

# Cellulites of Dental Origin in the Odontology Service of the Reference Health Center of the Common Iii of the Bamako District

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## Abstract

*These circumscribed cellulites are usually benign conditions, by which they can be complicated, and some of the most likely to be caused by these conditions. the patient. They are more likely to be men than women. Their frequency is higher among the students. The most common cause of these complications was molars. The literate patients were the most represented. The city was represented and the Bambara were more represented. The circumscribed cellulite was more in the limb than the number of cellulite cases was more suppurative than suppurative. These pathologies disrupt life because they can induce pain, making them diagnostic and therapeutic emergencies.*

**Keywords:** cellulite - circumscribed - dental origin - antibiotics

## INTRODUCTION

Cellulitis is a septic inflammation of the perimaxillary tissue that is, at the periphery of the bone structures. It can interest the maxillary, the mandible, reach all the boxes of the face and these infectious centers. They will be circumscribed and will invade physiologically limited territories by fasciae that differentiate the boxes from the face. Circumscribed cellulitis is a perifocal reaction [1]. This is an acute infection of the subcutaneous tissue. It travels through the bone or periosteum to reach the cellular tissue. It is an infection of bacterial origin, most often with streptococcus, sometimes with staphylococcus aureus or with various gram-negative germs, consecutive to dental or periodontal disease. It usually manifests as a large, hot and painful red area affecting the areas of the face, associated with fever and general malaise [2].

As a general rule when we have an infectious focus in our body, it tries to circumscribe it to limit it so that we can deal with this phenomenon. In a healthy individual who has no abnormality, in the vast majority of cases these infectious accidents are limited, collect

and circumscribe and that is good because it is easier to treat. These circumscribed cellulites are generally benign pathologies [3].

The objective of this work was to determine the prevalence of circumscribed cellulite, by analyzing their epidemiological aspects, their etiologies, their topographic forms at Csref commune III of the district of Bamako.

## MATERIALS AND METHODS

The present study was carried out in the dental office of the reference health center of commune III of Bamako in Mali. It was a descriptive cross-sectional study lasting 3 months from May 11 to July 3, 2015. During this period, an epidemiological analysis of circumscribed cellulitis and their causes and their topographical situation. For this purpose, we have created a model card for the examination of each patient, which includes the following items: marital status, age groups, level of education, notions of hygiene, etiology, topographical situation and recommended treatment. The population consisted

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of patients seen in consultation at the dental office of Csref Commune III of Bamako. The data has been processed and analyzed by the software World and epi info version 3.5.3.

### RESULTS

During the study period, we received 450 patients in consultation of which 50 presented clinical signs of circumscribed cellulite of dental origin or 11.11%. The study recorded 29 cases of circumscribed cellulitis in men (58%) and 21 cases of circumscribed cellulitis in women (42%), a sex ratio of 1.38. The age of the patients ranged from 0 to 60 years with a predominance in the age group 0 to 14 years with 56%. Regarding the level of education, we adopted the following structure:

- The basic level: this is basic education, ie from the first year to the ninth year, or the Basic Studies Diploma is awarded.
- The secondary level: this is the high school where the Bachelor's degree is awarded.
- The higher level: this is the university, the grandes écoles or institutes whose admission is conditioned by obtaining a bachelor's degree or equivalence. The number of cases of circumscribed cellulitis was 70% present in the mandible against 30% for the maxilla. The drug treatment was performed at 100% in patients with cellulitis and surgical in 64% of cases. The cause of circumscribed cellulitis was 94% of dental caries against 6% of periodontal origin. The mandible was most represented with forty teeth (40) and the temporary molars of the mandible were represented with 21 teeth.

**Table I.** *Distribution by sex*

Sex	patients	Frequency
Male	29	58,00
Female	21	42,00
Total	50	100

**Table II.** *Distribution of patients by age group.*

Age range	Patients	Frequency (%)
<b>0-14 years</b>	<b>28</b>	<b>56,00</b>
15 - 29years	05	10,00
30 - 44years	08	16,00
45 - 59 years	06	12,00
60 years and more	03	06,00
Total	50	100,00

**Table III.** *Distribution of patients by level of education*

Levels of education	Patients	Frequency (%)
Fundamental	<b>32</b>	<b>78,40</b>
Secondary	6	14,63
Superior	3	07,31
Total	41	100

**Table IV.** *Distribution of patients by headquarters*

Seat	Patients	Frequency (%)
Mandible	<b>35</b>	<b>70,00 %</b>
Maxillary	15	30 %
Total	50	100,00

**Table V.** *Distribution of patients by type of circumscribed cellulitis*

Type of circumscribed cellulite	Patients	Frequency (%)
Serous circumscribed cellulitis	<b>45</b>	<b>90,00</b>
Suppurated circumscribed cellulitis	5	10,00
Total	50	100,00

**Tables VI.** *Distribution of patients by contributing factors*

Contributing factors	Patients	Frequency (%)
Fumigation	03	06,00
elf-medication	32	64,00
Tobacco	05	10,00
Other	10	20,00
Total	50	100,00

**Table VII.** *Distribution of patients by treatment*

Treatment	Patients	Frequency (%)
Medicated	50	100
Surgical	32	64
Conservative treatment	18	36

**Table VIII.** *Distribution of patients by etiology*

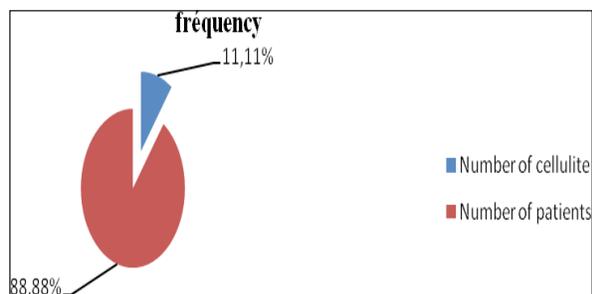
Causes	Patients	Frequency (%)
Tooth decay	<b>47</b>	<b>94 %</b>
Periodontal disease	3	6%
Total	50	100,00

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**Table IX.** Distribution of patients by tooth or group of causative teeth.

Groups of teeth	Maxillary	Mandibular
Temporary incisors	5	00
Temporary canines	0	01
Temporary molars	5	21
Permanent incisors	5	00
Permanent canines	0	01
Permanent premolars	2	08
Permanent molars	3	09
Total	20	40

### Illustration



### DISCUSSION

The frequency of circumscribed cellulitis of dental origin was 11.11% during the study period, however this figure remains well above those observed by KABA et al. at MOUILA [3] and GADEGBEKU et al at COCODY CHU [5] who obtained 4% and 1% respectively, for one year. This is due to the neglect of oral health problems in our study population. The male sex was represented with 58% of the cases; This is comparable to that of BENGONDO C. H. who found 61.46%. [1] The most represented age group was 0 to 14, followed by 30 to 44. A study done at the Albert Royer Hospital in Dakar by YAM A. et al. showed the frequency of cellulitis in subjects of age of pedodontics of 0-15 years is 56.6%. [8] For children under the age of 10, the negligence of dental hygiene must be attributed primarily to parents. The vulnerability of young subjects to cellulite could be explained by the anatomophysiological characteristics of their so-called milk or temporary teeth. According to our study, pupils / students were the most represented with 54% of cases followed by workers with 14% while at BENGONDO C.H et al. showed a predominance among students but also from a less comfortable environment with 39.2%. [1].

The number of cases of circumscribed cellulitis was 70% present in the mandible against 30% for the maxilla this result is comparable with that of several authors including SARR A. [6] and TINE C. [7] Indeed the mandibular teeth are more exposed to caries than the upper teeth because the food debris stagnate more easily on the one hand and on the other hand the poverty of the vascularization was often mentioned. The number of cases of serous cellulitis was 90% against 10% of cases of suppurative cellulitis. BENGONDO C. H. 84.3% acute circumscribed cellulitis versus 15.7% diffuse cellulitis [1]. Self-medication was the highest factor among the favoring factors with 64% of cases. All patients received 100% drug treatment which consisted mainly of massive and adapted antibiotic therapy, as reported by ASSA in 1996 [7]. According to DIA TINE et al. amoxicillin is still effective on streptococci and the combination Penicillin + Metronidazole is recommended in peri-maxillary cellulitis [2]. The cause of circumscribed cellulitis was 94% of tooth decay origin versus 6% of periodontal origin this result is comparable to that of SAAR A. which reported 91.4% of etiologies and periodontal diseases 3.1%. [6] The mandible was most represented with forty teeth (40) and the temporary molars of the mandible were represented with 21 teeth. ALAIN S. found 64.23% of cases for molars. [8]. This result could be explained by the chewing role of these teeth, more exposed to microtrauma.

### CONCLUSION

Finally, it is safe to say that, despite the existence of brushing methods and techniques, advice for behavioral change in relation to oral hygiene that circumscribed cellulite has hardly decreased in frequency. neglect of dental care by the population. Thus, our study shows that: The most frequently circumscribed circumscribed cellulitis is of dental origin and affects more young people between 0 and 10 years old; predominantly male with more cases of the serous form; the mandible was most represented and all patients received drug treatment; finally conservative treatment is rare whereas etiological treatment is based on systematic avulsion.

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