Predictors of outcomes in children presenting with a mediastinal mass: A retrospective analysis
C Ayoub DO, A Karnwal MD, C Lo MD, A Hutchason, M Luu, C Newth MD

INTRODUCTION
- Perioperative management of mediastinal masses presents a unique set of concerns depending on:
  - Time of presentation
  - Location of the mass (anterior vs posterior)
  - Airway obstruction
- Posterior mediastinal masses are traditionally considered to carry less anesthetic implications.

STUDY DESIGN
AIM:
- Evaluate the perioperative management of mediastinal masses and extrapolate factors that may affect morbidity and mortality.

METHODS:
- IRB approval
- Retrospective chart review
- 2005-2015
- No exclusion criteria

RESULTS
- 119 pts
- 70 (58.8%) M : 49 (41.1%) F

- DURATION OF SYMPTOMS:
  - Younger patients present earlier (p=0.02)
  - Lower body weight correlates with earlier clinical presentation (p = 0.005)
  - 86% of patients with tracheal compression presented within 12 months
  - Primary tumors presented earlier than secondary (p = 0.01)
  - Location of tumor (anterior vs posterior) showed no correlation with duration of symptoms.

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- LENGTH OF ICU STAY (LOS):
  - Pericardial effusion (p=0.01) and airway edema (p<0.001) increased ICU LOS.
  - Tumor size and anesthesia type (GA vs sedation) did not correlate with ICU LOS (P = 0.7 and P = 0.3)

- MORTALITY:
  - Overall-22 (18.4%) patients died
  - 3 died during acute admission related to mass
  - The median length of stay in the mortality group was 5 days (vs 2 days)
  - Associated with longer symptom duration (p=0.06).
  - No relation between the mortality and the tumor characteristics was seen.
  - Degree of tracheal compression was not associated with increased mortality.

DISCUSSION
- Emphasis traditionally has been placed on the concern over intraoperative obstruction relating to mass size and location.
- Data may suggest that factors affecting the entire perioperative management of these patients extending into ICU and postoperative course may be equally important.
- Judicious evaluation of anesthetic management including whether or not intubation is always warranted or in the best interest of these patients is exceedingly important.

REFERENCES