Patient presents with known malignant pleural effusion

A

Therapeutic thoracentesis

Chest x-ray (PA/lateral)

Is lung re-expanded?

Yes

Re-accumulation of malignant pleural effusion within 4 weeks of thoracentesis?

Yes

ECOG score of ≤ 2

Consider as clinically indicated:
- Pleuroscopic pleurodesis or
- Chest tube pleurodesis or
- Indwelling pleural catheter (IPC)

Symptomatic improvement?

Yes

Life expectancy of > 30 days

Consider as clinically indicated:
- Pleurectomy or
- Therapeutic thoracentesis or
- IPC

No

ECOG score of ≥ 3

Life expectancy of ≤ 30 days

Consider as clinically indicated:
- Therapeutic thoracentesis or
- IPC, if currently not in placed

Follow up within 2 weeks with clinical evaluation and chest x-ray (PA/lateral)

B

Yes

See Box A on this page if pleural fluid (PF) re-accumulates

No

Evaluate for re-accumulation every 2-4 weeks or as clinically indicated, with chest x-ray (PA/lateral)

- ECOG score of ≥ 3

Yes

See Page 2

No

Follow up within 2 weeks with clinical evaluation and chest x-ray (PA/lateral)

- ECOG score of ≤ 2

Yes

Consider as clinically indicated:
- Pleuroscopic pleurodesis or
- Chest tube pleurodesis or
- Indwelling pleural catheter (IPC)

Symptomatic improvement?

No

Life expectancy of > 30 days

Consider as clinically indicated:
- Therapeutic thoracentesis or
- IPC

Life expectancy of ≤ 30 days

Therapeutic thoracentesis

- Pleuroscopic pleurodesis or
- Chest tube pleurodesis or
- Indwelling pleural catheter (IPC)

ECOG = Eastern Cooperative Oncology Group

1 Patients with chemo-radiosensitive tumors on initial treatment (lymphoma, breast cancer, and small cell lung cancer) could obtain palliation with therapeutic thoracentesis while waiting on systemic treatment results
Management of Malignant Pleural Effusion - Adult

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.

Endobronchial obstruction?
- Yes
  - Symptomatic improvement after therapeutic thoracentesis?
    - Yes
      - ECOG score of ≤ 2
        - Therapeutic thoracentesis
        - IPC
    - No
      - ECOG score of ≥ 3
        - Life expectancy of ≤ 30 days
          - Therapeutic thoracentesis
          - IPC
        - Life expectancy of > 30 days
          - Therapeutic thoracentesis
          - IPC
  - No
    - Post thoracentesis without lung re-expansion
      - Individualized care as clinically indicated

Endobronchial obstruction?
- No
  - Life expectancy of ≤ 30 days
    - Decortication
    - IPC
  - Life expectancy of > 30 days
    - Lung re-expansion with or without symptomatic improvement
      - See Page 1, Box B
  - Symptomatic improvement without lung re-expansion
    - See Box C on this page
  - Consider other etiologies to explain symptoms

Re-accumulation of malignant pleural effusion within 4 weeks of thoracentesis?
- Yes
  - Observation or Repeat therapeutic thoracentesis
  - Lung re-expansion and/or symptomatic improvement?
    - Yes
      - Lung re-expansion with or without symptomatic improvement
        - See Page 1, Box B
    - No
      - Consider other etiologies to explain symptoms
- No
  - Follow up within 2 weeks with clinical evaluation and chest x-ray (PA/lateral)

ECOG score of ≤ 2
- Therapeutic thoracentesis
- IPC

ECOG score of ≥ 3
- Life expectancy of ≤ 30 days
  - Therapeutic thoracentesis
  - IPC
- Life expectancy of > 30 days
  - Therapeutic thoracentesis
  - IPC

Lung re-expansion with or without symptom improvement?
- Yes
  - See Page 1, Box B
- No
  - Consider other etiologies to explain symptoms

Evaluate for re-accumulation every 2-4 weeks or as clinically indicated, with chest x-ray (PA/lateral)
- See Page 1, Box A if pleural fluid re-accumulates
SUGGESTED READINGS


This practice consensus statement is based on majority opinion of the Pleural Effusion Work Group experts at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

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