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Background:

Neoadjuvant chemotherapy (NAC) for tumor downstaging, improved local and distant disease control, and increased R0 resection rates, followed by pancreatectomy, currently represents the backbone of management for locally advanced pancreatic cancer (LAPC). This study reports our institutional experience integrating SBRT after NAC in patients who remained unresectable but without disease progression.

Materials and Methods:

In our referral center, patients with LAPC receive a full course of NAC, FOLFIRINOX. Two weeks after completing NAC, cross-sectional imaging is performed to assess resectability. Recently, in cases where resection was not feasible yet no progression was evident, we introduced SBRT consisting of **5 fractions of 8 Gy each (total 40 Gy)** without concurrent chemotherapy. One month after SBRT, patients underwent restaging with pancreatic protocol CT to surgical resection.

Results:

Thirty-six patients (20 males, 16 females; median age 59; ECOG 0–1) received SBRT a median of 27 days after NAC (Aug 2019–Aug 2025). No SBRT-related toxicities occurred. Median follow-up was 22 months (completed Dec 2025). Seventeen patients (47%) were explored surgically a median of 2 months after SBRT, and **13 (76%, 36% of total)** underwent pancreatectomy. **R0 resection was achieved in 11 (88%)**. Eight patients remain alive and well at 11, 14, 19, 21, and 31 months; three died at 13, 22, and 27 months. Nineteen non-resected patients were followed and received additional chemotherapy when appropriate. Their median survival was 15 months. Local control was achieved in **13 patients (69%)**. Eleven remain alive (median 15 months), while six died (median 15 months).

Conclusions:

Our 5 yrs experience indicates that SBRT following NAC for LAPC is safe, provides high local control, and may convert approximately one-third of initially unresectable patients to resectable candidates.

