

Acute Abdomen in the Geriatric Patient

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ABSTRACT

Introduction

Geriatric emergency department visits are most often for acute abdominal pain. More elderly patients with acute abdominal pain visit the ER as the elderly population grows. However, emergency physicians face more challenges. Elderly abdominal pain symptoms vary. However, disease manifestations, cognitive issues, and communication issues may delay diagnosis in elderly patients, increasing mortality. Indeed, early and accurate acute abdomen diagnosis in elderly patients greatly affects their outcomes.

KEYWORDS: Elderly patients, diagnosis, acute abdomen

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INTRODUCTION

When it comes to the elderly population, acute abdominal discomfort is one of the most prevalent causes for admission to the emergency department. Patients who are old make up a growing number of patients who arrive to the emergency room because they are experiencing severe abdominal pain. This is attributable to the fact that the senior population is growing. This circumstance, on the other hand, presents extra challenges for emergency medical practitioners. A patient who is old and is experiencing abdominal discomfort may have clinical symptoms that are highly diverse from one another and nonspecific.

On the other hand, the diagnosis may be challenging or delayed in senior patients owing to the many presentations of the illness, cognitive issues, and communication challenges,

all of which may contribute to an increase in the total mortality rate. As a result, the timely and correct identification of acute abdomen in older patients is of the utmost importance and has a substantial impact on the outcomes of these patients.

DISCUSSION

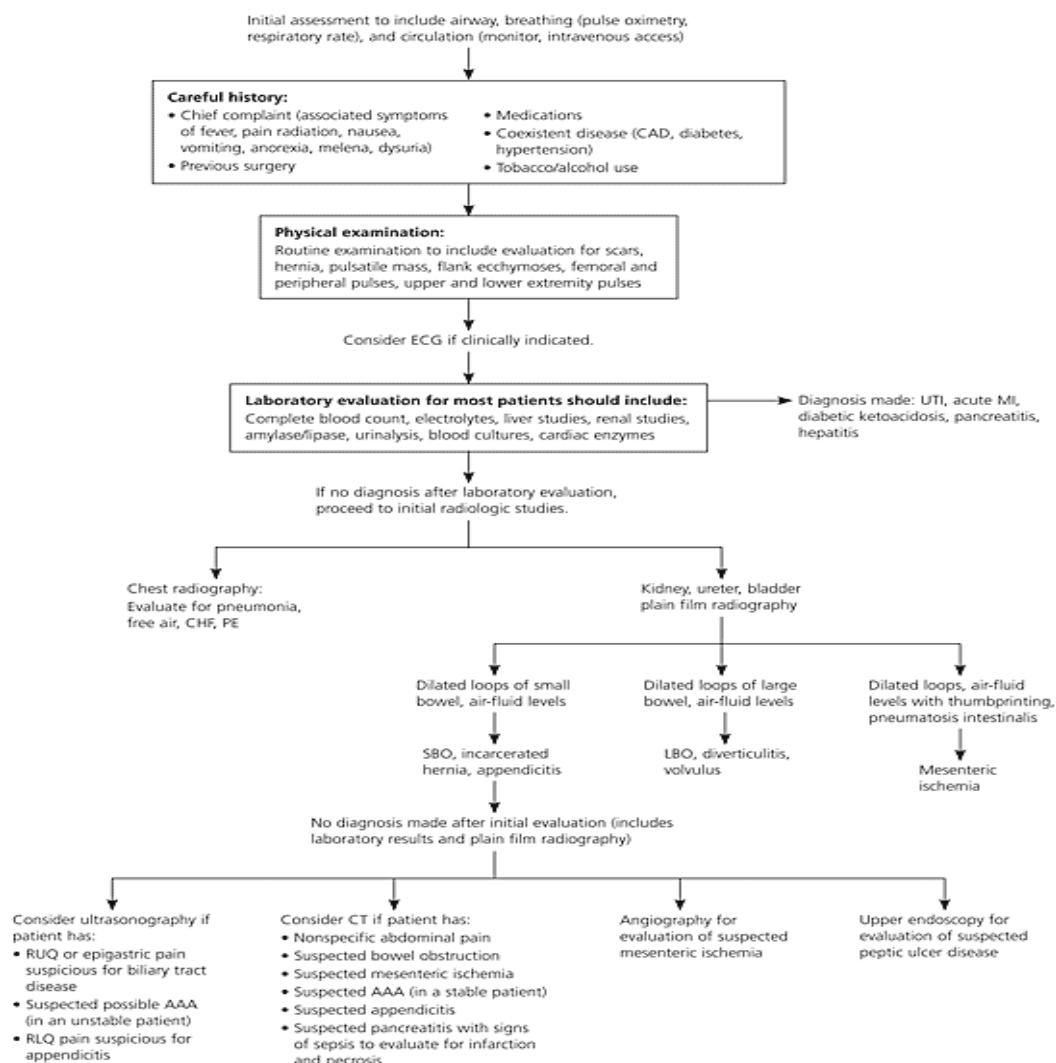
At this time, imaging modalities have emerged as an essential diagnostic tool for acute abdomen in senior patients, with computed tomography (CT) being the approach that is used the most frequently. With the exception of individuals who have a clinical suspicion of acute cholecystitis, computed tomography (CT) may be regarded the main technology for the initial diagnosis of acute abdominal discomfort. Imaging the intestinal wall, detecting primary and secondary

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pathologies in the surrounding mesentery, and even showing small amounts of intestinal ischemia and extraluminal air in the peritoneal cavity are all examples of how intravenous contrast-enhanced computed tomography (CT) can provide superior anatomical detail and diagnostic specificity. Not only does CT give evidence in support of the diagnosis, but it also offers information on the treatment technique that should be selected. The number of instances in which doctors rated a high degree of confidence in the suspected diagnosis went from 36% before CT to 77% after CT, according to a prospective research that was conducted by Esses et al.. In the research conducted by Rosen et al., it was discovered that only 37% of the patients who were brought to the emergency room with nontraumatic abdominal pain had pre- and post-CT diagnoses that were consistent with one another. Additionally, CT had the ability to reduce the need for hospitalization in 17% of patients, as well as the requirement for emergency surgery in 75% of patients. For the purpose of our research, a CT examination was carried out on 69 (39.4) individuals. A CT examination was carried out on patients who were diagnosed with the most prevalent conditions, which were appendicitis (75.0%), ileus (85.7%), and GIS perforation (87.5%). A conclusive diagnosis of CT was made for each and every one of these individuals. The abdominal

ultrasound is the technique of choice, particularly when examining biliary illnesses, since it is easily accessible, produces findings quickly, is inexpensive, and does not involve the use of ionizing radiation³. It has been observed that ultrasonography has a sensitivity and specificity of more than 70 percent when it comes to the diagnosis of appendicitis. An additional benefit of abdominal ultrasound is that it is a good way for doing quick screening for aortic aneurysm, liver tumor or abscess, kidney stones, and hydronephrosis. 88.6 percent of the patients who participated in this research underwent a USG examination. In spite of the fact that USG was the method of choice for patients with biliary disease and pancreatitis, it was the one that was used the least often for instances of ileus. The use of USG was adequate for the diagnosis of individuals who had biliary disease.

Intestinal blockage, adynamic ileus, kidney stones, and perforation of hollow organs may all be detected with radiographic examination, which includes x-rays of the chest and abdomen taken in an upright and supine position as well as an upright orientation. In the assessment of patients who have acute abdomen, it is a radiological examination that is readily accessible; nonetheless, it has very limited position in the evaluation process.



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Studies have been conducted on the significance of magnetic resonance imaging (MRI) in the diagnosis of acute abdomen, despite the fact that it is utilized less commonly in the initial diagnosis⁵. Within the scope of our investigation, not a single patient was admitted to the emergency room for an MRI evaluation. MRCP was conducted on seven individuals, which is four percent of the total, while they were hospitalized. No contribution was made to the diagnosis by the MRCP exams that were performed on these individuals. This research found that patients who had GIS perforation had the greatest death rate of any group of patients considered. The perforation of the GIS is a situation that is both life-threatening and an emergency that needs rapid medical attention. However, depending on the underlying reasons, it is possible that additional treatment options may be required. On the x-ray, the discovery that has to be investigated is a transparent crescent-shaped air that is located beneath the diaphragm. In instances when a perforation is suspected, the imaging technique of choice at the moment is computed tomography (CT). The use of computed tomography (CT) allows for the demonstration of extraluminal air that is too tiny to be detected by traditional radiography. Phlegmon, abscess, and the presence of fluid¹⁵ are some of the other indications that may be diagnosed using CT. Furthermore, the determination of the site of the hole may be accomplished by using CT. In the current investigation, CT was conducted on six of the eight patients who had GIS perforation, and DAR was performed on five of those patients. In two individuals, X-rays revealed the presence of free air under the diaphragm. Every single CT test revealed the presence of a hole together with the results that accompanied it; however, the precise site of the perforation was not described.

CONCLUSION

According to the findings of this investigation, biliary disorders and pancreatitis were shown to be the most prevalent causes of acute abdomen in older patients. In patients who were diagnosed with biliary disorders and pancreatitis, the most frequent imaging technique used was ultrasound (USG), whereas computed tomography (CT) was the most common imaging technique used in the diagnosis of appendicitis, ileus, and perforation. In light of the fact that the diagnostic accuracy is poorer and the mortality rate is greater in senior patients with acute abdomen compared to younger patients, it is of the utmost importance to make a prompt and accurate diagnosis and to choose the appropriate imaging approach.

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