

Does the presence of a pancreatic leak post Pancreaticobiliary surgery impact physio interventions? – a retrospective audit.

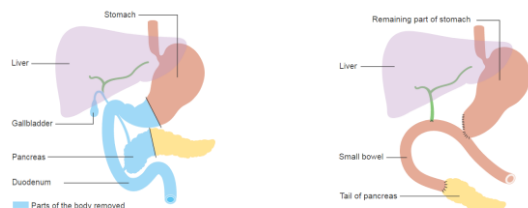
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Introduction

Pancreatic resection is associated with high morbidity, the most hazardous complication being pancreatic leak⁴ linked to sepsis, delayed gastric emptying, prolonged hospitalisation, and increased healthcare utilisation^{2,5}. Physiotherapy is integral to recovery after major abdominal surgery, but the impact of pancreatic leaks on referral, engagement, and outcomes remains unclear.

Aims

This study aimed to evaluate whether the presence of a pancreatic leak following pancreaticobiliary surgery affects physiotherapy interventions.



Method

A retrospective audit was undertaken of patients undergoing pancreatic resections at a tertiary centre between October 2023 and May 2024, using data extracted from the electronic health records system. Physiotherapy burden was quantified by the number of contacts with the physiotherapy team, as well as the number of “units” of treatment, defined as periods of 15 minutes spent with the patient engaged in physiotherapy. Comparisons between patients with and without pancreatic leaks were performed using Mann–Whitney U and Fisher’s exact tests.

Table 1: Details of pancreatic leak

Factor	Statistic
Surgery to Pancreatic Leak Identified (Days)	5 (3-9)
MMS at Identification of Pancreatic Leak	
1	6 (21%)
2	-
3	-
4	1 (3%)
5	4 (14%)
6	7 (24%)
7	11 (38%)
Discharged with Drain	18 (56%)

Table 2 – Patient Characteristics

	Whole Cohort	Pancreatic Leak No	Yes	p-Value
Age (Years)	65 ± 13	64 ± 14	67 ± 11	0.634
SPPOST – High	10 (12%)	6 (12%)	4 (13%)	0.094
Reconstruction	33 (40%)	20 (40%)	13 (41%)	1.00
Dehiscence	13 (16%)	6 (12%)	7 (22%)	0.353
PT Referral	72 (88%)	40 (80%)	32 (100%)	0.005

Table 3 – Patient outcomes

	Whole Cohort	Pancreatic Leak No	Yes	p-Value
Total No of Attempted Contacts	4 (3-8)	4 (2-6)	6 (4-13)	0.004
No of Direct PT contact Units	6 (3-10)	5 (3-8)	9 (4-20)	0.012
Total Length of Stay (Days)	15 (9-25)	11 (8-16)	23 (15-44)	<0.001
Surgery to PT Fit for Discharge (Days)	9 (5-15)	7 (2-13)	15 (8-31)	<0.001
PT Fit to Hospital Discharge (Days)	2 (0-7)	3 (0-7)	2 (0-10)	0.877

Results

82 patients were analysed, of whom 32 (39%) developed a pancreatic leak, diagnosed a median of 5 days postoperatively. Patients with leaks were significantly more likely to be referred for physiotherapy (100% vs. 80%) and received more attempted contacts (median: 6 vs. 4) and direct contact units (median: 9 vs. 5). These differences reflected longer hospitalisation (median: 23 vs. 11 days) and a delayed readiness for discharge (median: 15 vs. 7 days). Physiotherapy engagement rates were similar (69% vs. 74%).

Conclusions

Pancreatic leaks increase physiotherapy demand through higher referral rates, greater contact time, and prolonged inpatient stay, but do not significantly impair engagement with physiotherapy or functional recovery. Physiotherapy services should anticipate greater resource requirements in this cohort.

References

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