



Surgical Experience in Perforated Peptic Ulcer Disease in a Philippine Provincial Hospital

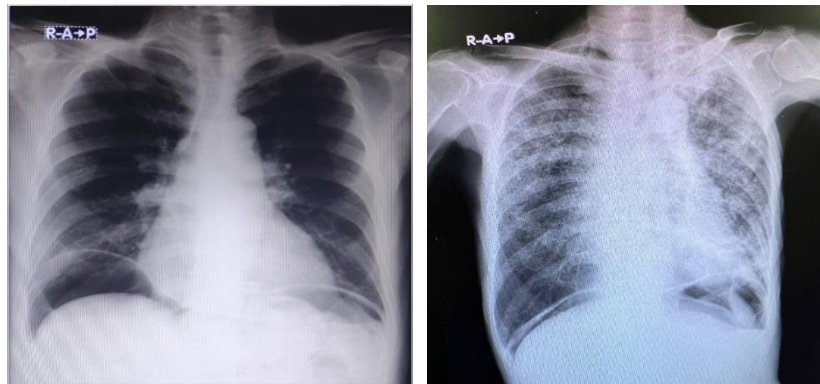
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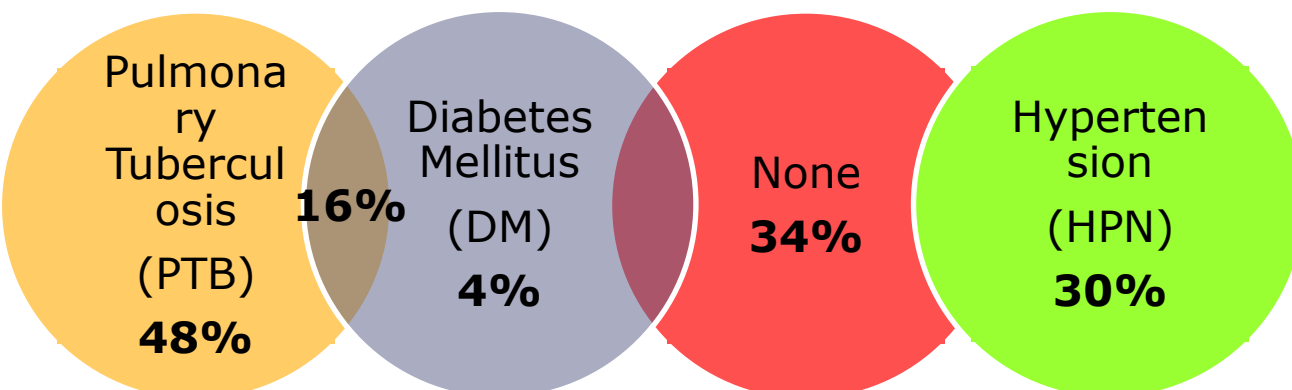
PEPTIC ULCER DISEASE (PUD)

Decline in cases (35.87%-18.8%) associated with decreasing cases of H. pylori infection.

Peptic ulcer disease is common with a lifetime prevalence of 5-10%, and an incidence of 0.1-0.3%. In the Philippines, the decline in cases was associated with decreasing cases of H. pylori infection. Despite sharp reduction in cases, 10-20% of these ulcers will complicate.



All patients presented with pneumoperitoneum on upright CXR films.

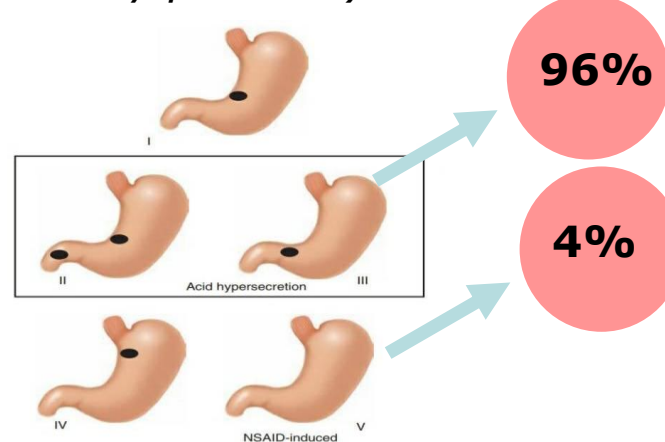


Complications of PUD includes bleeding and perforation, and improvement in medical management has made obstruction from chronic fibrotic disease a rare event. Hemorrhage was by far the most common complication of PUD with an annual incidence of 0.02-0.06%. Annual incidence of perforation ranges from 0.014% with an average 30 day mortality of 23.5%. Although perforation is less common, it is the most common indication for emergency operation and causes about 40% of ulcer-related deaths.

The American Society of Anesthesiologist (ASA) score was also included in this study as a parameter of assessing fitness of patients before surgery where, 50% of patients were ASA III (patients with severe systemic disease that limits activity but is not incapacitating), 44% were ASA II (patients with mild systemic disease), 4% were ASA IV (patient with incapacitating systemic disease that is a constant threat to life) and 2% were ASA I (normal healthy patients).

50 CASE SERIES

Patients aged 20 and above admitted at the General Emilio Aguinaldo Memorial Hospital from January 2015 – March 2023, who underwent surgical management for PPUD.



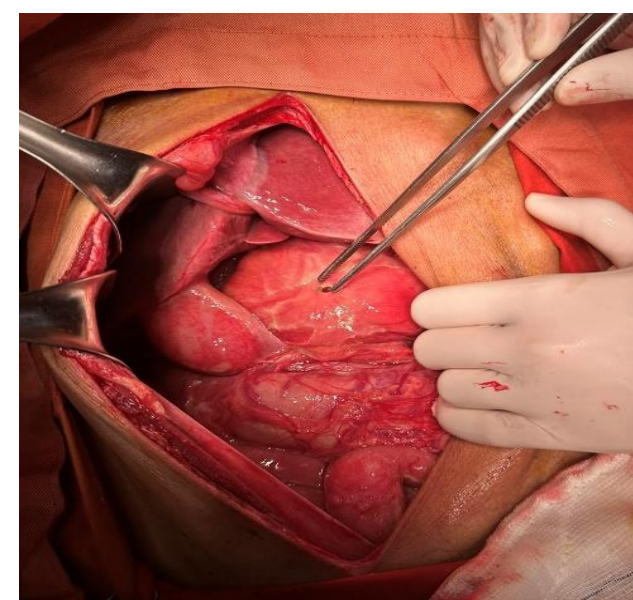
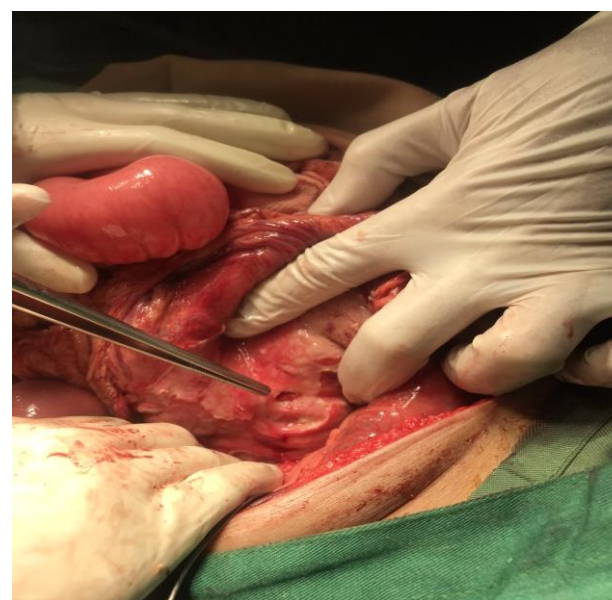
H. pylori urease test kit revealed positive for 86% of patients.

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> Age 20 and above Admitted at GEAMH from January 2015 to March 2023 Surgically managed case of PPUD 	<ul style="list-style-type: none"> Age less than 20 years old Patients with duodenal ulcer Missing data

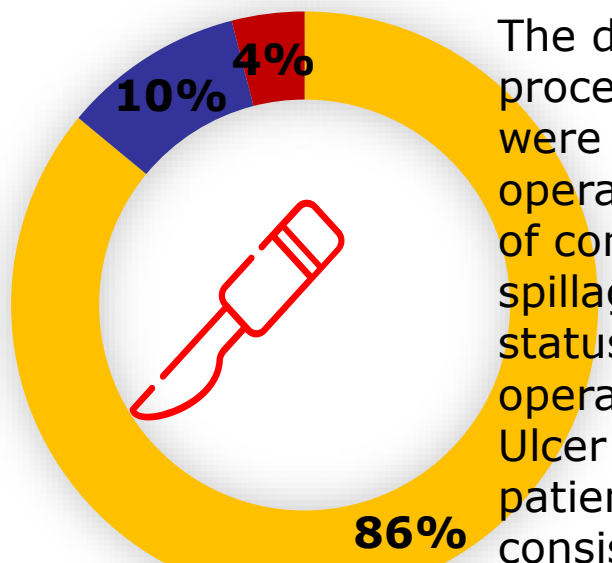
PATIENT PROFILE
Age, Sex, Co-morbidities Address Social class Risk factors

INTRA & POST-OPERATIVE OUTCOMES
Ulcer type (Modified Johnson's Criteria) H. pylori urease test kit result Surgical procedure (Patching vs. Definitive procedure) Histopathologic result General outcomes (Discharged vs. Expired)

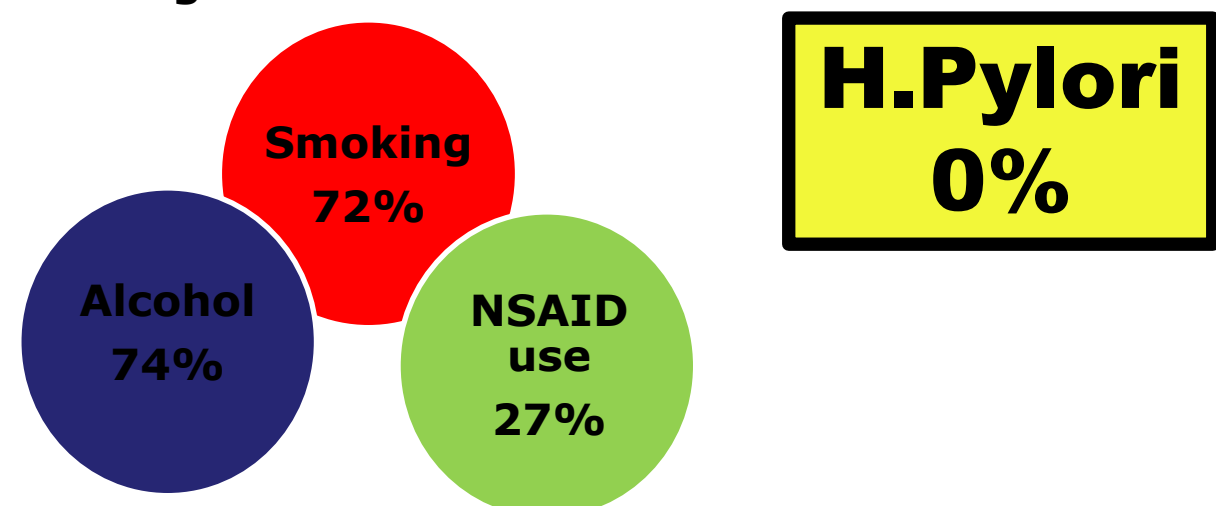
PRE-OPERATIVE PARAMETER
Clinical presentation Risk scores (ASA score, RCRI score)



Data were collected and thoroughly review for completeness and correctness, and reported using **descriptive statistics** with **measures of central tendencies**. Continuous variables were reported as **mean** and **standard deviation**. While categorical variables were reported as **frequencies** and **percentages**.



The decision to do definitive procedure vs omental patching were based on the patients pre-operative risk assessment, the level of contamination of food or fecal spillage, and more importantly, the status of the patient both pre-operatively and intra-operatively. Ulcer biopsy was done in all patients which revealed 96% consistent with PPUD.



Abdominal pain	Abdominal distension	Pneumoperitoneum	Leukocytosis
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- Modified Graham's Patching
- Truncal Vagotomy + Distal Gastrectomy + Billroth II + Heineke-Mikulicz Pyloroplasty
- Wedge Excision + Truncal Vagotomy + Heineke-Mikulicz Pyloroplasty

Conclusion: The 50-patient cohort of this study managed in a Provincial Hospital satisfied all the 6 facets of Global Surgery- less than 2 hours access, adequate surgical team manpower, increase in surgical cases, audit of surgical cases, decrease of impoverish and catastrophic spending for the patients. This study documented, that having a surgically- competent provincial hospital in a low and middle income country like the Philippines, gives fighting survival chance to patients with PPUD, with timely and patient centered management.