



Assessment of Risk Factors Associated with Peptic Ulcer for a Sample of Patients Attending Baghdad GIT Center

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Abstract

Peptic ulcer, also known as peptic ulcer disease (PUD), is the most common ulcer of an area of the gastrointestinal tract that is usually acidic and thus extremely painful. The study aims at identifying the epidemiological features patients (age, gender, occupation, social status) and the identification of some risk factors associated with this disease was conducted in the study of digestive diseases and liver in the hospital in Baghdad. Collect the data by interviewing the patient and using the questionnaire. The study sample includes (150) male and female cases. It was noted that the age, occupation and social status, smoking, drinking alcohol, drinking coffee, family history, taking analgesics and eating spicy foods have a significant effect on the risk of peptic ulcer. The study aims at:

identifying the epidemiological Feature of patients (age, gender, occupation, and residency)

To determine some risk factors which are associated with the disease (stress, smoking, eating, and alcohol drink)

Keywords: Ulcer, NSAIDS, Gastro-Intestinal

تقييم عوامل الخطر المرتبطة بالقرحة الهضمية لعينة من المرضى الذين يحضرون إلى مركز بغداد للجهاز الهضمي

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الخلاصة : مرض القرحة الهضمية، هي أكثر القرحات شيوعاً في منطقة من الجهاز الهضمي والتي عادة ما تكون حمضية وبالتالي مؤلمة للغاية. هدفت الدراسة للتعرف على السمات الوبائية للمرضى (العمر ، الجنس ، المهنة ، الحالة الاجتماعية) وتحديد بعض عوامل الخطر المرتبطة بهذا المرض في دراسة أمراض الجهاز الهضمي والكبد في مستشفى بغداد. جمع البيانات من خلال مقابلة المريض واستخدام الاستبيان. تضمنت عينة الدراسة (150) حالة ذكور وأنثى. لوحظ أن العمر والوظيفة والوضع الاجتماعي والتدخين وشرب الكحول وشرب القهوة والتاريخ العائلي وتناول المسكنات وتناول الأطعمة الغنية بالتوابل لها تأثير كبير على خطر الإصابة بالقرحة الهضمية تهدف الدراسة إلى :

1- التعرف على السمة الوبائية للمرضى (العمر ، الجنس ، المهنة ، الإقامة)

2- تحديد بعض عوامل الخطورة المصاحبة للمرض (الإجهاد ، التدخين ، الأكل ، شرب الكحوليات)

الكلمات المفتاحية : المعدية المعوية، المضادات الالتهابية غير الستيرويدية، قرحة

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معلومات البحث

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Introduction

Peptic ulcer disease (PUD) is a break in the inner lining of the stomach, first part of the small intestine or sometimes the lower esophagus^{[1][2]} An ulcer in the stomach is known as a gastric ulcer while that in the first part of the intestines is known as a duodenal ulcer^[1] The most common symptoms of a duodenal ulcer are waking at night with upper abdominal pain or upper abdominal pain that improves with eating. With a gastric ulcer the pain may worsen with eating^[3]. The pain is often described as a burning or dull ache other symptoms including belching, vomiting, weight loss, or poor appetite. About a third of older people who have no symptoms^[1].

Complications may include bleeding, perforation and blockage of the stomach. Bleeding occurs in as many as 15% of people^[4] Common causes include the bacteria *Helicobacter pylori* and non-steroidal anti-inflammatory drugs (NSAIDs)^[1]. Other less common causes including tobacco smoking, stress due to serious illness, Behcet disease, Zollinger-Ellison syndrome, Crohn disease and liver cirrhosis, among others^{[1][5]} Older people are more sensitive to the ulcer-causing effects of NSAIDs. The diagnosis is typically suspected due to the presenting symptoms with confirmation by either endoscopy or barium swallows. *H. pylori* can be diagnosed by testing the blood for antibodies, a urea breath test, testing the stool for signs of the bacteria, or a biopsy of the stomach. Other conditions that produce similar symptoms including stomach cancer, coronary heart disease, and inflammation of the stomach lining or gallbladder inflammation.

Peptic ulcers are present in around 4% of the population^[1] New ulcers were found in around 87.4 million people worldwide during 2015.^[6] About

10% of people develop a peptic ulcer at some point in their life.^[7] They resulted in 267,500 deaths in 2015 down from 327,000 deaths in 1990.^{[8][9]}

Aims of the study:

- 1- To identify the epidemiological Feature of patients (age, gender, occupation, residency.....etc)
- 2- To determine some risk factors associated with the disease (stress, smoking, eating, alcohol drink.....etc)

Patients and Methods

Study Design:

A Cross – Sectional study was done (Snap Shoot Study).

Setting of Study:

Medical City / G.I.T Center / Baghdad.

Duration of Study:

The data collection started from the 10th of Oct-2020 to the 29th of Mar-2021.

Sample Size:

150 patients were selected randomly within the inclusion Criteria.

Data Collection:

Data collection was carried out through direct interview with the patients by using specific questionnaire specially designed to this study including variety of variables such as (name, age, type of personality, family history, smoking, drinking (coffee, tea, soft drink) eat spicy food, drink alcohol) and other variables.

Statistical Analysis:

Data was analyzed by SPSS Statistical Package for Social Sciences (Frequency, percentage, Chi square test, P value).

Table (1) shows that of 150 cases were 37.3% in age group more than 51years ,as for gender show a high

percentage were 52% among male ,as for social status were 80% for married ,as for smoking were 68.7% No smoking ,as for Type of personality shows high percentage 62%among nervous ,as for family history were 68.7% No ,as for take following drugs 42.7% in aspirin.

Table (1): Distribution of study sample according to Demographic data:

Age	Frequency	Percent
20-30	35	23.3
31-40	28	18.7
41-50	31	20.7
More than 51	56	37.3
Total	150	100.0
Gender	Frequency	Percent
Male	78	52.0
Female	72	48.0
Total	150	100.0
Social status	Frequency	Percent
Single	30	20.0
married	120	80.0
Total	150	100.0
Smoking	Frequency	Percent
Yes	47	31.3
No	103	68.7
Total	150	100.0
Type of Personality	Frequency	Percent
nervous	93	62.0%
Quite	18	12.0%
moody	22	14.7%
normal	17	11.3%
Total	150	100.0
Family History	Frequency	Percent
Yes	47	31.3
No	103	68.7
Total	150	100.0
Taking Drugs	Frequency	Percent
Aspirin	64	42.7
NSAIDS	42	28.0
Don't take drugs	44	29.3
Total	150	100.0

Table (2) shows the people with age groups more than (51years) had a high risk factor for peptic ulcer (37.3 %) and have Type of personality nervous

(26)(28%) p value which refers to significant association.

Table (2) Relationship between Age and Type of personality:

Age	Type of personality				Total	p-value	
	nervous	quite	moody	normal			
20-30	Count	24	6	4	1	35	x ² =0.041 P<0.05 Sig
	% within Type of personality	25.8%	33.3%	18.2%	5.9%	23.3%	
31-40	Count	18	3	3	4	28	
	% within Type of personality	19.4%	16.7%	13.6%	23.5%	18.7%	
41-50	Count	25	1	3	2	31	
	% within Type of personality	26.9%	5.6%	13.6%	11.8%	20.7%	
more than 51	Count	26	8	12	10	56	
	% within Type of personality	28.0%	44.4%	54.5%	58.8%	37.3%	
Total	Count	93	18	22	17	150	
	% within Type of personality	100.0%	100.0%	100.0%	100.0%	100.0%	

Table (3) shows the people with age groups more than (51years) (37%) is high risk factors for peptic

ulcer with No family history (40.8%) p value which refers to significant association.

Table (3) Relationship between Age and Family History:

Age	Family History		Total	p-value	
	Yes	No			
20-30	Count	16	19	35	x ² =0.021 P<0.05 sig
	% within Family history	34.0%	18.4%	23.3%	
31-40	Count	11	17	28	
	% within Family history	23.4%	16.5%	18.7%	
41-50	Count	6	25	31	
	% within Family history	12.8%	24.3%	20.7%	
more than 51	Count	14	42	56	
	% within Family history	29.8%	40.8%	37.3%	
Total	Count	47	103	150	
	% within Family history	100.0%	100.0%	100.0%	

Table (4) shows higher percentage intake of aspirin (54.7%) with age groups more than 51 years (56)

37.3 % p value which refers to significant association.

Table (4) Relationship between Age and Taking Drugs:

Age	Are you take of the following drugs			Total	p-value
	Aspirin	NSAIDS	Don't take drugs		
20-30	Count 7 10.9%	Count 9 21.4%	Count 19 43.2%	Count 35 23.3%	x ² = 0.00841 P<0.05 sig
31-40	Count 8 12.5%	Count 9 21.4%	Count 11 25.0%	Count 28 18.7%	
41-50	Count 14 21.9%	Count 13 31.0%	Count 4 9.1%	Count 31 20.7%	
more than 51	Count 35 54.7%	Count 11 26.2%	Count 10 22.7%	Count 56 37.3%	
Total	Count 64 100.0%	Count 42 100.0%	Count 44 100.0%	Count 150 100.0%	

Table (5) shows high percentage among eat black paper (81.2%) and No smoking (68.7%) p value which refers to no significant association

Table (5) Relationship between Smoking and Eating Spicy Food

smoking	Do you eat spicy food			Total	p-value
	Red pepper	Black pepper	Pickle		
Yes	Count 22 40.0%	Count 6 18.8%	Count 19 30.2%	Count 47 31.3%	x ² = 0.116 p>0.05 Non sig
No	Count 33 60.0%	Count 26 81.2%	Count 44 69.8%	Count 103 68.7%	
Total	Count 55 100.0%	Count 32 100.0%	Count 63 100.0%	Count 150 100.0%	

Table (6) shows high percentage in Gainer (58.7 %) and drink cacao (83.3%) more than occupation employee (41.3%)

Table (6) Relationship between Occupation employees and Drinks:

Occupation		Do you drink					Total	p-value
		tea	coffee	cacao	Soft drink	Juice (lemon-orange)		
Employee	Count	24	32	1	2	3	62	$\chi^2 = 0.088$ p>0.05 Non sig
	% within drink	33.3%	54.2%	16.7%	28.6%	50.0%	41.3%	
Gainer	Count	48	27	5	5	3	88	
	% within drink	66.7%	45.8%	83.3%	71.4%	50.0%	58.7%	
Total	Count	72	59	6	7	6	150	
	% within drink	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Discussion:

Peptic ulcer disease (PUD) is a break in the inner lining of the stomach, first part of the small intestine or sometimes the lower esophagus [1][2] An ulcer in the stomach is known as a gastric ulcer while that in the first part of the intestines is known as a duodenal ulcer [1] The most common symptoms of a duodenal ulcer are waking at night with upper abdominal pain or upper abdominal pain that improves with eating. With a gastric ulcer the pain may worsen with eating [3]

It is often described as a burning or dull ache the researchers agreed that peptic ulcer relies on a number of risk discussion factors which have direct or indirect impact; some of these factors are rapidly acting while others take longer time to do an affect. According to the age groups high percentage was (37.3%) with more than 51 years this result Agree with study done by Sonnenberg [10]

In this study, we found high percentage among married (80%) and this result agrees with the

result found in Iraq by Sana'a 2009 [13] it might be due to higher demand of family. According to this study, we found that highest percent of cases had nonsmoker (68.7%) and this result agrees with the result found in in Iraq by athra'a 2012 [11] We found that highest percent of cases had aspirin (54.7%) and this result disagrees with the result found in Iraq by Adnan 2011 [13]

According to this study, we found that highest percent of cases eating black paper (81.2%) and this disagrees with the result found in Iraq by athra'a 2012 [13] . Regarding gender male recoded high percentage (52%) than female this result agrees with the study done by Svanes. 2000 [14]. According to this study, we found that highest percent of cases had nervous of personality (62%) and this result agrees with the result founded by ShiotaniA [15] . In this study, we found that highest percent of cases had not family history (40.8%) and this result disagrees with the result found by OhtakiY, AzumaT, KobishiJ, EtAl [16].

Conclusions and Recommendations

Conclusions:

1. The study showed that the peptic ulcers more occurs in male than female.
2. The study revealed that age groups more than 51 years were more likely to have peptic ulcers.
3. The results showed....that aspirin is the most common type of medication that causes peptic ulcers
4. The study found that patients with peptic ulcers were drinking many cacao
5. The study found that eating too many black peppers leads to causes of peptic ulcer disease
6. The study revealed that most patients had a nervous personality type.

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