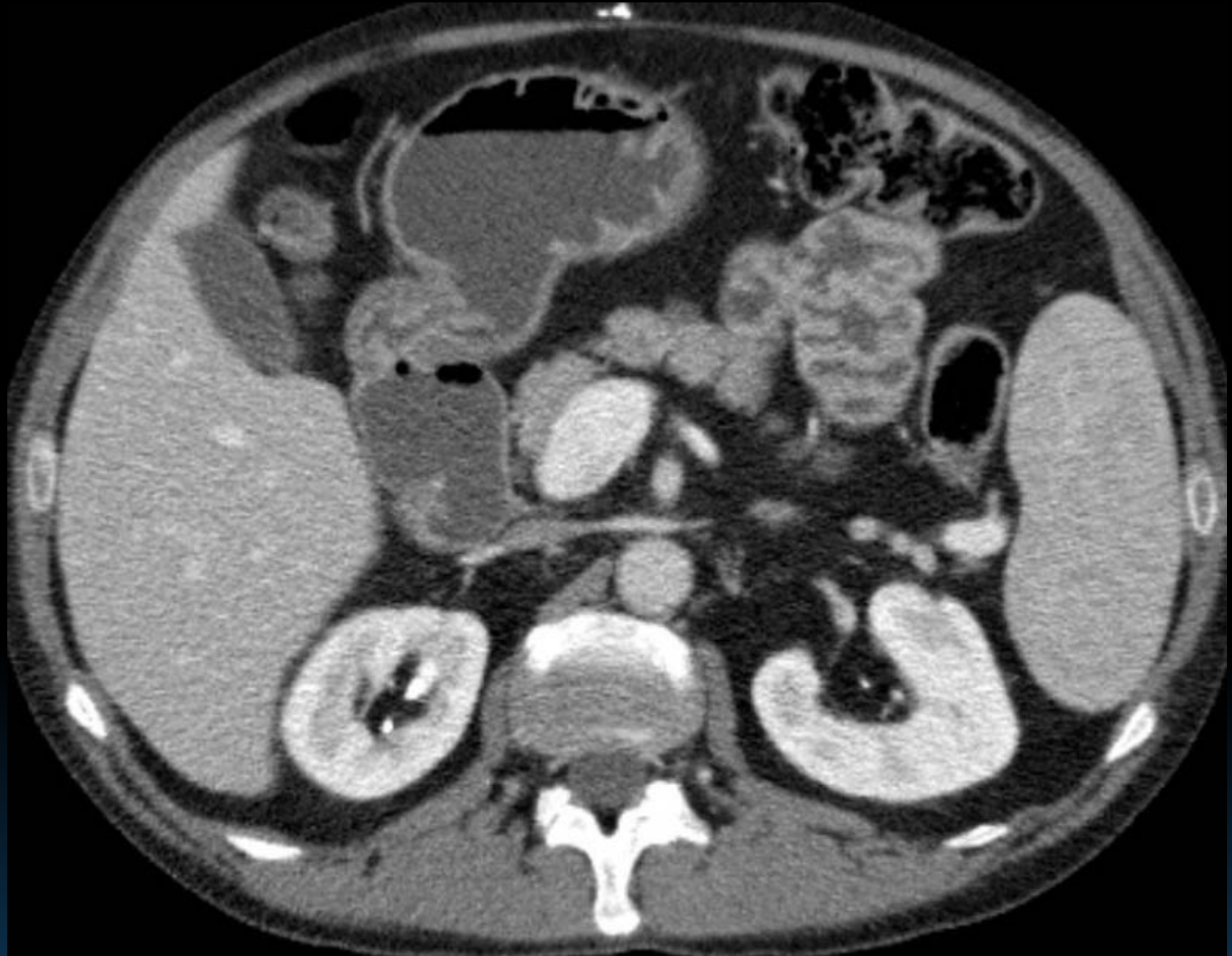


Advanced Concepts in Protocols



Pancreas Adenocarcinoma or NET

Pre-Surgical resection-

- Dual phase indicated to assess for resectability

- Dual phase indicated for accurate tumor measurements

Post Surgical resection-

- Dual phase imaging not needed; the tumor has been removed. CT is done to look for local recurrence or metastases so PV phase is adequate

Renal Cell Carcinoma

Surveillance of known lesion

Multi phase indicated

Post RFA/Cryo/Partial nephrectomy

Multiphase needed to assess treatment margins well

Post Nephrectomy

CT is done to look for metastases – single phase is adequate

Adrenal Nodules

Multiphase CT

- Indicated to characterize a new/newly discovered nodule
- Write tech note to call MD to check I- images before contrast is given- if $< 10\text{HU}$, skip the contrast series

If the indication for scan is follow up of a known nodule:

- If its been previously characterized, then I- abd only to measure size
- If previously attempted to be characterized and it wasn't, non contrast abd only to measure size
- If not previously characterized, then consider multiphase

Liver MRI

Eovist/Hepatobiliary contrast agent

Highly sensitive for metastatic disease

To differentiate FHN from Adenoma

* think of in females with liver lesion being characterized

Dotarem/Interstitial contrast agent

Preferred at DHMC for Cirrhosis/HCC detection

Prostate MRI

G-/G+

Done for surveillance, elevated PSA, tumor detection

G-

Done for XRT planning only

Considerations for Oral Contrast

Post Surgery

Indicated in almost all cases to differentiate abscess from fluid in bowel, anastomotic leaks, etc.

Multiphase scans of organs

Generally oral not needed if intent of scan is for solid organ tumor

Pain/ ? infection

Generally indicated for non-specific pain (* except omitted in ED patients due to acuity/time)

Give longer prep for inpatients due to slow transit ~3 hours

Hypovascular Tumors

These tumors enhance less avidly than normal liver.

Scan during PV phase, when liver is highest attenuation so contrast between the hypoenhancing tumor and the liver will be the greatest.

*All GI luminal
adenocarcinomas:*

Gastric

Small bowel

Colon

Rectal

Breast

Lung NSCLC

Pancreatic

adenocarcinoma

Hypervascular Tumors

These tumors enhance earlier and MORE avidly than normal liver.

Scan during late arterial phase, when the tumor enhancement is maximal and will contrast with the hypoenhancing liver.

Examples:

HCC

Adenoma

Focal Nodular hyperplasia

Ocular melanoma

Pancreatic neuroendocrine

Carcinoid tumor

Pheochromocytoma

Medullary thyroid

+/- Renal cell