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Poor Management Odontogenic Infection Complications in Non-Medically Compromised Maxillofacial Patients in Salah Alden General Hospital

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Abstract
Odontogenic infections one of the most common diseases in the oral and maxillofacial region. Precise &careful management of such patients very important. Poor management of odontogenic infection may leads to serious Complications in the maxillofacial region. Aims of the study. Hasten & facilitate patient recovery. Evaluate the most common poor management complication in maxillofacial region. Patients and methods. Sample of 20 patients complaining of poor management odontogenic infections. The data obtained from patients attending maxillofacial clinic. Same data collection formula for all patients. Results. The complications was, (10%) Buccal space abscess. (45%) Submandibular abscess. (10%) Submassetric abscess. (20%) Ludwig's angina. (10%) Supra sternal abscess. (5%) Necrotizing fasciitis Pt no. complaining according to Poor type of treatment was (35%) Antibiotics only. (15%) Aspiration of abscess &Antibiotics. (35%) Inadequate abscess drainage &Antibiotics. (10%) Remove the cause only without fallow up. (5%) Extraction of non-causative tooth. Conclusion. Poor education, patient careless (neglected& poor oral hygiene), inadequate& poor management planning of cases May leads to these complications results.

Introduction:

Odontogenic infections have been one of the most common diseases in the oral and maxillofacial region associated with mortality rate of 10–40 percent With the dvent of modern antibiotics, mortality rates have significantly reduced Such infections are usually self‑limiting purulent material may occasionally burrow deep into fascial spaces. Propagation can produced by direct continuity, by lymphatic or hematogenous dissemination and depends on the Patient's local and systemic factors and on the virulence of the pathogen [(1)] .Bad means not good; very poor quality , quantity or normal [(2)] Odontogenic infection is an infection of the alveoli, jaws, or face that originates from the tooth or its supporting structures and is one of the most common infections found. Diseases or diseases, on the other hand, have caused Periapical periodontitis [(3)] Medical complication. Complications in non-medically affected patients, & exclude, are an adverse consequence of a disorder, health condition, or treatment [(4)],

to explain inadequate management of odontogenic infection. (Dental patients with poor health status, such as pregnancy, or patients with systemic disorders, such as ischemic heart disease, congenital heart disease, liver disease, renal disease, asthma, immunodeficiency patients, and patients with impaired immune status are medically deficient patients [5]). Since many patients arrived at the clinic in the maxillofacial area, they complained of poor management complications. Good or adequate management may prevent complications, especially in patients who not medically compromised. This research conducted according to the complaints of these non-medically affected patients.

Aims of the study

1. Hasten & facilitate patient recovery.
2. Evaluate the most common poor management complication in maxillofacial region.

Patients &Method

Across sectional study with a sample of 20 patients complaining of poor management odontogenic infections, this study done in Salah Alden government, from the period of June 2018 to June 2019. The data obtained from patients attending maxillofacial clinic. All patients fully examined clinically & radiologically according to Signs& symptoms. (General& local) Fever, malaise, headache, swelling redness, tenderness, fluctuation, limited mouth opening, and the tooth tender to percussion. X-rays. OPG reveals carious tooth with periapical radiolucency associated with soft tissue swelling. CT scan reveal the localization& extension of the abscess as hypodense area within the facial & neck spaces. Ultra sound. Reveals the extension within the facial& neck spaces as hypoechoic area. Swab for culture & sensitivity for type of microorganism & the most potent antibiotic to the microorganism.

The Standardized formula of the patients (case sheet)
Pt name Age gender
Residence occupation
Chief complaint.
History of present illness

History of complaining.	yes	no
Are you visit dentist		
Are you visit maxillofacial		
Are you visit other specialist		
Are you Do general Investigation		
Are you Do local Investigation		

Steps of treatment	yes	no
Instruction.		
Fallow instruction		
Inform diagnosis.		
Referral		
Consultation		

Type of treatment.	yes	no
Antibiotics only.		
Aspiration of abscess& Antibiotics		
Inadequate Abscess drainage &Antibiotics		
Remove the cause only without fallow up		
Extraction of non-causative tooth		

Past medical history.
Clinical examination. Extra oral. . Intra oral.
Investigation. General. Local. Radiological. U/S .Diagnosis. .Treatment. Fallow up.

Results:

The result was the total no. are20 patients, 10 male & 10 female as in Table (1) (male 50%) & (female 50%) as in Fig. (1). According to age groups the result of patient was 3(0-10year)(15%),5(10-20)(25%),6(20-30)(30%),4(30-40)(20%),2(40-50)(10%),as in Table (2) &fig.(2). No. of patient according to visiting doctors was Dentist (eight patients visit, 12 not) .To maxillofacial (zero patient visit, 20 not). To other specialist (15 patient visit, 5not) as in Table (3) Fig. (3). According to investigation general (12patient, 8donot), local investigation (5patient do15 not) as in Table (4) Fig. (4). According to step of treatment instruction

(20 patient gain it zero not) fallow instruction (15patient fallow five not). All patients inform diagnosis. Referral (5refeerd, 15not). Consultation (5withconsultaion 15 without) as seen in Table (5) Fig. (5). Pt no. complaining according to Poor type of treatment was (Seven patient) (35%) Antibiotics only. (Three patient)(15%) Aspiration of abscess &Antibiotics. (Seven patient)(35%) Inadequate Abscess drainage& Antibiotics. (Two patient)(10%) Remove the cause only without fallow up. (One patient)(5%) Extraction of non-causative tooth as in Table (6) & Fig. (6). the patient no. complications was, (2patient) (10%) Buccal space abscess. (9patient)(45%) Submandibularabscess.(2patient)(10%)Submassetricabscess.(4patient)(20%)Ludwig's angina.(2patient)(10%)Supra sternal abscess.(1patient)(5%)Necrotizing fasciitis as in Table(7) & Fig.(7). Some digital photograph reveals the patients complications as seen in Fig (3-1, 2, 3, 4, 5, 6).

Discussion:

All information's taken depend on patients or relative words& what doctors told them about their condition. Clinical examination& some investigations done to confirm or exclude patients says. None medically compromised patients commonly less susceptible to these complications if the diagnosis & treatment done at beginning of infection by specialist. The more age group affected is (20-30 year) this group more active so it will more susceptible for complication. At the beginning of the complaint, Most of the patients mainly visit dentist some of patients depend on their own, pharmacist &general specialists for treatment. Poorly education patients, interference of many medical branches in this region (dentistry, maxillofacial, general surgery, ENT. general physician& pharmacist) leads to delay the diagnosis &poor managements& lost the golden time which is early diagnosis. All patients (Buccal space abscess, Submandibular abscess Submassetric abscess, Ludwig's angina, Supra sternal abscess, and necrotizing fasciitis) treated without culture & sensitivity test without special x-ray for this area periapical x-ray or (OPG) that may needed. Deficiency in the local investigations are obvious for all patients. Poor treatment with antibiotics only, inadequate drainage & antibiotic or by aspiration of abscess& antibiotic or remove the cause without fallow up, or extraction of non-causative tooth. Few patients only referred or have consultation to specialist other than maxillofacial. Therefore, delay treatment in the exact time, inadequate investigations with poor managements cause these complications. More complications are submandibular abscess fallowed by Ludwig's angina this may be due to many branches of medicine deals with & working on it. Treatment without proper medical, surgical plan & doctor's inadequate interference, with patient carless (neglected& poor oral hygiene), addition to general& special circumstances in the government, rare number of maxillofacial specialists, and all these factors could explain poor management complications. So one should suspect these compilations in non-medically compromised patients or healthy patients. This study agree with Igoumenakis, Dimosthenis, et al [6] Odontogenic infections remain a common cause of morbidity. Poor oral hygiene, self-medication, inadequate utilization of antibiotics, lack of treatment of the causative tooth, delayed presentation at the hospital, and bacterial resistance to empirically administered antibiotics appear to correlate with the spread of odontogenic infections. Incision and the evacuation of pus when indicated, intravenous antibiotic therapy, modification of the antibiotic regimen according to the results of sensitivity tests, and early treatment of the causative tooth constitute a successful management protocol for odontogenic infections.

Conclusion

Inadequate &poor management interference, inadequate investigation, unorganized correlation of medical departments, rare maxillofacial specialist, Poor education, patient careless poor oral

hygiene. Inadequate& poor management planning of cases may leads to these complications results.

Recommendation

Educating people or patients those with these complaining in maxillofacial area to visit the maxillofacial specialist. Instruct the doctors who are dealing with this type of patients in this area to consult the maxillofacial specialist. Provide the hospitals by maxillofacial facilities needed for proper diagnosis & treatment.

Fig. (3-1): Digital photograph show patient with buccal space abscess.

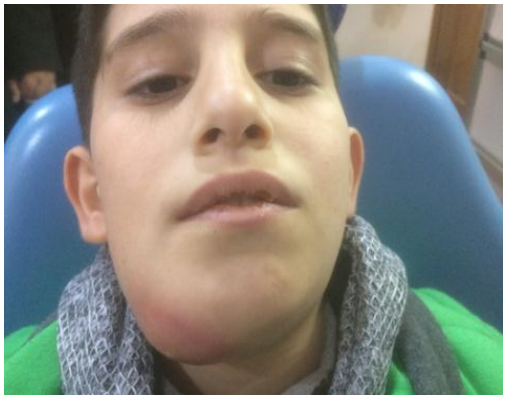


Fig. (3-2): Digital photograph show patient with Submandibular abscess.

Fig. (3-3): Digital photograph show patient with Submassetric abscess.

Fig. (3-4): Digital photograph show patient with Ludwig's angina.

Fig. (3-5): Digital photograph show patient with neck& Supra sternal abscess.

Fig. (3-6): Digital photograph show patient with Necrotizing fasciitis.

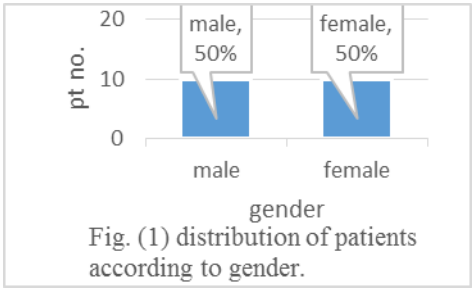


Fig. (1) distribution of patients according to gender.

Table (1) show no. of patient according to gender.

Pt no		gender	
		male	female
2		1	1
9		5	4
2		1	1
4		1	3
2		1	1
1		1	0
total	20	10	10

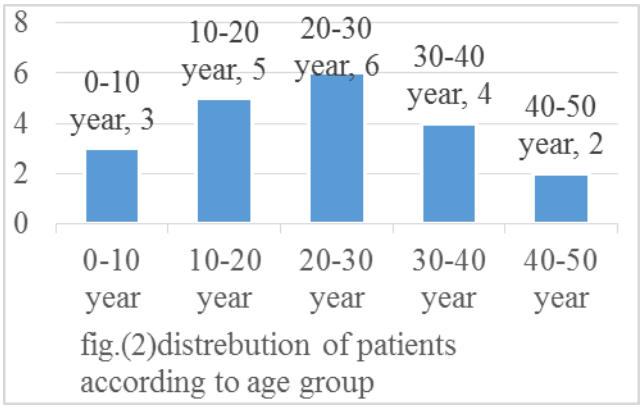
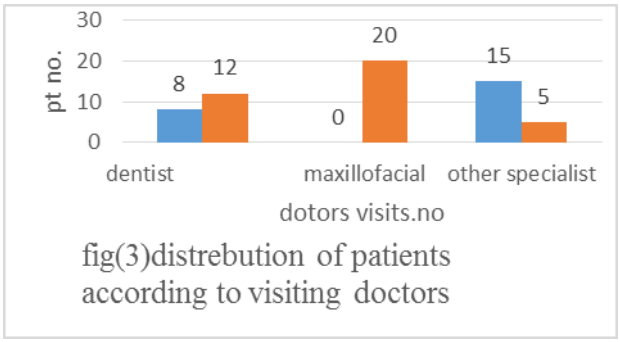


fig.(2)distrebution of patients according to age group

Table (2) distribution of patient according to age group.

Age group	Pt. no.
0-10 year	3
10-20 year	5
20-30 year	6
30-40 year	4
40-50 year	2
total	20



fig(3)distrebution of patients according to visiting doctors

Table (3) distribution of patient according to visiting doctors.

visit doctors	yes	No
dentist	8	12
maxillofacial	0	20
other specialist	15	5

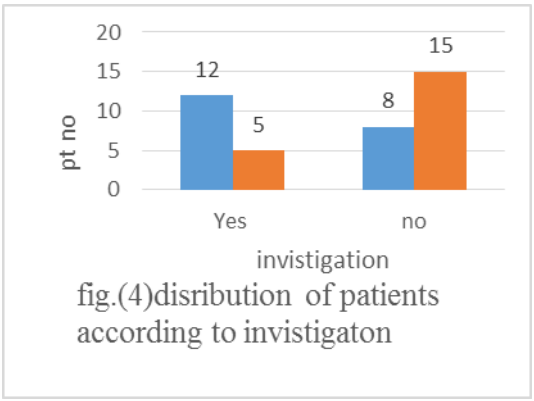


fig.(4)disribution of patients according to invistigaton

Table (4) distribution of patient according to investigation.

Investigation	Yes	no
general	12	8
local	5	15

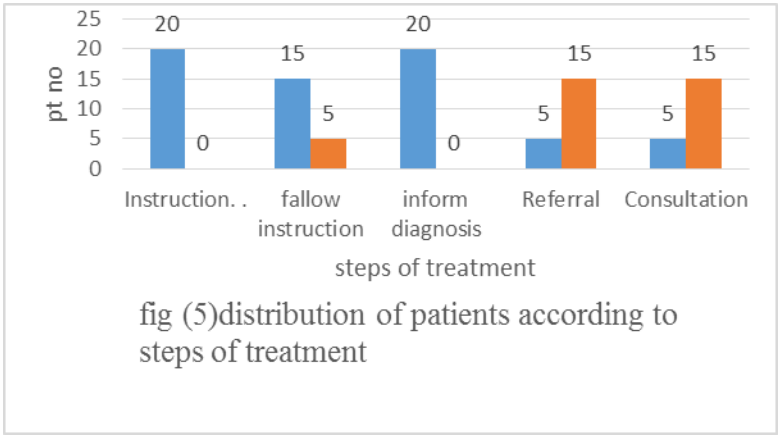


fig (5)distribution of patients according to steps of treatment

Table (5) distribution of patient according to steps of treatment.

Steps of treatment	yes	no
Instruction.	20	0
fallow instruction	15	5
inform diagnosis	20	0
Referral	5	15
Consultation	5	15

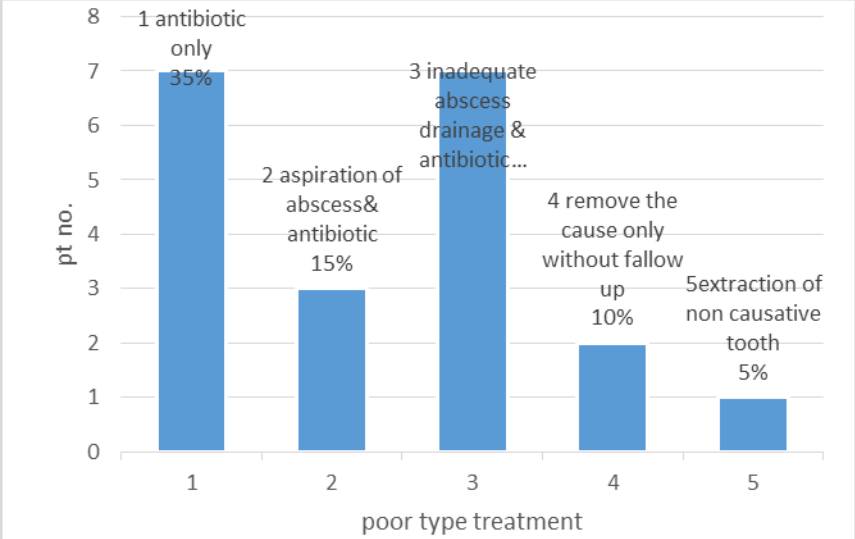


fig.(6)disribution of patients according to poor type of tretment

Table (6) distribution of patient according to poor type of treatment.

no. Pt complaining	Poor type of treatment
7	Antibiotics only.
3	Aspiration of abscess &Antibiotics
7	Inadequate Abscess drainage &Antibiotics
2	without Remove the cause only fallow up
1	Extraction of non-causative tooth

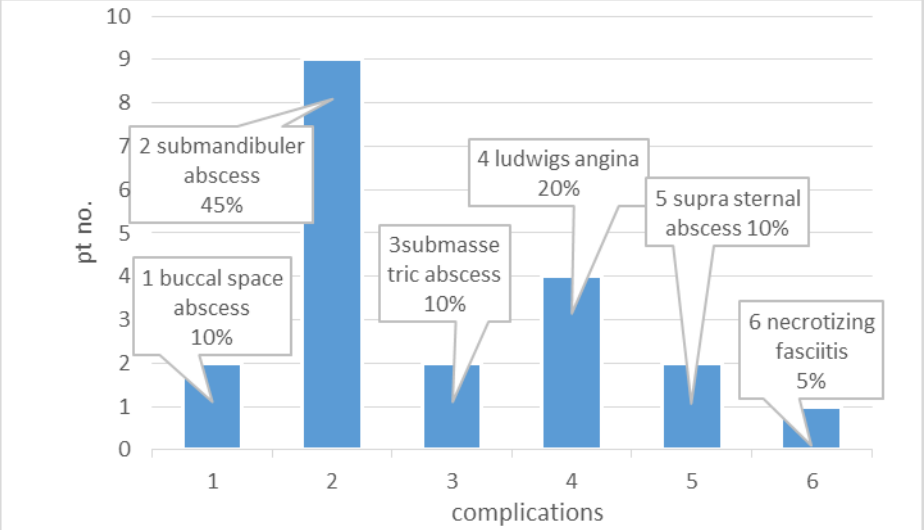


fig.(7)ditrebution of patients according to complications

Table (7) distribution of patients according to complications.

Pt no.	Chief complain (complications)
2	Buccal space abscess
9	Submandibular abscess
2	Submassetric abscess
4	Ludwig's angina
2	Supra sternal abscess
1	Necrotizing fasciitis
Total 20	

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