The COVID-19 Pandemic Delays Acute Appendicitis and Cholecystitis Presentation and Increases Postoperative Morbidity in Omaha Metropolitan Single Health System Emergency Departments

**INTRODUCTION:** Since the first reported COVID-19 in December 2019, 90 million cases have been confirmed with two million mortality globally. In the United States, 22 million cases with 370,000 deaths were reported as of January 1st, 2021. The pandemic posed a critical challenge to public health and the medical community. Navigating through an unprecedented pandemic is difficult as very little is known regarding COVID-19 and its physiological impact on disease processes. However, we suspect patients have delayed presentation when feeling ill possibly due to fear of contracting COVID-19 and therefore have clinically more severe disease at presentation. We performed a retrospective study pre- and post-pandemic to evaluate the trend of emergent general surgeries presentations in Omaha, Nebraska.

**METHODS:** All adult patients who presented to Omaha CHIHealth ED diagnosed with appendicitis, cholecystitis, diverticulitis, and bowel perforations undergoing emergent general surgeries from March to July from 2017 to 2020 were included and perioperative data examined.

**RESULTS:** 857 emergent general surgery patients presented to Omaha metropolitan CHIHealth ED. More patients in 2020 were found to be tachycardic, tachypneic, febrile, anemic requiring transfusion, require longer length of stay, less likely to discharge home, and more likely to die. Specifically for acute appendicitis and cholecystitis, length of surgery was longer and postoperative morbidity and re-admission rates were higher.

**CONCLUSION:** During the first four months of COVID-19 pandemic, patients presented to Omaha metropolitan CHIHealth ED for emergent general surgeries were clinically more ill and resulted in increased length of surgery and higher complications.

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**The Effects of Preoperative Embolization of the Splenic Artery in Patients Undergoing Splenectomy for Immune Thrombocytopenic Purpura**

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**INTRODUCTION:** Transfusion of platelets, red blood cells, or both is usually necessary immediately after splenic artery ligature in patients with immune thrombocytopenic purpura who undergo splenectomy. The purpose of this study was to investigate whether preoperative embolization of the splenic artery reduced the need for transfusion of platelets, red blood cells, or both.

**METHODS:** Fifty-four patients who had a splenectomy for purpura between October 1999 and March 2017, performed by the same surgical team, were enrolled. One group, composed of 34 patients, did not undergo embolization and was compared with another 20 patients, the embolization group. This division was not randomized and was made considering the availability of the PAE procedure at the time of the surgery. The decision was not influenced by the patient’s general health condition or platelet count. The patients in both groups had similar preoperative conditions and sociodemographic characteristics.

**RESULTS:** The platelet count in the embolization group rose from a mean of 6,000/µl before the procedure to 75,000/µl after the procedure. There was no need for platelet or red blood cell transfusions in the embolization group, according to the practical guidelines of the American Society of Anesthesiologists, while in the group without preoperative embolization, 22 patients (p=0.001) required platelet transfusion and 16 (p=0.01), red blood cell transfusion.

**CONCLUSION:** Embolization of the splenic artery before splenectomy seems to be a safe method to avoid blood transfusions and its complications in thrombocytopenic purpura patients who undergo splenectomy.

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The Impact of Pregnancy Complications on Wellness and Career Satisfaction: Results of a National Survey of US Surgeons

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