Observation is the dominant choice compared with aspiration and chest tube insertion for primary spontaneous pneumothorax. It should be considered as the first-line therapy in appropriately selected patients.

**STUDY DESIGN**

Systemic review of primary spontaneous pneumothorax (PSP) strategies over 20 years with 22 articles

- Observation
- Aspiration
- Chest tube

1° outcome: PSP resolution following initial intervention

2° outcome: PSP recurrence; length of stay; rate of surgical management; complications

✓ Cost-utility analysis

**RESULTS**

Compared with chest tube,

- **observation** (mean difference 5.17; 95% CI, 3.75 - 6.59) and
- **aspiration** (mean difference 2.72; 95% CI, 2.39 - 3.04) had shorter length of stay

Compared with observation,

- **chest tube** (risk ratio 0.81; 95% CI, 0.71 - 0.91) and
- **aspiration** (risk ratio 0.73; 95% CI, 0.61 - 0.88) had higher resolution without additional intervention

2-year recurrence rates did not differ between management strategies

Observation had the best utility and lowest cost