

INCIDENCE OF GASTRITIS WITH EROSIVE GASTRITIS AT ADAM MALIK HOSPITAL

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Abstract

Gastritis is inflammation or bleeding mucosa in the stomach that can be acute and chronic. Erosive gastritis can cause erosion stomach Because it damages the mucosa of the stomach, which can happen when you drink alcohol, take NSAIDs, stress, or drink coffee. Complications from erosive gastritis that are not treated can develop with age, starting from puberty until age. Based on the explanation background above, formulation problems in research This is incidence gastritis with erosive gastritis. General objectives of the research This is to know the incidence of gastritis with erosive gastritis. For RSU, Adam Malik Medan's Research results can give donation mind and increase service health to patients with erosive gastritis. Research results show that most gastritis patients at Adam Malik Hospital are aged 10-25, and categories aged 55-65 (24.6%). Research results show that patients with erosive gastritis at Adam Malik Hospital mucosa hyperemia (59%). Research results show a significant relationship between gastritis and erosive gastritis at Adam Malik Hospital (p0.000). Based on the results of the study, it can be concluded that: 1. Age Most gastritis patients at Adam Malik Hospital are aged 10-25 and categories aged 55-65 years (24.6%). 2. Majority of various types of patients sex female (57.4%) 3. Patients diagnosed with gastritis at Adam Malik Hospital (59%) 4. Patients with erosive gastritis at Adam Malik Hospital have mucosa hyperemia (59%) 5. There is a significant relationship between gastritis and erosive gastritis at Adam Malik Hospital (p0.000).

Keywords: Gastritis, Erosive Gastritis, Acute, Chronic.

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Introduction

Gastritis is a condition of inflammation or bleeding of the gastric mucosa, which can be acute and chronic (Sepdianto et al., 2022). Gastritis is caused by three main factors, namely *Helicobacter pylori* infection, long-term use of non-steroidal anti-inflammatory drugs (NSAIDs), and stress-related muscle damage (SRMD). People generally know gastritis as ulcer disease; gastritis occurs at all ages, from children, teenagers, and adults to the elderly (Jannah, 2020). Gastritis can interfere with daily activities because sufferers feel pain and discomfort in the stomach (Nur, 2021).

Many gastritis sufferers start from being too busy, which results in someone forgetting to eat (Sepdianto et al., 2022). Sometimes, gastritis symptoms are initially ignored, even though if the gastritis is left untreated, serious complications can occur (Sepdianto et al., 2022). In general, the causes of gastritis are divided into internal factors, namely conditions that trigger the excessive release of stomach acid and external substances that cause irritation and infection (Handayani & Thomy, 2018).

Symptoms of gastritis, apart from the pain in the solar plexus area, are nausea, vomiting, weakness, bloating and feeling short of breath, decreased appetite, pale face, increased body

temperature, cold sweat, dizziness or always belching and in more severe conditions you can vomit blood (Yusfar & Ariyanti, 2019). In general, the causes of gastritis are divided into internal factors, namely conditions that trigger excessive gastric acid production and external substances that cause irritation and infection.

Some of the risk factors for gastritis are using aspirin or non-steroidal anti-inflammatory drugs, infection with *Helicobacter pylori* germs, having a habit of drinking alcohol, having a smoking habit, often experiencing stress, eating habits, namely irregular meal times, and eating too much spicy food and acid (Yusfar & Ariyanti, 2019). Meanwhile, according to Ardiansyah, the causes of Gastritis are consuming digitalis chemical drugs (acetaminophen/aspirin, corticosteroids), alcohol consumption, radiation therapy, bile reflux, corrosive substances (vinegar, pepper), stress or pressure conditions, infections by bacteria *Helicobacter pylori*, *Escherichia coli*, salmonella and others, use of antibiotics, fungi from candida species (*Histoplasma capsulatum*, and *Mucoraceae*) (Yusfar & Ariyanti, 2019).

According to the World Health Organization (WHO), in 2020, several countries in the world obtained the percentage results of the incidence of gastritis in the world, it was found that the number of gastritis sufferers in England was 22%, China 31%, Japan 14.5%, Canada 35% and France 29.5% (Mustakim et al., 2021). The percentage of gastritis incidence rates in Indonesia, according to WHO, is 40.8%. The incidence of gastritis in several regions in Indonesia is quite high, with a prevalence of 274,396 cases out of 238,452,952 residents.

According to Maulidiyah (2018), in the city of Surabaya, the incidence of gastritis is 31.2%, Denpasar is 46%, while in Medan, the incidence of infection is quite high at 91.6%. Based on the 2018 health profile, gastritis is one of the ten most common diseases in inpatients in hospitals in Indonesia, with 30,154 cases (4.9%) (Mustakim et al., 2021). Based on data from the Palembang City Health Service, it is known that the number of gastritis sufferers in 2019 was 63,408 cases, while in 2020, there were 52,936, and in 2021, there were 49,115.

Erosive gastritis can cause stomach erosion because it damages the mucosal defenses of the gastrointestinal tract, which can occur due to things like NSAIDs, alcohol, stress, coffee, and so on. Untreated erosive gastritis can cause difficulties and affect people of all ages, from teenagers to the elderly. Symptoms of SCBA bleeding include hematemesis, melena, gastric perforation, hypovolemic shock, and death; this may be caused by ulcer complications (Kumara & Andriyati, 2023).

In Indonesia, bleeding erosive gastritis is approximately 25-30% (Kumara & Andriyati, 2023). Based on epidemiological data state, erosive gastritis patients with peptic ulcers in geriatric incidence are increasingly due to 2 factors, namely, declined function in the stomach resulting from degenerative processes and the use of drug NSAIDs, especially aspirin-controlled. So knowledge, education and follow-up of different patient conditions are needed due to the specificity of these conditions (Michigami et al., 2017).

Research methods

Types of research

Types of research This is study descriptive observational, research descriptive that is research conducted to know the independent variable value, good one variable or more (independent) without making a comparison or connecting with other variables, meanwhile objective main study descriptive is described in a way systematic facts and characteristics object or thorough subject in a way fast.

Research methods: A descriptive observational study will describe some circumstances or unearthed problems through observations in the field.

Place and time of research**Place Study**

The research was conducted at H. Adam Malik General Hospital, Medan, at Jl. Bunga Lau No.17, Selamat Tani, Kec. Medan Tuntungan, Medan City, North Sumatra 20136.

Research time

Study carried out in June – July 2023

Research Population and Sample**Population**

Population is a whole subject study. Population is the area of generalization consisting of an object/subject with quantity and characteristics, certain conditions determined by the researcher for study, and then withdrawn conclusions. Population in research: This is a record of medical gastritis patients with erosive gastritis seeking treatment at H. Adam Malik General Hospital Medan in 2022.

Sample

The sample is part of the number and characteristics possessed by the population. The sample is part of the number and characteristics possessed by the population. The sampling technique used in this research used a *purposive sampling technique*. *Purposive sampling* is a technique for determining samples with certain considerations. The sample collection criteria in this study consisted of inclusion and exclusion criteria.

a. Inclusion Criteria

Gastritis patients with erosive gastritis who have complete medical records.

b. Exclusion Criteria

Gastritis patients with erosive gastritis who have incomplete medical records.

Instrument Study

Research instruments are tools or facilities used by researchers in collecting data to make their work easier and the results better, in the sense of being careful, complete and systematic so that they are easy to process (Arikunto, 2018). In this study, the instruments used were medical records of patients with erosive gastritis as the main instrument, then writing instruments and documentation tools as complementary instruments in this study.

Results and Discussion**Distribution Frequency Based on Characteristics Patient**

Table 1. Distribution Frequency Based on Characteristics Patient

Age	Frequency	Percentage
1-9 years	5	8.2
10-25 years	15	24.6
26-35 years old	4	6.6
36-45 years old	3	4.9
46-54 years old	6	9.8
55-65 years old	15	24.6
66-75 years old	12	19.7
76-85 years old	1	1.6
Total	61	100.0

The table shows that the majority of patients aged 10-25 and the categories 55-65 years old, with 15 people (24.6%) and at least 76-85 years old as much as 1 person (1.6%).

Distribution Frequency Based on Characteristics Patient

Table 2 Distribution Frequency Based on Characteristics Patient

Gender	Frequency	Percentage
Man	26	42.6
Woman	35	57.4
Total	61	100.0

The table shows that the majority of various types of patients are Women, as many as 35 people (57.4%), and men, as many as 26 people (42.6%).

Distribution Frequency Based on Gastritis at Adam Malik Hospital

Table 3 Distribution Frequency Based on Gastritis at Adam Malik Hospital

Gastritis	Frequency	Percentage
Gastritis	36	59.0
Erosive gastritis	25	41.0
Total	61	100.0

The table shows that the majority of patients with a diagnosis of gastritis at Adam Malik Hospital, as many as 36 people (59%). In comparison, the diagnosis of erosive gastritis with the diagnosis of erosive gastritis was 25 people.

Distribution Frequency Based on Erosive Gastritis Disease at Adam Malik Hospital

Table 4 Distribution Frequency Based on Erosive Gastritis Disease at Adam Malik Hospital

Erosive Gastritis	Frequency	Percentage
Hyperemic mucosa	36	59.0
Hyperemic mucosa erosive	25	41.0
Total	61	100.0

Based on the table shows that there is erosive gastritis at Adam Malik Hospital in mucosa hyperemia in as many as 36 people (59%) and mucosa Erosive hyperemia in 25 people (41%).

Incident Gastritis with Erosive Gastritis at Adam Malik Hospital

Table 5 Incidence of Gastritis with Erosive Gastritis at Adam Malik Hospital

Erosive Gastritis				
Gastritis	Hyperemic Mucosa N (%)	Hyperemic Mucosa Erosive N (%)	Total N (%)	p-value
Gastritis	36 (100)	0 (0)	46 (100)	0,000
Erosive gastritis	0 (0)	25 (100)	25 (100)	
Total	36 (100)	25 (100)	61 (100)	

The table shows that the chi-square test results were found p value = 0.000 ($p < 0.05$), which means a significant relationship exists between gastritis and erosive gastritis at Adam Malik Hospital.

Discussion

The results showed that most gastritis patients at Adam Malik Hospital were aged 10-25 and in the age category 55-65 years (24.6%). This is supported by Putra's research at the Internal Medicine Clinic, Haji Hospital Medan in 2020 (2023) showing that the largest range was in the 25-32 year age range, 42 people (35.0%, 32 people in the 33-40 year age range (26.7%), age range 17-24 years as many as 16 people (13.3%), age range 41-48 years as many as 12 people (10.0%), age range 49-56 years as many as 9 people (7.5%) %, age range 57-63 years was 6 people (5.0%), age range 64-70 years was 1 person (0.8%), age range 71-77 years was 2 people (1.7%) This age is included in the young and productive age who are at a moderate level of activity and are experiencing changes in lifestyle during college conditions, including changes in eating patterns (irregular eating patterns). Excessive pressure and tasks in the productive age will influence less selective eating patterns and affect a person's psychology (Putra & Wardhani, 2023).

Research results show that patients who were female (57.4%). Rosiani, Bayhakki, and Indra conducted research in 2020 with the results that most patients experiencing chronic gastritis were female, with 68 people (55.7%) (Rosiani et al., 2020). This research is in line with this research, namely that the majority of patients were female, 71 patients (59.2%) and 49 male patients (40.8%). (Putra & Wardhani, 2023). This is the same as the research conducted by Nababan in 2018, namely that most subjects were female, with a total of 65 people (46%). Raintung 2019 shows a correlation between gender and the incidence of gastritis. In his research, women have a greater risk of experiencing gastritis; this is possible because women often diet too strictly because they are afraid of getting fat, eat irregularly, and women are more busy with work, which causes them to eat late, which can cause stomach acid to increase. Women also tend to experience psychological stress, which can irritate the gastric mucosa because more stomach acid will be produced during times of stress. If left untreated, it will cause gastritis. It can be assumed

that girls, especially during adolescence, will pay more attention to body posture than boys (Raintung et al., 2019).

Research results show that Patients diagnosed with gastritis at Adam Malik Hospital (59%). This matter is supported by research previously conducted by Jusuf (2022), which stated that The incidence of gastritis was 63 people (56.2%). Gastritis is often referred to as an ulcer disease, namely inflammation of the gastric mucosa due to irritation and infection, where the squeezing process can damage the stomach if it occurs continuously. This causes abrasions and sores, which result in inflammation called gastritis. (Jusuf, Adityaningrum, & Yunus, 2022).

The results showed that patients with erosive gastritis at Adam Malik Hospital had hyperemic mucosa (59%). The study results showed a significant relationship between gastritis and erosive gastritis at Adam Malik Hospital ($p=0.000$). Erosive gastritis is inflammation of the stomach over a long period. It is caused by chemical agents, especially the use of NSAID anti-inflammatory drugs and coronary heart disease therapy drugs. Chronic gastritis can be confirmed using gold-standard endoscopic and histopathological examinations. In chronic gastritis, chronic inflammatory cell deposits in lymphocytes, PMN infiltrates and glandular atrophy are found. Classification of chronic gastritis uses the Operative Link For Gastritis Assessment (OLGA) in 2005. Chronic gastritis therapy is expected to be comprehensive, starting from supportive management and pharmacological management. Based on epidemiological data, it is stated that in patients with erosive gastritis to peptic ulcers in geriatrics, the prevalence incidence is increasing due to 2 main factors, namely a decrease in the protective function of the stomach due to degenerative processes and long-term and uncontrolled use of NSAID drugs, especially aspirin. So knowledge, education and follow-up of different patient conditions are needed due to the specificity of these conditions. Decreased immunological levels in geriatric patients provide an opportunity for *H. pylori* to infect the stomach and have the potential to become a malignant condition. Successful initial management at the level of erosive gastritis will provide a good prognosis and reduce the risk of *H. pylori* infection (Ilhamsyah et al., 2018).

Conclusion

Based on the research results, it can be concluded that:

1. Most gastritis patients at Adam Malik Hospital are aged 10-25 and in the age category 55-65 years (24.6%).
2. The majority of patients were female (57.4%)
3. Patients diagnosed with gastritis at Adam Malik Hospital (59%)
4. Erosive gastritis patients at Adam Malik Hospital have hyperemic mucosa (59%)
5. There was a significant relationship between gastritis and erosive gastritis at Adam Malik Hospital ($p=0.000$).

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