EARLY AND LATE RECURRENCE PATTERNS OF PANCREATIC DUCTAL CARCINOMA AFTER PANCREATICODUODENECTOMY

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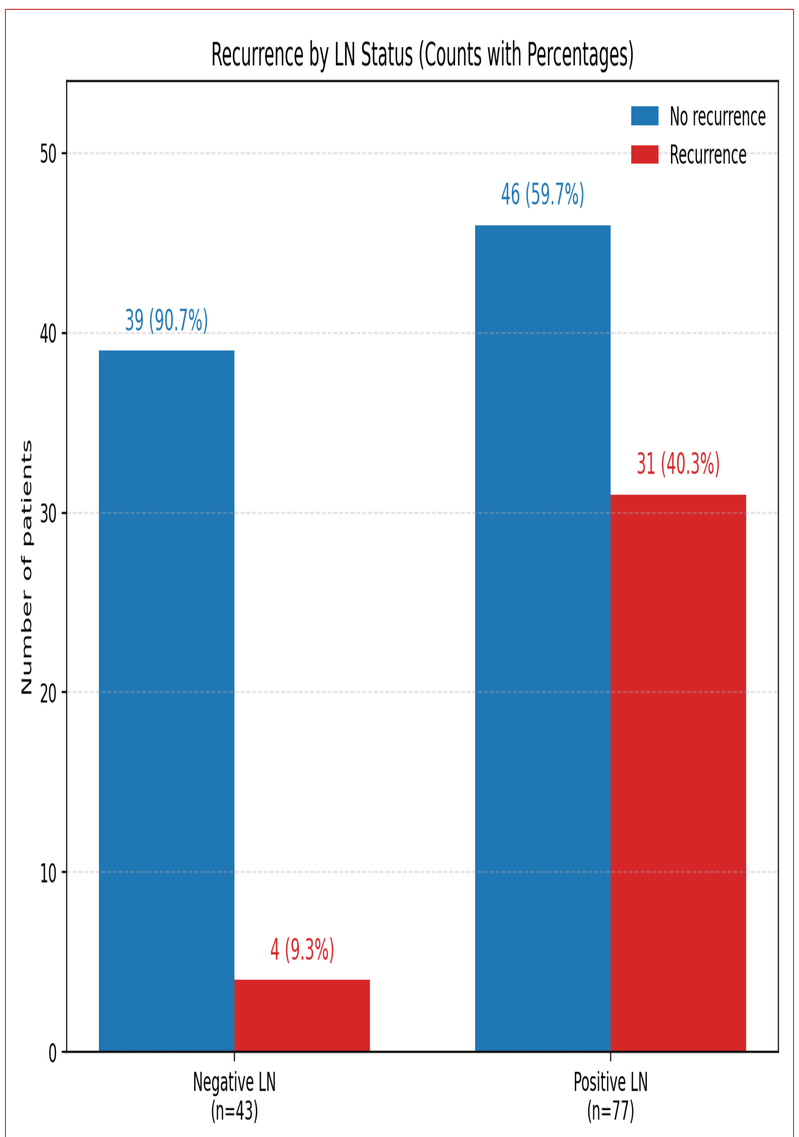
OBJECTIVE

- Pancreaticoduodenectomy is the standard treatment for resectable periampullary and pancreatic tumors.
- Identifying temporal patterns and statistically validated risk factors is essential for guiding surveillance and adjuvant therapy.

METHODS

- A retrospective cohort of 120 patients undergoing PD procedure was analyzed.
- Early recurrence was defined as ≤12 months post-surgery; late recurrence as >12 months
- Associations were tested using Chi-square tests for parametric variables and Spearman-Kendall test for non-parametric variables.

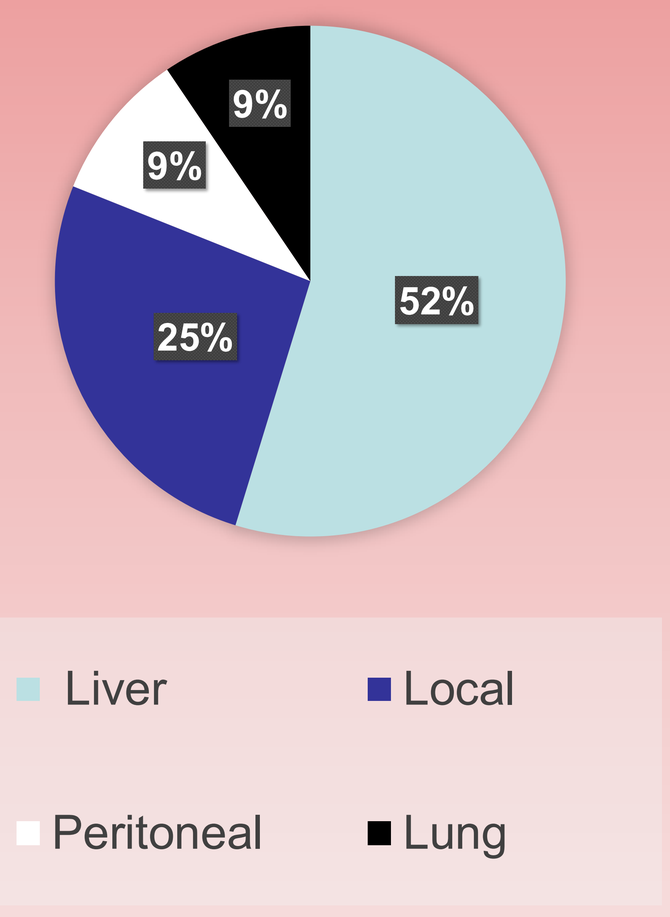
Significance was set at $p < 0.05$.



TREATMENT

Treatment Modality	*No.*	*%*
Surgery alone	37	30.9
Surgery + adjuvant chemotherapy	83	69.1

Pattern of recurrence



HISTOLOGICAL DISTRIBUTION

Subtype	*%age*	*%age R*
Adenocarcinoma	89.1	29
Neuroendocrine	6.6	25
Mixed	4.3	0

RESULTS

- Among 120 cases, recurrence occurred in 35 (29 %).
- Early recurrence accounted for 19 cases (median 8.4 months), late for 16 (median 20.6 months) with a median time to recurrence was 10.3 months (IQR 8.2–19.0).
- Positive lymph nodes strongly correlated with recurrence (40.3% vs 9.3%; **p = 0.006**).
- N-stage demonstrated a stepwise increase in recurrence (N0 10.6%, N1 36.2%, N2 48.1%; overall **p = 0.11**).
- Continuous variables (CA19-9 & tumor size) showed no significant difference (CA19-9 **p = 0.66**, tumor size **p = 0.67**).

CONCLUSION

- Recurrence after PD is frequent, with early hepatic metastasis predominating.
- LN positivity is the most significant predictor ($p < 0.006$), while vascular invasion trends toward significance.
- These findings support intensified surveillance and tailored adjuvant therapy for high-risk subsets.

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