousness. socio-economic conditions of the populations. In addition,

the scourge constituted by the booming clandestine market of NSAIDs and traditional medicines, caustic or superinfectious effects have been found as favoring factors in several African series. Concerning the causal teeth, they were exclusively mandibular. The infection which originates at the level of the dental apices, diffuses through the cellulo-adipose spaces of the neck reaching the thorax following the platysma. Indeed, the platysma muscle has mandibular, thoracic, aponeurotic and cutaneous insertions. It constitutes a potential superficial transmission belt for infection from the mandible to the thorax [6].

Clinically, skin necrosis was the most common tissue lesion. This suggests necrotic damage to the superficial cervical fascia favoring possible spread of the infection step by step, from the cutaneous or subcutaneous tissue and reaching the fat. peri-mammary then the mammary gland. Therapeutically, necrosectomy was the surgical procedure most often performed which resulted in extensive loss of substances from the soft tissues. The rest of the treatment required budding with honey. The choice of honey for the budding of these losses of substances was motivated by the therapeutic properties of honey and a better preparation of the vascular bed for a skin graft. 3 cases of aftereffects noted after thin retraction-type skin grafting and permanent loss of the breast following a total mastectomy. Total mastectomy carries a heavy aesthetic and functional cost, sometimes a source of psycho-affective disturbances, hence the interest in combining psycho-affective care.

CONCLUSION:

Perimaxillary cellulitis of dental origin and spread to the breast seems to be the prerogative of women during periods of genital activity. Surgical treatment is most often mutilating leading to numerous after-effects. It requires specific psychological support. Breast reconstruction is a better solution to improve the aesthetic and psychoaffective prognosis but still remains hypothetical given the socio-economic conditions of our patients.

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Conflict of Interest

The authors declare that they have no conflicts of inter—est. The authors declare that they received no funding to perform this study.



Figure 1: Right skin-glandular necrosis

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