

**Introduction:** Patients with malignant pleural effusions (MPE) have a poor life expectancy and a high symptom burden. Definitive management strategies include chest drain and pleurodesis or placement of an indwelling pleural catheter. A meta analysis showed that 76% - 82% of patients had a successful pleurodesis with sterile talc. It has been postulated that patients who experience a greater inflammatory response or experience more pain are more likely to have a successful pleurodesis. Trapped lung is associated with a lower rate of pleurodesis success and it is thought that the number of previous interventions may be related to the development of trapped lung.

**Methods:** A post hoc analysis from the TIME 1 trial was undertaken to establish the accuracy of these hypotheses. 320 patients were included who had a diagnosis of MPE.

**Results:** There was a correlation between the number of previous ipsilateral aspirations and the incidence of trapped lung ( $p=0.015$ ).

**Conclusion:** Inflammation may play a factor in pleurodesis success as patients with a greater rise in CRP were more likely to have a successful pleurodesis. There is no evidence to support the hypothesis that patients who have more pain are more likely to have a successful pleurodesis. The correlation between the incidence of trapped lung and previous pleural interventions needs further study into whether or not there is a causal relationship.

	Pleurodesis Success	Pleurodesis Failure	Significance
Mean change in CRP Day 0 - Day 1	47.81 (SD 52.08)	27.05 (SD 32.47)	$p = 0.003$
Mean change in WCC Day 0 - Day 1	2.28 (SD 3.07)	1.55 (SD 2.82)	$p = 0.152$
Mean rank pain scores (VAS) 0 - 24 hours	132.26	122.53	$p = 0.422$
Mean rank of no. of rescue analgesia doses	140.68	129.12	$p = 0.266$