PERITONITIS AS A COMPLICATION AMONG PATIENTS PRESENTING WITH PAIN ABDOMEN IN EMERGENCY DEPARTMENT

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ABSTRACT:
Peritonitis is inflammation of the peritoneum, the lining of the inner wall of the abdomen and cover of the abdominal organs. Symptoms may include severe pain, swelling of the abdomen, fever, or weight loss. One part or the entire abdomen may be tender. This cross-sectional study was conducted among the patients presenting in the emergency department of different hospitals. Name, age, gender and history of pain abdomen and assessment of peritonitis were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. A total of 200 patients presenting with pain abdomen in the emergency department were included in this study i.e., 100 males (50%) and 100 females (50%). The mean age of the patients was 35.32±2.32 years. Out of these patients, seven patients were diagnosed having peritonitis. Further management and investigations were planned accordingly.

Keyword: Peritonitis

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INTRODUCTION:
Peritonitis is inflammation of the peritoneum, the lining of the inner wall of the abdomen and cover of the abdominal organs. Symptoms may include severe pain, swelling of the abdomen, fever, or weight loss. One part or the entire abdomen may be tender. Complications may include shock and acute respiratory distress syndrome. Causes include perforation of the intestinal tract, pancreatitis, pelvic inflammatory disease, stomach ulcer, cirrhosis, or a ruptured appendix. Risk factors include ascites and peritoneal dialysis. Diagnosis is generally based on examination, blood tests, and medical imaging.
Treatment often includes antibiotics, intravenous fluids, pain medication, and surgery. Other measures may include a nasogastric tube or blood transfusion. Without treatment death may occur within a few days. Approximately 7.5% of people have appendicitis at some point in time. About 20% of people with cirrhosis who are hospitalized have peritonitis. The main manifestations of peritonitis are acute abdominal pain, abdominal tenderness, abdominal guarding, rigidity, which are exacerbated by moving the peritoneum, e.g., coughing (forced cough may be used as a test), flexing one’s hips, or eliciting the Blumberg sign (meaning that pressing a hand on the abdomen elicits less pain than releasing the hand abruptly, which will aggravate the pain, as the peritoneum snaps back into place). Rigidity is highly specific for diagnosing peritonitis (specificity: 76–100%). The presence of these signs in a person is sometimes referred to as peritonism. The localization of these manifestations depends on whether peritonitis is localized (e.g., appendicitis or diverticulitis before perforation), or generalized to the whole abdomen. In either case, pain typically starts as a generalized abdominal pain (with involvement of poorly localizing visceral innervation of the visceral peritoneal layer), and may become localized later (with involvement of the somatic innervation of the parietal peritoneal layer). Peritonitis is an example of an acute abdomen (1-3).
MATERIAL AND METHODS:
This cross-sectional study was conducted among the patients presenting in the emergency department of different hospitals. Name, age, gender and history of pain abdomen and assessment of peritonitis were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. The quantitative variables were presented as mean and standard deviation. The qualitative variables were presented as frequency and percentages.

RESULTS:
A total of 200 patients presenting with pain abdomen in the emergency department were included in this study i.e., 100 males (50%) and 100 females (50%). The mean age of the patients was 35.32±2.32 years. Out of these patients, seven patients were diagnosed having peritonitis. Further management and investigations were planned accordingly.

DISCUSSION:
A diagnosis of peritonitis is based primarily on the clinical manifestations described above. Rigidity (involuntary contraction of the abdominal muscles) is the most specific exam finding for diagnosing peritonitis. If focal peritonitis is detected, further work-up should be done. If diffuse peritonitis is detected, then urgent surgical consultation should be obtained, and may warrant surgery without further investigations. Leukocytosis, hypokalemia, hypernatremia, and acidosis may be present, but they are not specific findings. Abdominal X-rays may reveal dilated, edematous intestines, although such X-rays are mainly useful to look for pneumoperitoneum, an indicator of gastrointestinal perforation. The role of whole-abdomen ultrasound examination is under study and is likely to expand in the future. Computed tomography (CT or CAT scanning) may be useful in differentiating causes of abdominal pain. If reasonable doubt still persists, an exploratory peritoneal lavage or laparoscopy may be performed. In people with ascites, a
diagnosis of peritonitis is made via paracentesis (abdominal tap): More than 250 polymorphonuclear cells per μL is considered diagnostic. In addition, Gram stain is almost always negative, whereas culture of the peritoneal fluid can determine the microorganism responsible and determine their sensitivity to antimicrobial agents.

In normal conditions, the peritoneum appears greyish and glistening; it becomes dull 2–4 hours after the onset of peritonitis, initially with scarce serous or slightly turbid fluid. Later, the exudate becomes creamy and evidently suppurative; in people who are dehydrated, it also becomes very inspissated. The quantity of accumulated exudate varies widely. It may be spread to the whole peritoneum, or be walled off by the omentum and viscera. Inflammation features infiltration by neutrophils with fibrino-purulent exudation. Depending on the severity of the person’s state, the management of peritonitis may include General supportive measures such as vigorous intravenous rehydration and correction of electrolyte disturbances and antibiotics are usually administered intravenously, but they may also be infused directly into the peritoneum. The empiric choice of broad-spectrum antibiotics often consist of multiple drugs, and should be targeted against the most likely agents, depending on the cause of peritonitis (see above); once one or more agents grow in cultures isolated, therapy will be target against them (4–6).

REFERENCES: