2021 ATA® Guidelines for Management of Patients with Anaplastic Thyroid Cancer

Surgical Management

AMERICAN THYROID ASSOCIATION®

Optimal Thyroid Health for All

Surgical evaluation for ATC

- Immediate airway evaluation
- Goal: R0/R1resection
  - Is tumor resectable?
- Determine extent of disease based on rapid and accurate staging
  - Invasion into local structures?
  - Presence of distant metastases?
  - Is there a role for neoadjuvant therapy?
- Goals of Care
  - Patient centered
  - Curative vs Palliative
  - Balance morbidity from surgery with expected benefits

Immediate Airway Evaluation

- Does the patient have stridor?
- Is immediate tracheostomy required to protect airway?
- Placement of a tracheostomy results in immediate improvement of upper airway obstruction but requires significant education for care and understanding that tumor location and growth may make management of the tracheotomy complex.
- **In patients without impending airway compromise, we advise against preemptive tracheostomy placement. (GPS 7)**

Evaluation of Resectability

- Extent of local invasion
  - High resolution CT scan/MRI neck and chest with contrast to assess for presence of regional disease, vascular or visceral invasion.
  - Direct laryngoscopy to assess vocal cords, subglottic and upper trachea to assess for function and invasion.
  - Consider endoscopic evaluation of the esophagus to assess invasion.
  - Consider bronchoscopic evaluation of trachea to assess invasion.
- Systemic evaluation
  - Confirm pathology
  - Radiological evaluation for distant metastases
  - Define clinical stage (IVA, IVB, IVC)
- Patient comorbidities and fitness for surgery assessed and acceptable.
- Patient goals of care, advanced directives defined.
- Consensus achieved with patient/family and treatment team for decision for surgery.

Surgery for stage IVA/IVB ATC

- For patients with **confined (stage IVA/IVB) ATC** in whom R0/R1 resection is anticipated, we **strongly recommend surgical resection**. (R.12)
- Radical resection (including laryngectomy, tracheal resections, esophageal resections, and/or major vascular or mediastinal resections) is **generally not recommended given the poor prognosis of ATC** and should be considered only very selectively after thorough discussion by multidisciplinary team, also **considered in light of new information** based upon **mutations present and the availability of targeted therapies**. (R.13)
- If surgery is undertaken, **intraoperative frozen section and pathology consultation** may be a helpful adjunct to inform surgical decision making. (GPS 6)

Exclusions for Surgery

- Patient condition, goals of care or decision making capacity unsuitable for surgery
- High volume ATC metastases
- Anticipated prohibitive morbidity from required surgical procedure
  - Unacceptably high risk of extensive laryngeal, tracheal, bilateral recurrent laryngeal nerve, esophageal or vascular resection required for R0/R1 resection
  - Anticipated post-op recovery prohibitive in context of other needed therapies (chemoradiotherapy)