

Introduction

- Antibiotics are commonly prescribed as prophylaxis during endoscopic ultrasound-guided fine needle aspiration of pancreatic cysts.
- There is limited evidence to suggest that they provide additional benefits during the procedure.

Objectives

- This study aimed to analyze the efficacy of routinely using antibiotics during endoscopic ultrasound-fine needle aspiration (EUS-FNA) for pancreatic cysts.

Methods

- A retrospective case-control study was conducted.
- All patients older than 18 who underwent EUS-FNA at our institution between May 2016 and June 2023 were included.
- The data collected included demographics, clinical diagnosis, antibiotic use, and complications.
- Complications reviewed included infections and antibiotic-related complications.
- Descriptive statistics were computed for demographics and primary variables.
- Fisher's exact test examined the association between demographics, whether or not they received antibiotics, and complication rates.

Results

- A total of 205 patients were included, 117 (57.07%) of whom were females.
- The mean age of participants was 65.48+/-14.19.
- 133 patients (64.87%) received antibiotics, while 72 (35.12%) did not.
- The decision was based on the physician's discretion.
- There were no significant differences in the complication rates between the patients who received antibiotics and those who did not (p=1).

Results

Variable		Complications		P value
		No	Yes	
Gender	Female	117(57.07%)	1(100%)	1.000
	Male	88(42.93%)	0(0%)	
Race	Black	12(5.94%)	0(0%)	1.000
	White	184(91.09%)	0(0%)	
	Asian	1(0.50%)	0(0%)	
	Other	3(1.49%)	0(0%)	
	Declined	2(0.99%)	1(100%)	
	Cyst	164(80.00%)	1(100%)	
Clinical diagnosis	IPMN vs cystic pancreatic neoplasm	1(0.49%)	0(0%)	1.000
	Mixed type OPMN cyst	1(0.49%)	0(0%)	
	Mucinous cyst	16(7.80%)	0(0%)	
	Multiple cystic lesions	9(4.39%)	0(0%)	
	Non-mucinous cyst	2(0.98%)	0(0%)	
	Other	10(4.88%)	0(0%)	
	Simple cyst	1(0.49%)	0(0%)	
	Benign cystic debris and blood products	1(0.49%)	0(0%)	
Received antibiotics	No	72(35.29%)	0(0%)	1.000
	Yes	133(64.71%)	1(100%)	

Table 1. Comparison of Complication Rates during EUS-FNA of Pancreatic Cysts.

Discussion

- The results demonstrate no significant difference in complication rates, including infections, when antibiotics are prescribed or not after performing EUS-FNA.
- Antibiotic usage can increase healthcare costs, antibiotic resistance, and allergic reactions.
- The use of antibiotics should be reevaluated and applied on a case-by-case basis.

