

Clinical Trial On Pleural Cavity Opening During Median Sternotomy

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Clinical Trials are the backbone of the modern medicine. They are the only way to test securely a hypothesis and to put out an evidence based medicine. In this paper we will discuss the first and second stage of a clinical trial on how to make sternotomy without opening pleural cavities.

1 Introduction

The median sternotomy is a common surgical approach used in cardiac surgery. It provides access to the heart and great vessels, allowing for various procedures such as coronary artery bypass grafting (CABG), valve repair or replacement, and aortic surgery. However, one of the potential complications of median sternotomy is the opening of the pleural cavities, which can lead to postoperative complications such as pneumothorax, hemothorax, and respiratory distress.

2 Data & Methods

Patients were randomly assigned to two groups: the experimental group, which underwent median sternotomy with lungs down 10 second and two thorax compression, and the control group without this maneuver. The primary outcome was the incidence of pleural cavity opening given two operators, hospital mortality. Secondary outcomes included length of hospital stay and postoperative pain from drainages. The data was collected from a single center and included demographic information, surgical details, and postoperative outcomes. The data was analyzed using statistical software to compare the outcomes between the two groups. ## Conclusion

3 Figures

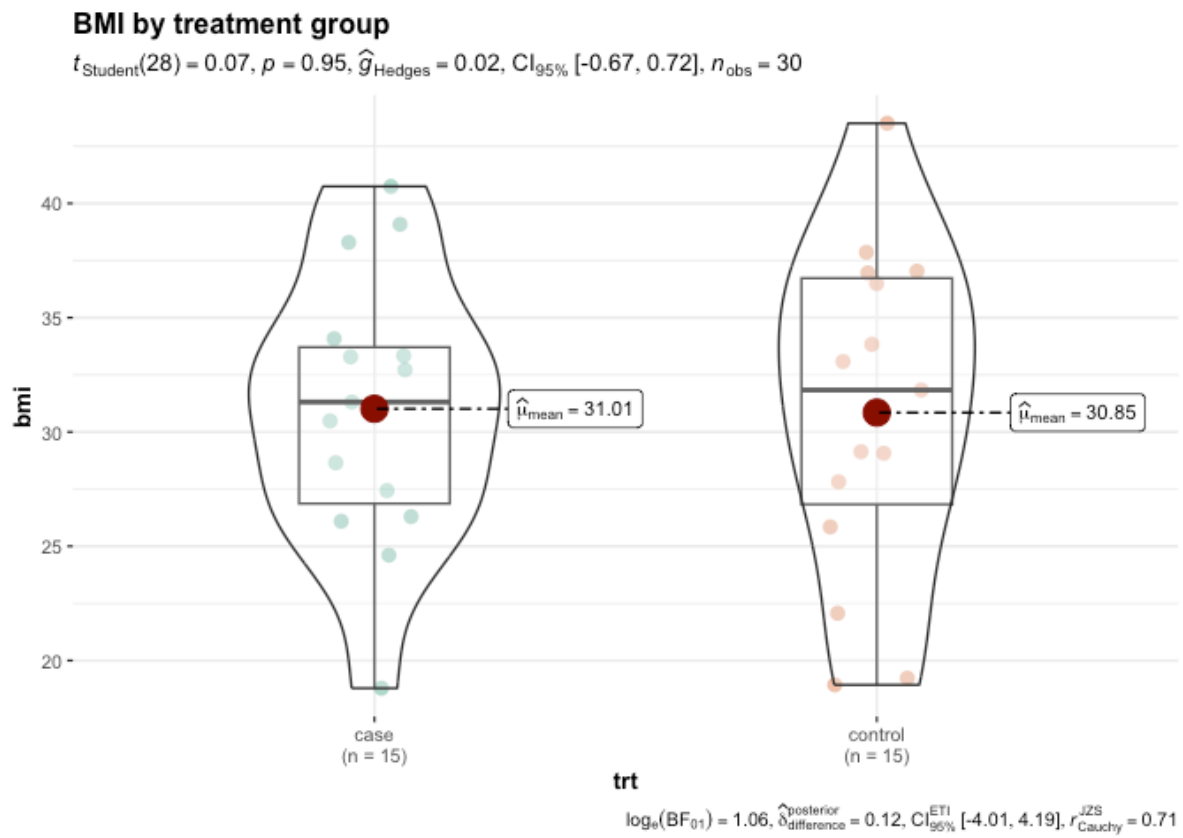


Figure 1

Source: [First Stage](#)

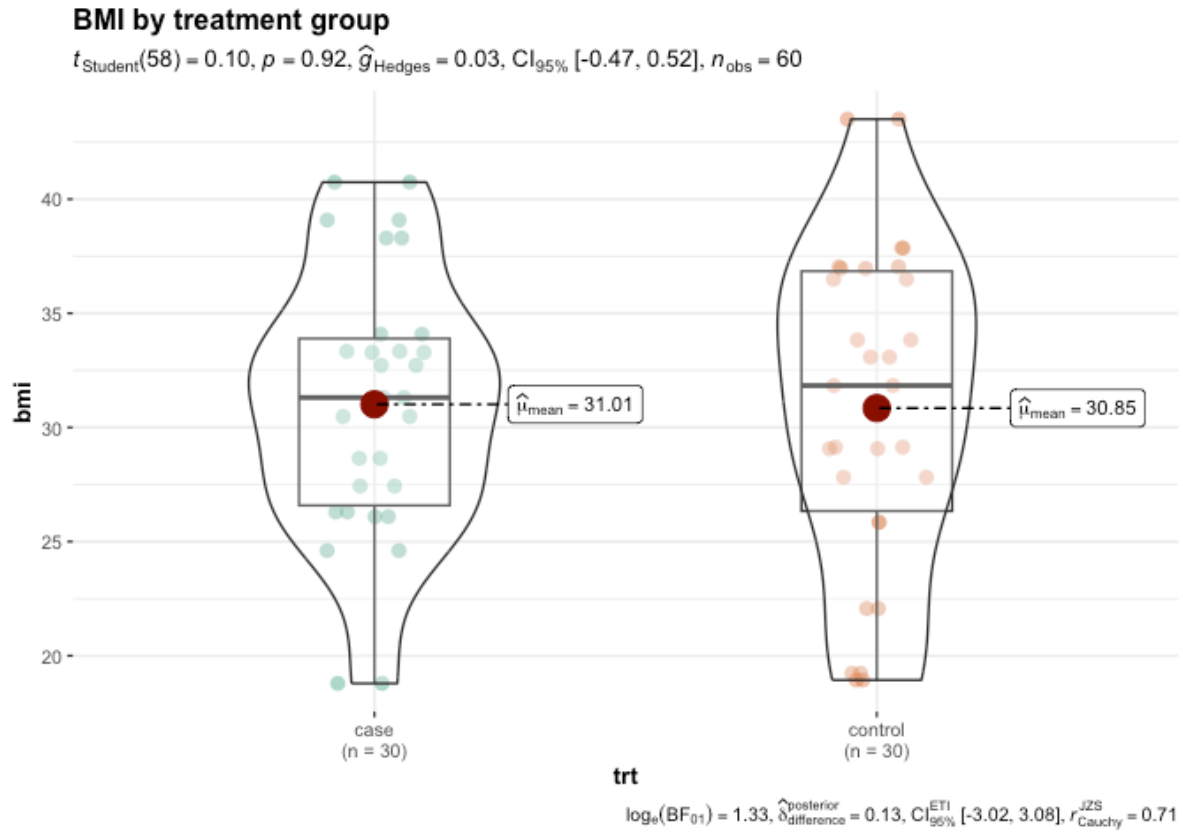


Figure 2

Source: [Second Stage](#)

4 Tables

Table 1: Demographics of the first stage

Characteristic	N = 30 ¹
trt	
case	15 (50%)
control	15 (50%)
outcome	
close	17 (57%)

Table 1: Demographics of the first stage

Characteristic	N = 30 ¹
open	13 (43%)
bmi	32 (26, 36)
diabetis	12 (40%)
¹ n (%); Median (Q1, Q3)	

Source: [First Stage](#)

Table 2: Demographics of the second stage stage

Characteristic	N = 60 ¹
trt	
case	30 (50%)
control	30 (50%)
outcome	
close	34 (57%)
open	26 (43%)
bmi	32 (26, 36)
diabetis	24 (40%)
¹ n (%); Median (Q1, Q3)	

Source: [Second Stage](#)

5 Acknowledgements

References