RECTAL CARCINOID

Rectal carcinoid overview

- Comprise 12.6% of all carcinoid tumors
- Third largest group of the gut carcinoids
- No sex predominance
- Average age of diagnosis 48-52 years (significantly lower than colon carcinoids which have average age of diagnosis of 70 years)

Frequency of Symptoms in Rectal Carcinoid

- Carcinoid syndrome → Rare (<10 %)
- Weight Loss → Modest (11-50%)
- Vomiting → Rare (<10%)
- UGI bleeding → Rare (<10%)
- Rectal bleeding → Modest (11-50%)
- Obstruction → Rare (<10%)
- Constipation → Rare (<10%)
- Palpable mass → Rare (< 10%)
- Pain/discomfort → Modest (11-50%)
- Asymptomatic → Modest (close to 50%)

Carcinoid syndrome

- Symptoms
  - Flushing (common 85%)
  - telangiectasia, cyanosis, diarrhea and cramping (common 85%)
  - valvular lesions (right heart more common than the left)
  - bronchoconstriction
  - 90% of patients with the carcinoid syndrome have metastatic disease (except for bronchial and ovarian tumors that can produce symptoms without metastasis)
- Malignant potential of rectal carcinoids
  - General good prognosis
    - low propensity to metastasize
    - overall five year survival rate of 88.3%
      - Tumor size, histiologic microinvasion, histologic growth pattern, histologic microinvasion, presenting symptoms, DNA Ploidy
    - Tumor size
      - Less than 1 cm → rarely metastasize
      - Between 1cm and 1.9cm → 10% metastasize
      - Greater than 2 cm → Over 70% metastasize
    - Microinvasion
      - Muscular invasion is treated as widespread disease (see below)

Detecting Metastatic Disease

- Most common metastatic site is liver

- CT or MRI → MRI may be more favorable because of better definition of metastatic disease boundaries within the liver.
- Nuclear Medicine
    - 80-90 % express high levels of high affinity receptors for somatostatin
    - Radiolabeled somatostatin analogs like Octreotide provide good visualization of carcinoid tumors
    - False-negative studies may occur in very small primary tumors, tumors with low numbers of somatostatin receptors or tumors that have receptors with a reduced affinity for somatostatin
    - False-positive results are rare but may occur in areas of inflammation and sometimes in nonendocrine tumors
    - Best used for:
        - Localization of primary occult tumor when MRI or CT fails (tumors larger than 1cm)
        - Staging of patients with known metastatic disease (very helpful in identifying metastases outside of liver)

Treatment

- Less than 1 cm (80% of rectal carcinoids are less than 1cm, limited to submucosa and have no metastasis) → endoscopic or transrectal resection
- Between 1 and 2cm without evidence of lymph node metastases (10% of cases) → Wide excision with a meticulous evaluation to r/o muscular invasion
- 2 cm and larger (10% of cases) or any size with evidence of muscular invasion or lymph node metastases present → Radical surgery: LAR with mesorectal excision or abdominoperineal resection
- Greater than 2cm with liver or lymph node metastases → local excision to prevent bleeding, tenesmus and obstruction. Surgical therapy regarded as palliative.
- If exhibits an adenocarcinoid or NE carcinoma phenotype, should be treated as an adenocarcinoma
- Limited role of chemotherapeutic agents

References

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