Pancreas

Cancer Centre of Southeastern Ontario
Standard Management Guidelines

Intended for use by Clinicians and Health Care Providers involved in the Management or Referral of adult patients with pancreatic cancer

Section	Activity	Activity Description	Details	Reference(s)
AA	Cancer Centre Referrals		• In the absence of metastatic disease, refer to Hepatobiliary Surgery (http://www.hoteldieu.com/programs-and-departments/gastroenterology-clinic) • Management requires multidisciplinary input therefore referrals to gastroenterology, hepatobiliary/pancreatic surgery, medical, radiation oncology and palliative care are appropriate • MCC recommended for complex cases	
A	Diagnosis		• For potentially resectable cases, at discretion of Hepatobiliary Surgeon (EUS with FNA preferred for histological confirmation) • If unresectable disease and/or inoperable patient OR plan for preoperative treatment, histological proof mandatory • If metastatic disease, obtain biopsy confirmation of metastatic site or primary	
B	History and Physical Exam		• Assess for jaundice, abdominal pain, weight loss, steatorrhea, new onset diabetes, symptoms of mass effect, gastric outlet obstruction. Determine ECOG performance status and obtain nutritional/dietetic evaluation • Consider genetic risk factors and refer for genetic counseling, if indicated	

C	Investigations		• Pancreatic protocol CT preferred
			• Pancreatic protocol MRI if:
			  o Suspected lesion not identified on pancreatic protocol CT
			  o Contrast-enhanced CT cannot be obtained	

Section	Activity	Activity Description	Details	Reference(s)
			○ Cystic lesion • MCC review to classify as: resectable, borderline resectable, locally unresectable, or metastatic • Blood work: ○ Liver function tests and chemistries ○ INR ○ Renal function (creatinine) ○ CA 19-9 level	
D	Pathology of diagnostic specimen	Synoptic Report	• KGH pathology review of all cases with outside pathology • Resection specimen: ○ Surgical report to include: ▪ Location of primary tumor ▪ Tumor type (histology) ▪ Grade ▪ Size ▪ Presence of lymphovascular and/or perineural invasion ▪ Extent of invasion ▪ Assessment of resection margins ▪ Lymph node status ▪ Staging	Cancer protocol template (synoptic reports) for carcinoma of pancreas from the College of American Pathologists Staging: TNM staging based on AJCC Cancer Staging System for Pancreatic Cancer Staging, 7th Ed.
E	Post-Investigation Management	Curative Intent	**Resectable (Stage I-IIb)** *Features (NCCN Guidelines 2015):* • No distant metastases • Major vein involvement (SMV/PV does not preclude curative intent resection	

Section	Activity	Activity Description	Details	Reference(s)
			• Clear fat planes around celiac axis, hepatic artery, and SMA *Surgery:* • R0 resection; Whipple procedure for pancreatic head adenocarcinomas and distal pancreatectomy with splenectomy for distal pancreatic adenocarcinomas • Standard lymphadenectomy *Adjuvant Chemotherapy:* • Should be initiated within 12 weeks after surgery • Baseline pre-treatment CA 19-9 and CT scan (chest, abdomen, pelvis [pancreatic protocol]) • Clinical trial preferred, if available o 6 cycles of Gemcitabine o 6 cycles of FUFA o 6 cycles of Gemcitabine/Capecitabine *Adjuvant Chemoradiation:* • Considered in R1 resected (microscopic margin positive) patients o 5-FU-based chemoradiotherapy + pre- and post-CRT Gemcitabine	Adjuvant/Curative/Neo-Adjuvant Pancreatic Cancer Regimens

Section	Activity	Activity Description	Details	Reference(s)
			Borderline Resectable *Features (NCCN Guidelines 2015):* Pancreatic head/uncinate process • Arterial o Solid tumour involving the common hepatic artery without extension to coeliac axis or hepatic artery bifurcation allowing for safe and complete resection and reconstruction o Solid tumour contact with the SMA ≤ 180° o Presence of variant arterial anatomy (e.g. accessory right hepatic artery) and the presence and degree of tumour contact should be noted if present as it may affect surgical planning *Treatment Goal:* • Potential resection with curative intent • MCC discussion • Clinical trials preferred, if available • Neoadjuvant chemotherapy (FOLFORINOX) • Select neoadjuvant chemoradiation (5=FU)	
		Advanced	**Unresectable/Locally Advanced, Nonmetastatic (Stage III)**	

Section	Activity	Activity Description	Details	Reference(s)
		Disease	*Features:* • No distant metastases • SMA encasement > 180° • Any celiac abutment (head) or celiac encasement > 180° (body and tail) • Aortic invasion or encasement, lymph node metastases beyond field of resection • Clinical trial preferred, if available • MCC discussion recommended *Chemotherapy:* • FOLFIRINOX (carefully selected patients with good performance status [ECOG 0-1], adequate bilirubin) • Gemcitabine+Nab-Paclitaxel *Combined Chemoradiation:* • For select patients, as per discussion at MCC **Metastatic (Stage IV)** *Palliative Chemotherapy:* • Clinical trials, if available • First line: o FOLFIRINOX (carefully selected patients [ECOG 0-1],	Palliative Pancreatic Cancer Regimens

Section	Activity	Activity Description	Details	Reference(s)
			adequate bilirubin (≤1.5xULN) o Gemcitabine+NabPaclitaxel o Single agent Gemcitabine • Second line: o Gemcitabine after previous FOLFIRINOX o Clinical trials o Best supportive care *Palliative Radiation:* • For pain palliation	
			Other Supportive Therapy, if Clinically Appropriate • Celiac ganglion ablation (EUS or CT guided) for pain control • Biliary stenting (endoscopic biliary metal stent preferred) or surgical bypass • Duodenal stent or gastric bypass for gastric outlet obstruction	
		Locally Recurrent Disease	• MCC discussion • Treat with palliative intent, as described above	
F	Follow-up with no Evidence of Disease		• History and physical examination for symptom assessment every 3 to 6 months for 2 years, then annually • CA19-9 and follow-up CT scans if clinical suspicion of recurrence	
G	Controversies		• Adjuvant chemoradition • Adjuvant radiation • Borderline resectable disease and neoadjuvant treatment	

Section	Activity	Activity Description	Details	Reference(s)
H	Clinical Trials		• Patients should be enrolled in clinical trials, if available o CCTG PA.7 (phase II/III Trial of Gemcitabine and Nab-Paclitaxel and Durvalumab {PD-L1 inhibitor] +/- Tremelimumab [CTLA-4] in Metastatic Pancreatic Adenocarcinoma	

References

Conroy T, Desseigne F, Ychou M, Bouche O, Guimbaud R, Becouarn Y, et al. FOLFIRINOX versus gemcitabine for metastatic pancreatic cancer. N Engl J Med, 364(19):1817-1825, 2011. http://www.nejm.org/doi/pdf/10.1056/NEJMoa1011923

Ducreux M, Cuhna AS, Caramella C et al. Cancer of the pancreas: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Annls of Oncol 26: supplement (5) v56-v68, 2015. https://annonc.oxfordjournals.org/content/26/suppl_5/v56.full.pdf+html

Revisions

1. Initial Guideline templated September 30, 2016 – Alison Young
2. Edited October 14th, 2016 –Dr. Tomiak revisions – Alison Young
3. Edited October 25, 2016 – Pathology revisions – Alison Young