

to enhance our comprehension of these lesions, thereby contributing to the development of improved preventive and therapeutic strategies. Additionally, our data emphasize the necessity of tailored approaches based on the specific dysplastic patterns observed in individual patients. By recognizing and addressing these variations, healthcare providers can optimize patient care and outcomes in the management of cervical dysplasia.

LITERATURE

1. Park, K. J. Current concepts in cervical pathology / K. J. Park, R. A. Soslow // Archives of pathology & laboratory medicine. – 2009. – Vol. 133. – № 5. – P. 729–738.
2. Kalliala, I. Incidence and mortality from cervical cancer and other malignancies after treatment of cervical intraepithelial neoplasia: a systematic review and meta-analysis of the literature / I. Kalliala, A. Athanasiou, A. A. Veroniki, G. Salanti // Annals of Oncology. – 2020. – Vol. 31. – № 2. – P. 213–227.
3. Wang, M. Diagnostic value of high-risk human papillomavirus viral load on cervical lesion assessment and ASCUS triage / M. Wang, B. Hou, X. Wang, L. Han, Y. Shi // Cancer Medicine. – 2021. – Vol. 10. – № 7. – P. 2482–2488.
4. Babakanrad, E. Cervical cancer: a review of epidemiology, treatments and anticancer drugs / E. Babakanrad, T. Mohammadian // Current Cancer Therapy Reviews. – 2023. – Vol. 19. – № 3. – P. 198–212.
5. Ashman, D. HPV detection rates and histopathologic follow-up of patients with HSIL cytology in a large academic women’s hospital laboratory / D. Ashman, H. Zhang, J. Li, M. Austin, T. Wang // Journal of the American Society of Cytopathology. – 2020. – Vol. 9. – № 6. – P. 550–555.

УДК 616.366-002-018.1-091-053

S. D. Kolamunna, S. N. Dias

Scientific supervisor: MD, PhD, G. V. Tishchenko

Educational institution

“Gomel state medical university”

Gomel, Republic of Belarus

EXPLORING CHOLECYSTITIS: HISTOPATHOLOGICAL PATTERNS AND AGE-RELATED TRENDS

Introduction

Acute cholecystitis is an acute inflammatory disease of the gallbladder. It is often attributable to gallstones, but many factors, such as ischemia; motility disorders; direct chemical injury; infections with microorganisms, protozoa, and parasites; collagen disease; and allergic reaction are involved [1].

Acute cholecystitis is the most frequent complication occurring in patients with cholelithiasis. Cholelithiasis is one of the main diseases associated with obesity. Acute cholecystitis and four (or five) “Fs”, it has been said that the patients with cholelithiasis have factors such as “4F” and “5F” (fair, fat, female, fertile, and forty). Common to all individuals with these “4/5Fs” are high levels of estrogen and progesterone. AIDS as a risk factor Acute cholecystitis is initially a chemical inflammation, but regularly complicated by bacterial invasion from the gut. Escherichia coli, Klebsiella and Streptococcus faecalis dominate among aerobic bacteria, whereas Bacteroides fragilis and clostridia are commonly encountered anaerobes. Mixed infections are prevalent. Bactibilia occurs in at least 60% of the early stage of acute cholecystitis and is particularly prevalent in the elderly. Also, bactibilia is very common in recurrent cholecystitis. In the majority of patients, gallstones are the cause of acute cholecystitis. The process is one of physical obstruction of the gallbladder by a gallstone, at the neck or in the cystic duct. This obstruction results in increased pressure in the gallbladder. There are two factors which determine the progression to acute cholecystitis – the degree of obstruction and the duration of the obstruction. If the obstruction is partial and of short duration the patient experiences biliary colic. If the obstruction is complete and of long duration the patient develops

acute cholecystitis. If the patient does not receive early treatment, the disease becomes more serious and complications occur [1, 2].

Although antimicrobial treatment does not sterilize the bile of an obstructed gall bladder, most authors favour such treatment in cases of febrile cholecystitis, particularly in the elderly, in order to prevent septic complications. Various regimens of preoperative antimicrobial prophylaxis have significantly reduced the infectious complications, in spite of persistent bactibilia. Prophylactic courses should not exceed one or two days, one single preoperative dose is probably adequate.

A combination of broad spectred betalactam antibiotics and nitroimidazole would generally seem to provide an appropriate and atoxic coverage.

Cholecystectomy remains the gold standard treatment for acute cholecystitis, being one of the most frequently performed surgical interventions. Early intervention is crucial to prevent disease progression and associated complications [2, 3].

A study was undertaken to investigate the prevalence of various types of cholecystitis based on histopathological classification and to explore the relationship between age and cholecystitis.

Classification According to Histopathology

Chronic Calculous Cholecystitis: Characterized by biliary pigmentation of the gallbladder mucosa, focal accumulations of eosinophils, atrophy, and full-blooded vessels. It exhibits diffuse moderate lymphohistiocytic infiltration and wall lipomatosis.

Chronic Cholecystitis: Manifests as cholesterosis of the gallbladder with biliary pigmented mucosa, focal clusters of foamy macrophages, atrophy, and full-blooded vessels. There is diffuse moderate lymphohistiocytic infiltration and wall lipomatosis.

Acute Phlegmonous Cholecystitis: Involves mucosal serous edema with foci of neutrophilic infiltration, along with full-blooded vessels. There is lymphohistiocytic and diffuse moderate neutrophilic infiltration throughout the gallbladder wall layers.

Acute Gangrenous Cholecystitis: Features cholesterosis of the gallbladder, mucosal serous edema with necrotic foci, full-blooded vessels, and lymphohistiocytic infiltration throughout the gallbladder wall layers. Additionally, there are foci of colliquatory necrosis and xanthoma cells.

Acute Phlegmonous Calculous Cholecystitis: Characterized by mucosal serous edema with necrotic foci, full-blooded vessels, and lymphohistiocytic infiltration throughout the gallbladder wall layers. It also presents foci of colliquatory necrosis in the gallbladder wall.

Acute Gangrenous Calculous Cholecystitis: Associated with adjacent lymph nodes showing signs of lymphofollicular hyperplasia. The gallbladder exhibits biliary pigmented mucosa, atrophy, and full-blooded vessels. There is diffuse moderate lymphohistiocytic infiltration and wall lipomatosis.

Acute Serous Cholecystitis: Shows biliary pigmented mucosa with focal clusters of foamy macrophages, atrophy, and full-blooded vessels. Additionally, it presents diffuse moderate lymphohistiocytic infiltration and wall lipomatosis.

Goal

The objective of this article is to provide a comprehensive exploration of the morphological characteristics of cholecystitis and investigate the age distribution at which it is diagnosed.

Material and methods of the research

A retrospective analysis of medical records, histological reports, and microscopic slides of 96 patients total diagnosed with cholecysticis in 2023 was conducted. Data processing and statistical analysis were performed using Microsoft Office Excel 2013

The results of the research and their discussion

According to the above graph (graph1), the least occurrence of cholecystitis in gomel is acute phlegmonous calculous cholecystitis of about 5% and highest occurrence of cholecystitis

in gomel was seen as chronic calculous cholecystitis of about 45%. Acute phlegmonous cholecystitis and Chronic cholecystitis has equal occurrence of about 12%.

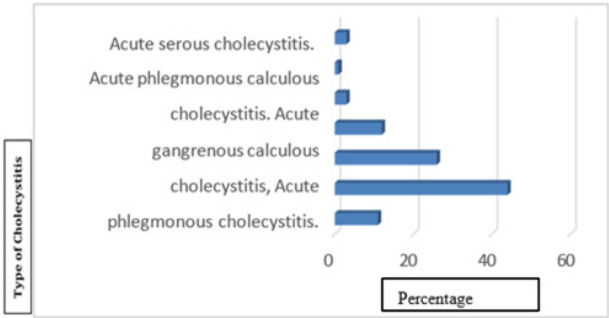


Figure 1 – Types of cholecystitis and occurrence in Gomel, Belarus

According to the above graph (graph 2) the highest percentage occurrence of cholecystitis is observed in patients of age group of 61–70 of about 36% with increase of age up to 61–70 there is an average increase in percentage occurrence of cholecystitis and after 61–70 age group there is an average decrease of cholecystitis.

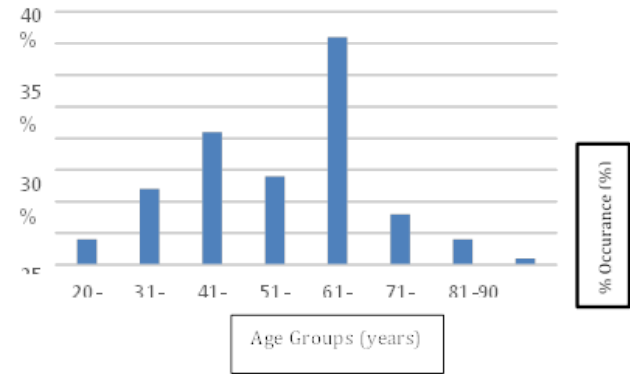


Figure 2 – Relationship Between Age and Percentage Occurrence of cholecystitis

According to the above graph (graph 3), the most common cholecystitis can be seen on patient 61–70 is chronic callus cholecystitis of about 34%, where as acute phlegmonous cholecystitis and chronic cholecystitis has and approximately equal percentage occurrence .and there was no acute phlegmonous squamous cholecystitis and acute gangrenous callus cholecystitis observed in this age group.

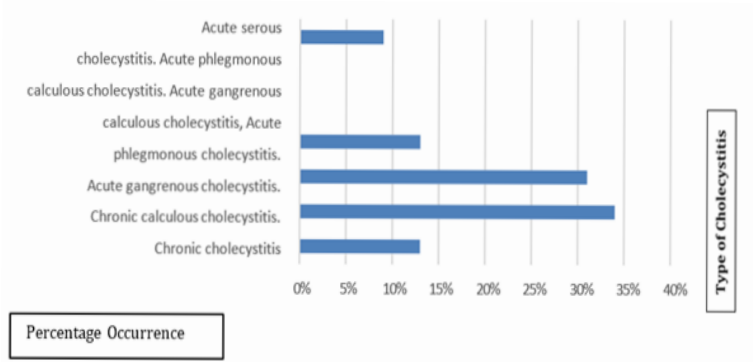


Figure 3 – Percentage occurrence of types of cholecystitis of age group 61–70

Conclusion

Based on the findings presented in Graph 1, it is evident that “Chronic Calculous Cholecystitis” predominates among the biopsy specimens collected from patients. Specifically, within the adult population, individuals aged between 61 and 70 years (as illustrated in Graph 2) exhibit the highest incidence of this condition. Notably, there were no reported cases of cholecystitis observed in children or individuals up to 20 years of age. Among patients aged 61–70 years, “Chronic Calculous Cholecystitis” emerged as the most prevalent type of cholecystitis.

These findings underscore the importance of early detection and management of cholecystitis, particularly among individuals in the age group of 61–70 years. Additionally, they highlight the need for further research to explore the underlying factors contributing to the higher incidence of “Chronic Calculous Cholecystitis” in this demographic. Furthermore, it emphasizes the significance of preventive measures and lifestyle interventions to mitigate the risk of developing cholecystitis, especially in susceptible age group.

LITERATURE

1. *Park, K. J.* Current concepts in cervical pathology / K. J. Park, R. A. Soslow // Archives of pathology & laboratory medicine. – 2009. – Vol. 133, № 5. – P. 729–738.
2. *Shaffer, E. A.* Epidemiology of gallbladder stone disease / E. A. Shaffer // Best practice & research Clinical gastroenterology. – 2006. – Vol. 20, № 6. – P. 981–996.
3. *Cuschieri, A.* The European experience with laparoscopic cholecystectomy / A. Cuschieri, F. Dubois, J. Mouiel, P. Mouret // The American journal of surgery. – 1991. – Vol. 161, № 3. – P. 385–387.

УДК 616.132-036.2-08(476.2-25)”2023”

S. A. Shahid, S. A. Shahid

Scientific supervisor: MD, PhD., G. V. Tishchenko

Educational institution

“Gomel State Medical University”

Gomel, Republic of Belarus

AORTIC DISSECTION IN AUTOPSIES IN GOMEL REGION, 2023: ANALYSIS AND FINDINGS

Introduction

While uncommon, acute aortic dissection (AAD) is a rare but catastrophic disorder. Aortic dissection is due to the separation of the layers of the aortic wall. A tear in the intimal layer results in the progression of the dissection (either proximal or retrograde) chiefly due to the entry of blood in between the intima and media. Predisposing high-risk factors for non-traumatic aortic dissection include hypertension, an abrupt, transient, severe increase in blood pressure, genetic conditions, pre-existing aortic aneurysm, atherosclerosis, pregnancy and delivery, family history, aortic instrumentation or surgery, and inflammatory or infectious diseases that cause vasculitis [1].

There are two main anatomic classifications used to classify aortic dissection. There is the Stanford system in which Type A involves the ascending aorta, regardless of the site of the primary intimal tear. Type A dissection is defined as a dissection proximal to the brachiocephalic artery. Type B aortic dissection originates distal to the left subclavian artery and involving only descending aorta. The other classification system is the DeBakey system where Type 1 originates in the ascending aorta and extends to at least the aortic arch. Type 2 originates in and is limited to the ascending aorta. Type 3 begins in the descending aorta and extends distally above the diaphragm (type 3a) or below the diaphragm (type 3b). The incidence of aortic dissection is reported to be 5