

Challenging antibiotic stewardship: antibiotic use in the management of acute pancreatitis without waiting for a CT scan or CRP marker

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Madam, Acute pancreatitis is an acute inflammation of the pancreas presenting as severe abdominal pain and elevated pancreatic enzymes. The global burden of Acute pancreatitis has increased by 3.07% per year, for the last 56 years.¹ Gallstones, chronic alcohol, and hypertriglyceridaemia are the main risk factors involved in the pathogenesis of Acute pancreatitis worldwide.² However, in Pakistan gall stones impacting the common bile duct and hypertriglyceridaemia are the main culprits.

There has been an extensive debate regarding the use of prophylactic antibiotics and the outcome of acute pancreatitis. The cumulative evidence suggests that the prompt use of antibiotics, before obtaining serum markers, is not associated with a significant decrease in secondary pancreatic infection.³

Multiple studies have shown that the use of antibiotics, deviating from the recent guidelines, boosts antibiotic resistance and the risk of invasive fungal infections. A 2020 study conducted by Soulountsi has also rendered this practice unjustified.⁴

In studies supporting the use of prophylactic antibiotics in improving outcomes, the quality of evidence is low suggesting that the approach should be more tailored to individual patient conditions while adhering to the guidelines. Despite the sterile nature of the early stages of acute pancreatitis, some clinicians continue to opt for prophylactic use, however, it is strictly against the international consensus. Unfortunately, in Pakistan, there is a common practice of using antibiotics in acute pancreatitis within 72hrs, without waiting for the CT scan results and inflammatory markers screening.

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Antimicrobial resistance is an anticipated outcome of such practice. The prevalence of antimicrobial resistance to commonly prescribed antibiotics is already very high.⁵ Not weighing the risk-benefit ratio will not only contribute to increasing resistance but also predispose to avoidable and potentially fatal fungal infections. The appropriate approach to management of Acute pancreatitis should be based on a thorough knowledge of recent guidelines, carrying out proper investigations, and making an individualized plan for the patient based on clinical findings. This will not only minimize the burden of complications but also provide more room for improvements in the management of acute pancreatitis.

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