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LOSS OF SMELL AND TASTE IN COVID19 PATIENTS

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Abstract:

This study focuses on the assessment and knowledge of loss of smell and taste in covid19 patients.
As 200 patients were collected from Azady Teaching Hospital, Kirkuk, Iraq.
The samples were divided into 67 women and 124 men, The average age of patients ranged from 30 to 66 years as they were diagnosed with COVID-19 infection by rt-PCR for respiratory samples and through the use of a questionnaire consisting of a number of questions in assessing symptoms of olfactory loss and age and it was found that there is a significant linear relationship of 0.001, and this indicates that there is a large role for co-19 on the prevalence of loss of sense of smell and taste.

Keywords: COVID-19, smell, taste, Anosmi, OTD

INTRODUCTION

SARS-CoV-2 is a type of coronavirus that infects humans and causes COVID-19. This disease is characterized by complications in the respiratory system, usually accompanied by mild symptoms (80% of cases), in some cases, these respiratory symptoms are accompanied by other manifestations.
In particular, according to recent studies, up to 88% of COVID-19 patients lose their sense of smell and taste and in the majority of these patients (80%), their sense of smell and taste recover on their own over time.
Loss of smell occurs for various reasons, including local disturbances of the olfactory analyzer (allergic rhinitis and atrophic rhinitis), damage to nerve pathways
Olfactory nerves are responsible for the ability to sense and identify smell, as nerve impulses are transmitted to a part of the olfactory brain, then to the subcortical centers, and finally to the cortical center, where they are processed. Therefore, loss of smell develops not only against the background of viruses and bacterial infections.
With Covid-19, the loss of smell is immediate and almost complete, at the same time, symptoms such as a stuffy nose or severe runny nose are usually not observed: most often, patients with coronavirus can breathe freely.
A genetic risk factor increases the likelihood of a person infected with the virus losing their sense of smell or taste by 11 per cent. CV-19, 68% of them reported a loss of smell or taste.

MATERIAL AND METHOD

Patient sample

A cross-sectional study of 200 patients (62% men and 38% women) collected from Azady Teaching Hospital, Kirkuk, Iraq. was established by relying on electronic medical demographic data available in the Hospital.

Study design

Data and demographic information of patients with loss of smell and taste in covid19 patients were collected.
The average age of patients ranged from 30 to 66 years, and patients who were 20 years old were excluded, as they were diagnosed with COVID-19 infection by rt-PCR for respiratory samples and through the use of a questionnaire consisting of a number of questions in assessing symptoms of olfactory loss and age.
The statistical analysis program SPSS soft for the purpose of analyzing the results of patients. In addition, MICRO SOFT EXCEL 2012 program was adopted to draw the figures for the results of patients.

Study period

Duration of the study for the collection and analysis of demographic data on patients spanned from a period 2-9-2020to 10-10-2021

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Aim of study

The study aims to assess the spread of the sense of smell and taste to patients with COVID 19 in Iraq

Statistical analysis

The data were statistically analyzed using the SPSS soft program, and the following techniques were relied on in evaluating demographic parameters and patient data.

1. Mean ±SD
2. P-VALUE
3. Frequency
4. Correlation
5. Percentage
6. Cross tabulation F

RESULT

Table 1- distribution of patient according to age

AGE					
		F	%	VP	CP
Valid	30-34	20	10.0	10.0	10.0
	35-39	30	15.0	15.0	25.0
	40-44	20	10.0	10.0	35.0
	45-49	20	10.0	10.0	45.0
	50-54	35	17.5	17.5	62.5
	55-59	35	17.5	17.5	80.0
	60-66	40	20.0	20.0	100.0
	Total	200	100.0	100.0	

Figure 1- Distribution Of Patient According To Gender

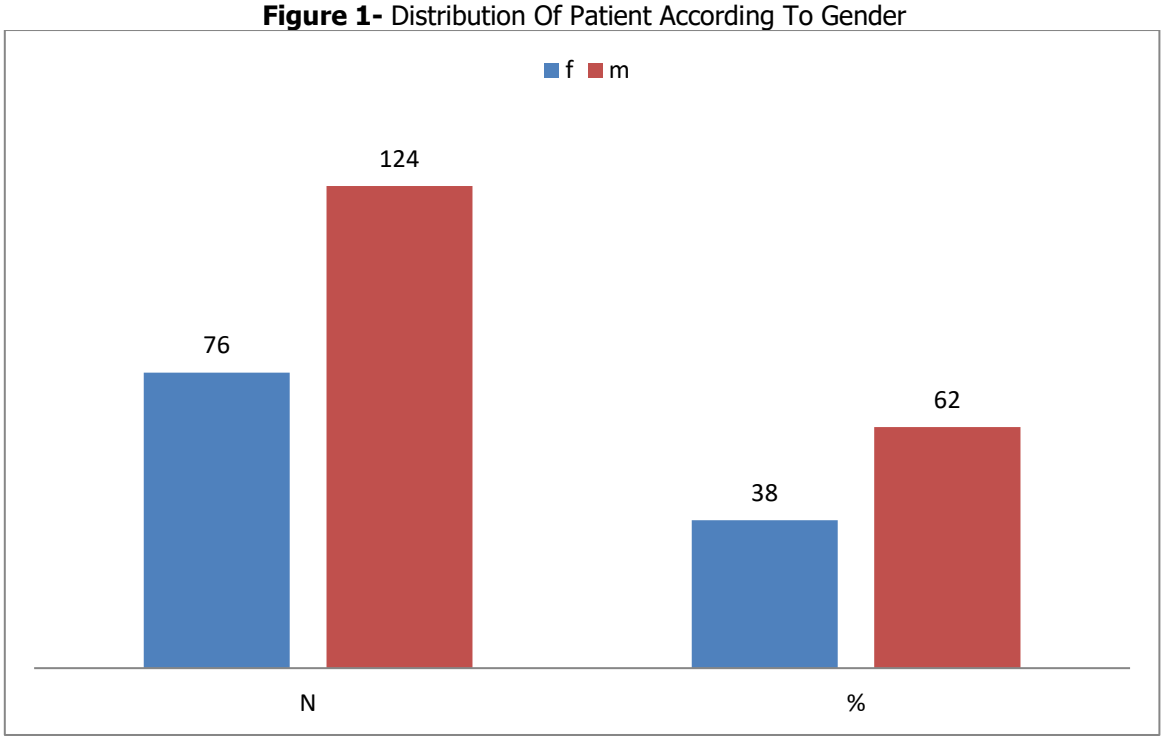

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Table 2- demographic results of patient

	f	%
gender		
f	76	38.0
m	124	62.0
Smoking		
non smoker	137	68.5
smoker	63	31.5
comorbidities		
no	156	78.0
yes	44	22.0

Figure 2- Symptoms of patients

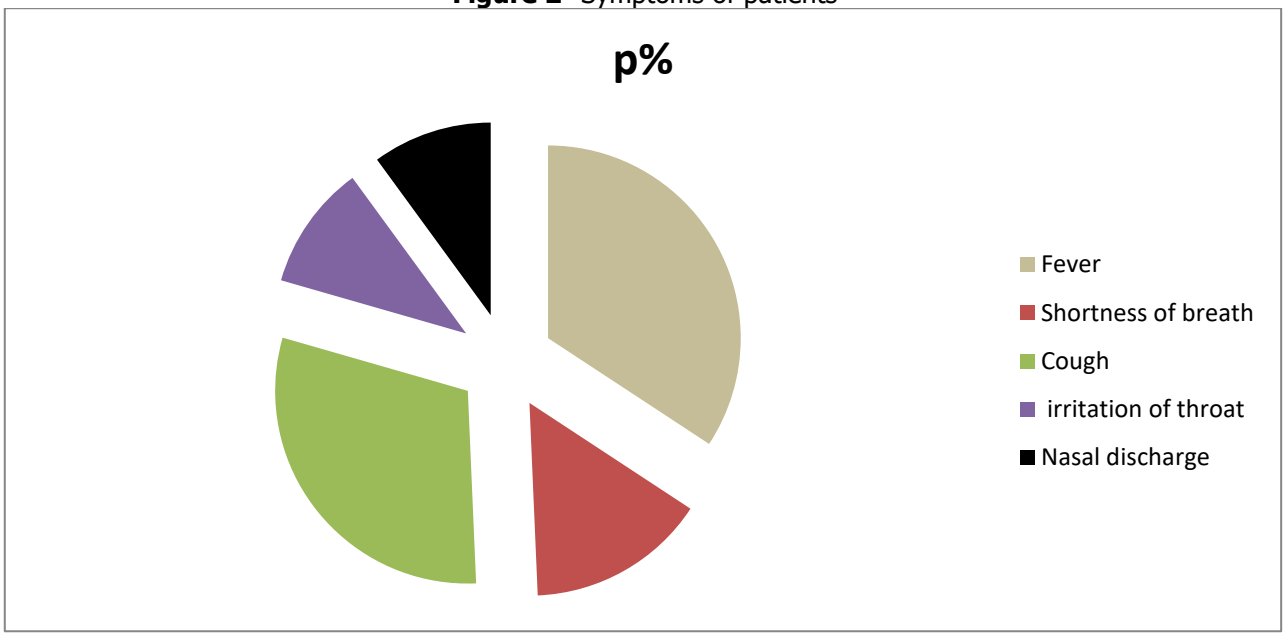

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Table3- relevance of patient CO-19

age * VAR00005 * GENDER Crosstabulation					
Count					
GENDER					Total
			Anosmia	OTD	
f	age	30-34	6	9	15
		35-39	5	5	10
		40-44	0	4	4
		45-49	0	5	5
		50-54	5	8	13
		55-59	5	8	13
		60-66	8	8	16
	Total		29	47	76
m	age	30-34	5	0	5
		35-39	5	15	20
		40-44	3	13	16
		45-49	0	15	15
		50-54	6	16	22
		55-59	6	16	22
		60-66	8	16	24
	Total		33	91	124
Total	age	30-34	11	9	20
		35-39	10	20	30
		40-44	3	17	20
		45-49	0	20	20
		50-54	11	24	35
		55-59	11	24	35
		60-66	16	24	40
	Total		62	138	200

Figure 3 - time (Loss of OTD)

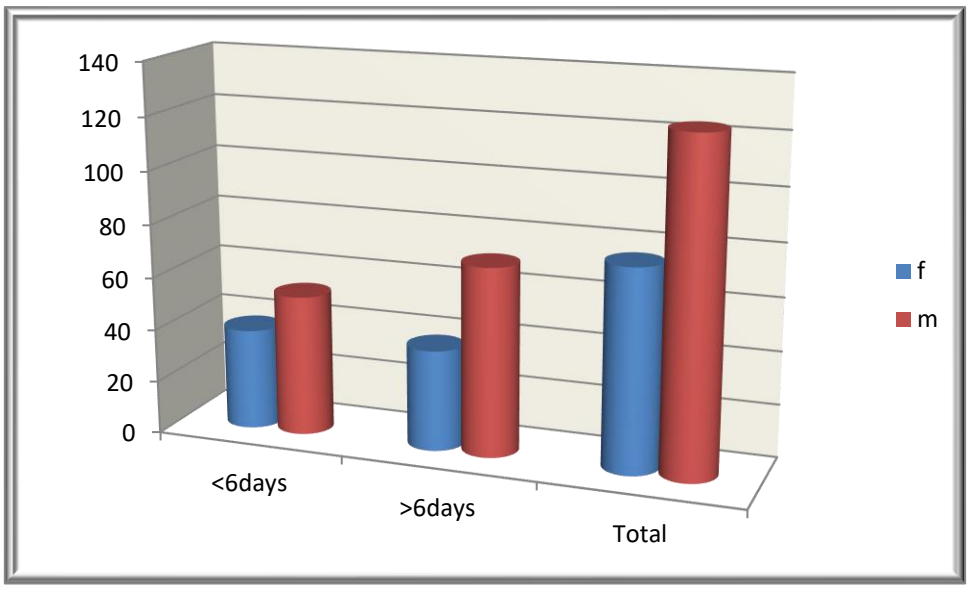

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figure 4-Level of Taste dysfunctions

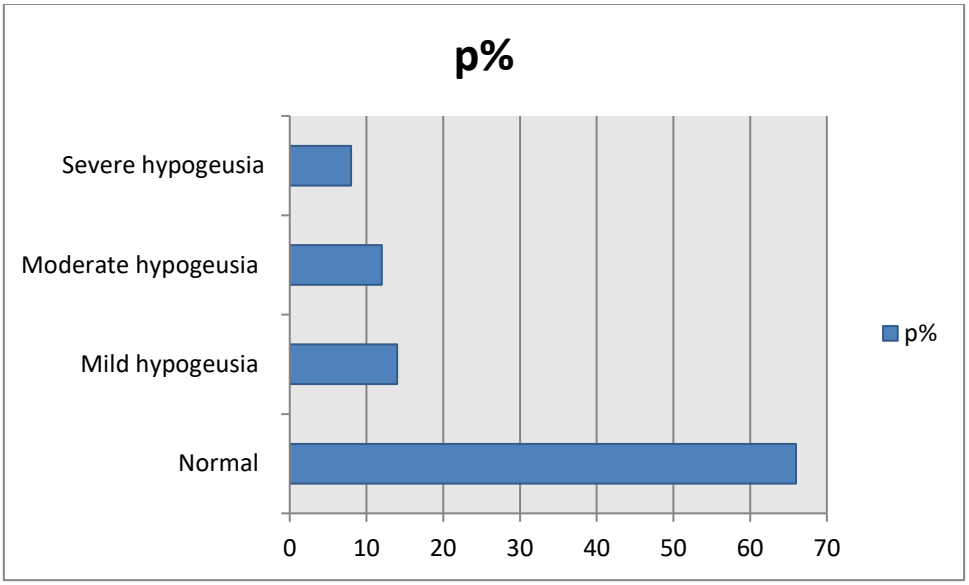

figure 5 -Level of Ageusia

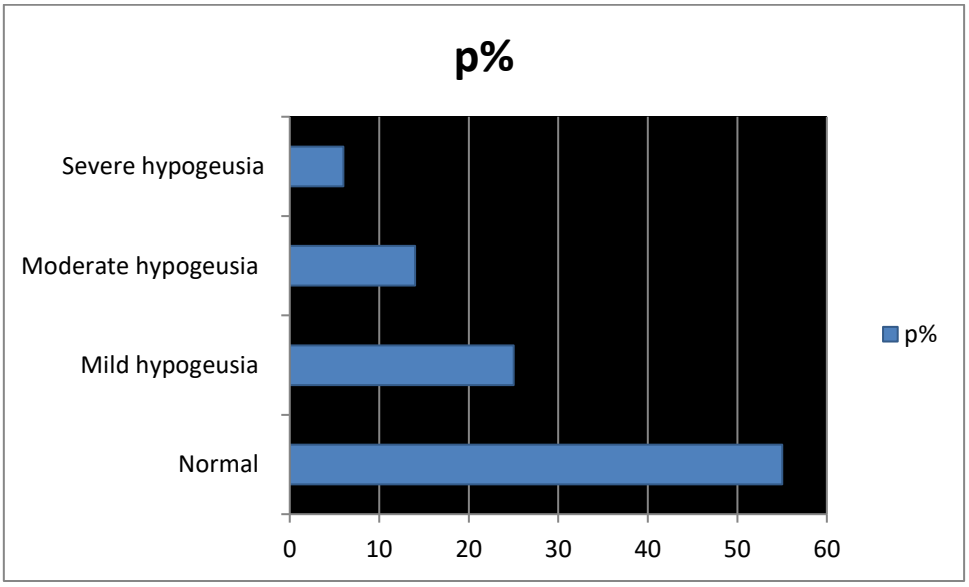

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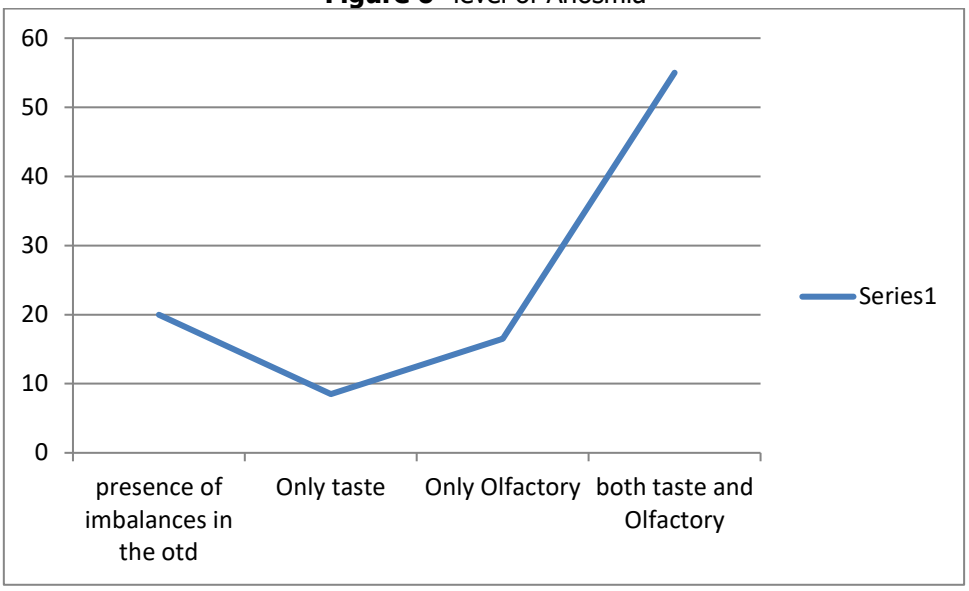
Figure 6- level of Anosmia



DISCUSSION

200 patients were collected from Azady Teaching Hospital, Kirkuk, Iraq. and the results and demographic data were analyzed by statistical analysis program and EXCEL program, mean value and SD of age patients were found as shown in Table 1.

Table 4- Mean value +SD (age of patients)

Statistics		
age		
N	Valid	200
	Missing	0
Mean		49.4000
Median		52.5000
Std. Deviation		10.56637
Range		36.00
Minimum		30.00
Maximum		66.00

The patients were divided into 38% women and 62% men, and it was found that 68% were non-smokers, and there were no results for patients related to alcohol and the patients' addiction to them.

As for the symptoms appearing on patients, they were related to fever, cough, and lost of smell/taste from clinical onset of symptoms were divided into <6 days and >6 days, 71 men were >6 days and 53 men were <6 days.

Level of taste dysfunctions and ageusia were evaluated for patients and divided according to four levels (Normal, Mild hypogeusia, and Moderate hypogeusia).

Severe hypogeusia)

In Taste dysfunctions, we find that 67% of the patients were normal, and Mild hypogeusia came in second place with 14% and Moderate hypogeusia 12%

As for Anosmia, the majority of patients had an overall olfactory and taste dysfunctions of 55%.

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A study published by the Journal of Internal Medicine and included more than 1,400 people who were confirmed to be infected as a result of the examination, found that seven of 10 patients had headaches, loss of sense of smell, and other symptoms most common were nasal obstruction (67.8%) and coughing (63.2%). Fatigue (63.3%), muscle aches (62.5%), runny nose (60.1%), and loss of taste (54.2%). Only half of the patients (45.4%) had a fever.

RECOMMENDATIONS

1. The basic rule for people with impaired sense of smell, taste, and other signs of illness is not to try to self-diagnose based on data from Internet resources. It is also important to exclude self-medication, which can sometimes aggravate the situation.
2. If you have lost your sense of smell, which is associated with a runny nose or occurs as the only symptom, you should immediately contact your family doctor, general practitioner, or otolaryngologist.
3. The Paltimed Clinic develops individualized, state-of-the-art rehabilitation programs for patients suffering from prolonged loss of sense of smell. Rehabilitation includes drug therapy, physical therapy, and manipulation techniques

CONCLUSION

An inverse relationship was found between patients with OTD and without, and statistically significant differences were found between the two groups, and that CO-19 has a significant effect on the loss of sense of smell and taste in patients.
It was also concluded that otolaryngologists continue to exercise increased vigilance in the management of patients with acute onset of OTD symptoms.

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