

#### **The Gambia 2017 - 2018**



# Odontogenic facial cellulitis. Management in Farafenni General Hospital

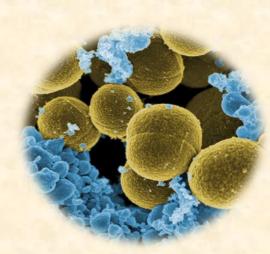


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### INTRODUCTION

Early diagnosis and treatment of facial cellulitis are challenging because of its variable clinical presentations, including multiple potential sources of infections and multiple organisms within the head and neck area.

Odontogenic cellulitis accounted for approximately 50% of total facial infections in a hospitalized population over a 10-year period study. Despite a significant reduction in frequency and mortality in the post-antibiotic era, odontogenic infections can still be life threatening.

Odontogenic facial cellulitis refers to infections arising from the dentition and its adjacent supporting periodontal structure. The infection then disseminates beyond its source, e.g., dentoalveolar abscess, and into the surrounding connective tissues. They may require urgent surgical intervention and ICU management because of the potential for spread of infection into intracranial and peritracheal neck spaces and risk of airway compromise if appropriate management is not instituted.

Facial cellulitis is classified as nonodontogenic and odontogenic, depending on the source of the infection, and as upper or lower face, depending on the anatomical location.

### **OBJECTIVE**

To determine epidemiological and clinical characteristics of odontogenic facial cellulitis in patients requiring hospitalization.

### **METHODS**

S DESCRIPTIVE
T TRANSVERSAL
D

**29 PATIENTS** 

**October 2017 - May 2018** 

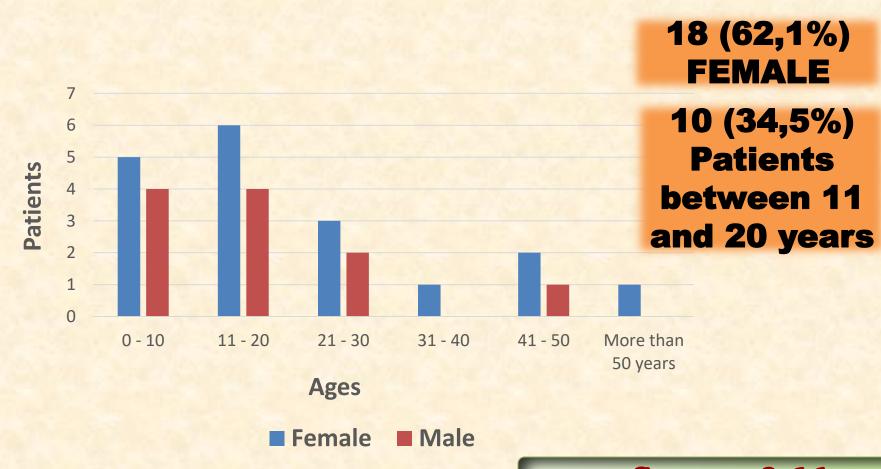
**Farafenni General Hospital** 

### VARIABLES OF THE STUDY

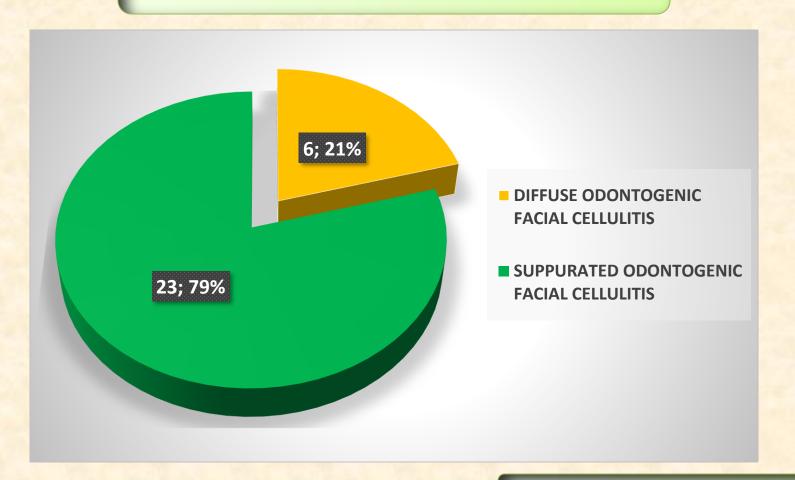
- √ Ages distributed by decades
- √ Sex male, female
- ✓ Clinical classification circumscribed, diffuse, suppurated
- ✓ Dental groups affected front teeht, canines, premolars, molars
- √ Infection's location upper face, lower face
- ✓ External drainage yes, no
- ✓ Delay to attend to the dentistry 1 week, 2 4 weeks, more than 1 month
- ✓ Time for dental extraction 1 week, more than 1 week, no extraction (refusal or death)
- ✓ Antimicrobial therapy
- √ Discharged Conditions alive, deseaced and causes of death

### RESULTS

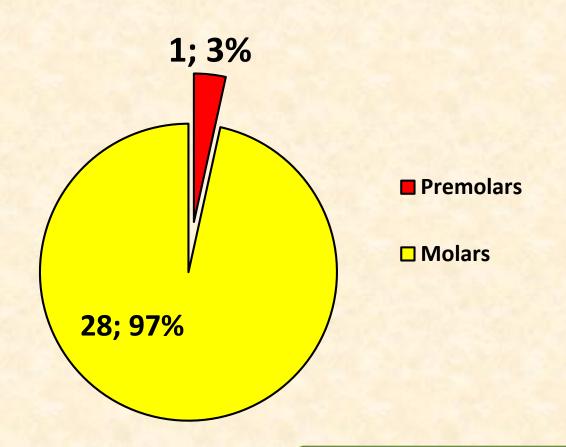
## Grafic 1. Patients with odontogenic facial cellulitis. Age and sex.



#### Grafic 2. Clinical classification.



# Grafic 3. Dental groups associated with the origin of the infection.



# Table 1. Relation between location of the infection and necessity of external drainage.

Location of the infection		cessity of ex	Total			
	Nº	%	Nº	%	Nº	%
Upper face	1	3,5	7	24,1	8	27,6
Lower face	5	17,2	16	55,2	21	72,4
Total	6	20,7	23	79,3	29	100

### Source: folders

# Table 2. Relation between the delay to attend to the dentistry and the necessity of external drainage.

Necessity of external drainage							
Delay to attend to Yes No					Total		
the dentistry	Nº	%	Nº	%	Nº	%	
1 week	-	-	9	31,0	9	31,0	
2 – 4 weeks	1	3,5	4	13,8	5	17,2	
More than 1 month	5	17,2	10	34,5	15	51,8	
Total	6	20,7	23	79,3	29	100	

#### Source: folders

## Table 3. Relation between the delay to attend to the dentistry and the time for dental extraction.

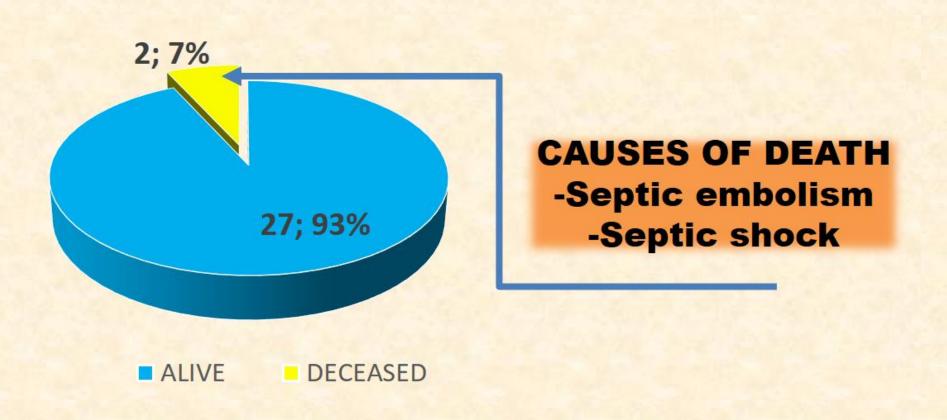
Time for dental extraction								
Delay to attend to the dentistry	1 week		More than 1 week		No extraction (refusal or death)		Total	
	Nº	%	Nº	%	Nº	%	Nº	%
1 week	6	20,7	3	10,3	-	-	9	31,0
2 – 4 weeks	1	3,5	-	-	4	13,7	5	17,2
More than 1 month	-	-	13	44,8	2	7,0	15	51,8
Total	7	24,1	16	55,2	6	20,7	29	100

#### Source: folders

### Table 4. Antimicrobial therapy.

Antimicrobial therapy	Nº	%	
Metronidazole	26	89,7	
Gentamicine	24	82,8	
Penicillin	18	62,1	
Ampicillin	10	34,5	
Ciprofloxacin	1	3,5	
Cloxacillin	1	3,5	

#### Grafic 4. Discharged conditions.



### CONCLUSIONS

Odontogenic facial cellulitis prevail in female, childrens and young population and molars in mandibulary location are the most affected.

There is a closed relation between the delay of patients to attend to the dentistry and the proper time to perform the dental extraction, and also with de need of additional surgical procedures to solve complications such as external facial abscess.

Penicillin, metronidazole and gentamicine, as a combination, provides excellent bacterial coverage for most odontogenic infections.

### RECOMENDATIONS

It is recommended to improve in promotion and prevention activities in Community Centers and villages in order to increase the knowledge and culture of the population about the importance of attending prematurely to the dentist in front of any symptom and sign of Odontogenic facial cellulitis.

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