

Original Research

CLINICAL AND PARACLINICAL CHARACTERISTICS IN ELDERLY PATIENTS WITH COLONIC DIVERTICULITIS AT THONG NHAT HOSPITAL

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Abstract: This article analyzes the clinical and paraclinical features of 47 elderly patients with colonic diverticulitis at Thong Nhat Hospital. The majority were male (68.1%) and aged 60–74 (72.3%). The most common symptom was dull persistent abdominal pain (70.2%), mainly in the right and left iliac fossae. Fever and digestive disorders were atypical, with low fever rates (10.6%) and watery stools accounting for 51%. Blood tests showed leukocytosis in 46.8% and increased CRP in 93.6%. CT imaging was crucial for diagnosis and severity assessment, with 25.5% requiring surgery. The findings highlight the importance of recognizing atypical symptoms and the role of paraclinical tests in diagnosis in the elderly.

Keywords: colonic diverticulitis; elderly; clinical characteristics; paraclinical features

1. INTRODUCTION

Colonic diverticulitis is a very common gastrointestinal disease in the elderly, with incidence rates markedly increasing in the over-60 age group [6,7]. The disease not only causes uncomfortable symptoms such as abdominal pain, fever, and digestive disorders but can also easily lead to dangerous complications such as perforation, abscess, and peritonitis if not diagnosed and treated promptly [7,8]. Particularly in the elderly, clinical manifestations are often atypical, easily overlooked or confused with other pathologies, increasing the risk of complications as well as treatment costs [3,9].

Additionally, elderly patients often have multiple underlying diseases such as hypertension, diabetes mellitus, cardiovascular disease and use multiple medications, complicating the diagnostic and management process [6,8]. Furthermore, immune response and recovery capacity in this age group are also significantly reduced, leading to higher risks of severe progression and mortality [8]. Recognizing the specific clinical and paraclinical characteristics in elderly patients with colonic diverticulitis is essential to improve diagnostic effectiveness, treatment, and complication prevention [7,9].

However, in Vietnam, studies focusing on the clinical and paraclinical characteristics of elderly patients with colonic diverticulitis remain limited [3,10]. Therefore, surveying and systematizing clinical manifestations, paraclinical results and their relationship with risk factors in this patient group will provide additional practical data, helping clinicians with early recognition, optimal treatment strategy selection, complication minimization, and quality of life improvement for the elderly [6-8].

2. SUBJECTS AND METHODS

2.1. Study Subjects

All patients ≥ 60 years old diagnosed with colonic diverticulitis by clinical examination and MSCT, admitted for treatment at the Department of Gastrointestinal Surgery, Thong Nhat Hospital from 01/2024 to 12/2024, with

complete medical records.

2.2. Study Methods

Retrospective descriptive case series study.

2.3. Data Processing and Analysis Methods

Exclusion criteria: Insufficient data, multiple recurrent colonic diverticulitis, non-specific diverticulitis, extra-colonic diverticulitis or concurrent other acute surgical pathology.

Sample size: 47 elderly patients selected by convenience sampling method.

Study variables: Recording information about age, gender, BMI, medical history, clinical symptoms (location and nature of abdominal pain, fever, digestive disorders), blood tests (white blood cells, CRP), diagnostic imaging (MSCT), treatment methods, complications, hospital stay duration.

Data analysis: Using statistical software (SPSS/R). Descriptive statistics: percentages for qualitative variables, mean \pm SD or median (IQR) for quantitative variables.

2.4. Research Ethics

The study was approved by the Ethics Committee of the Faculty of Medicine - Nguyen Tat Thanh University. Personal information was kept absolutely confidential and used only for research purposes.

3. RESULTS

3.1. Demographic Characteristics

Males accounted for 68.1%, females 31.9%.

The 60–74 age group accounted for 72.3%, ≥ 75 years was 27.7%.

BMI ≥ 23 accounted for 53.2%.

66% had hypertension, 19.1% diabetes mellitus, 21.3% had previous abdominal surgery.

3.2. Clinical Characteristics

Persistent dull abdominal pain was most common (70.2%), mainly in the right iliac fossa (25.5%) and left iliac fossa (19.1%).

10.6% had fever $\geq 37.5^{\circ}\text{C}$, 89.4% had no fever.

Digestive disorders: watery stools 51.1%, abdominal distention 34%, constipation 12.2%, nausea/vomiting 10.6%.

3.3. Paraclinical Characteristics

46.8% had leukocytosis ≥ 12 K/uL, 93.6% had elevated CRP ≥ 5 mg/L.

MSCT classification: Stage Ib (51.1%) was most common, IIa 14.9%, IIb 10.6%, III 12.8%, IV 2.1%.

Diverticulum location: right colon 40.4%, sigmoid 42.5%, left side 17%.

3.4. Treatment Methods

Medical treatment: 74.5%; surgical treatment: 25.5%.

Medical treatment predominated in the ≥ 75 years group.

3.5. Complications

21.3% had complications, commonly peritonitis, colonic perforation, abscess.

4. DISCUSSION

The study results show that colonic diverticulitis in the elderly at Thong Nhat Hospital mainly affects males and the 60–74 age group, consistent with domestic and international epidemiological reports [3],[8],[10]. Males have twice the incidence rate of females, possibly related to dietary habits, smoking, alcohol consumption, and sedentary lifestyle [8].

Atypical clinical symptoms are characteristic in the elderly group: persistent dull abdominal pain (70.2%), diverse pain locations but mainly in the right and left iliac fossae. Low fever rate (10.6%) and common digestive disorders (watery stools 51.1%), consistent with Sartelli and colleagues' observation that in the elderly, diverticulitis symptoms are often vague, easily overlooked or confused [7,10].

Definitive diagnosis relies on laboratory tests and imaging: nearly half of patients had leukocytosis, most had elevated CRP, consistent with literature showing CRP is a sensitive marker for severe diverticulitis [6]. CT scan helps classify stages and identify complications; the rate of Ib (diverticulitis

with small abscess) was predominant, similar to international trends [7,8].

The high rate of medical treatment (74.5%), mainly in the ≥ 75 years group, is due to high surgical risk in the elderly. This trend is consistent with modern recommendations for prioritizing conservative management in high-risk groups. However, 25.5% still needed surgical intervention when complications appeared or failed to respond to treatment, a rate equivalent to many international studies [7,8].

Medical history (hypertension, diabetes mellitus, previous abdominal surgery) are risk factors that increase severity and complications, as well as increase the rate of surgical intervention [8,9]. Identifying high-risk groups helps physicians proactively monitor and intervene early.

The study also recorded a significant complication rate, notably generalized peritonitis, colonic perforation, and abscess, emphasizing the necessity of early diagnosis and close monitoring in the elderly [7,8].

Study limitations include small sample size, retrospective design, and single-center implementation; however, it has contributed practical data on clinical and paraclinical characteristics of colonic diverticulitis in elderly Vietnamese patients.

5. CONCLUSION

Colonic diverticulitis in the elderly has atypical clinical and paraclinical manifestations, easily overlooked, and prone to complications. Dull abdominal pain, watery stools, and elevated CRP are common signs. CT plays an important role in diagnosis and disease severity classification. Medical treatment is prioritized in patients ≥ 75 years old, but surgical intervention is still needed when complications occur. Recognition of atypical symptoms and risk factors helps improve diagnostic effectiveness, treatment, reduce complications, and improve quality of life for the elderly.

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