

Observed Behavioral Effects of Medical Treatment for Type B Aortic Dissections

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Observed Behavioral Effects of Medical Treatment for Type B Aortic Dissections

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Introduction

- Objective: Identify possible behavioral effects of treating type B aortic dissections medically
- Antihypertensive medications may affect a patient's behavior through lowering their blood pressure or by directly acting on neurological pathways
- Studies found on antihypertensive medications utilized a small sample population and were over 10 years old¹⁻³
- No studies regarding the behavioral effects of treating Type B dissections were found⁴⁻⁵

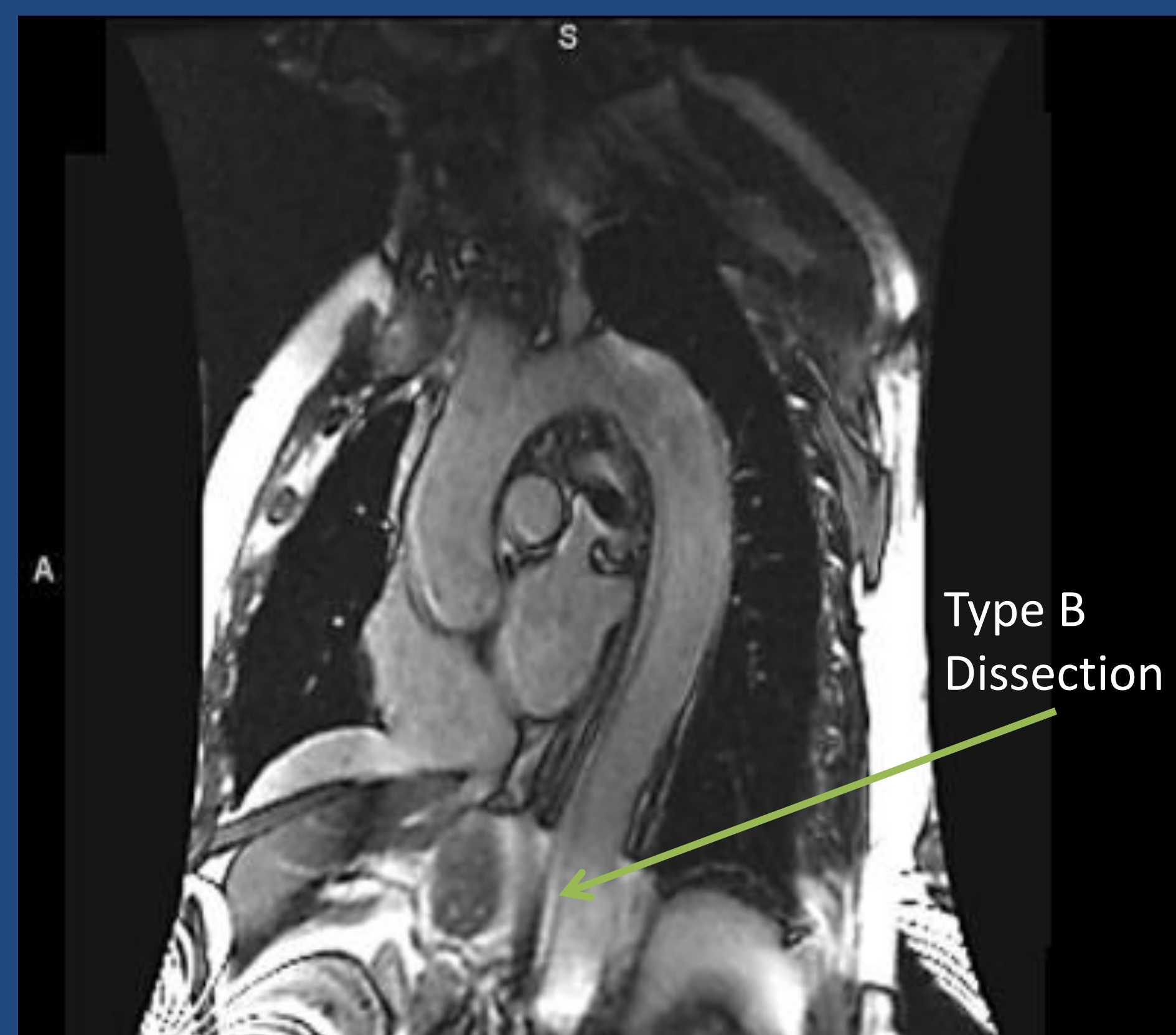


Figure 1: This figure depicts a Type B dissection of the descending aorta.

Methods

- Selected study population of 104 patients with medically treated Type B dissections from 244 initial records
- Constructed database to organize patient demographics, treatments, and to record behavioral effects
- Searched charts and medical records to determine possible behavioral effects
- Constructed histogram displaying frequency of observed behavioral effects, a demographic table, and pie chart displaying percent of patients with behavioral effects

Results

Table 1: This table depicts a summary of the study population demographics

| | |
|---|-------------------------|
| Total Patients with Medically Treated Type B Aortic Dissection over 10 years (2004-2014) | 104 |
| Number with Behavioral Effects | 57 |
| Number of Males | 67 |
| Number of Females | 37 |
| Age Range | 21-94 (73 years) |
| Median Age | 68 ± 16 years |
| Number of Deaths | 10 |

Distribution of Behavioral Effects in Medically Treated Type B Aortic Dissections

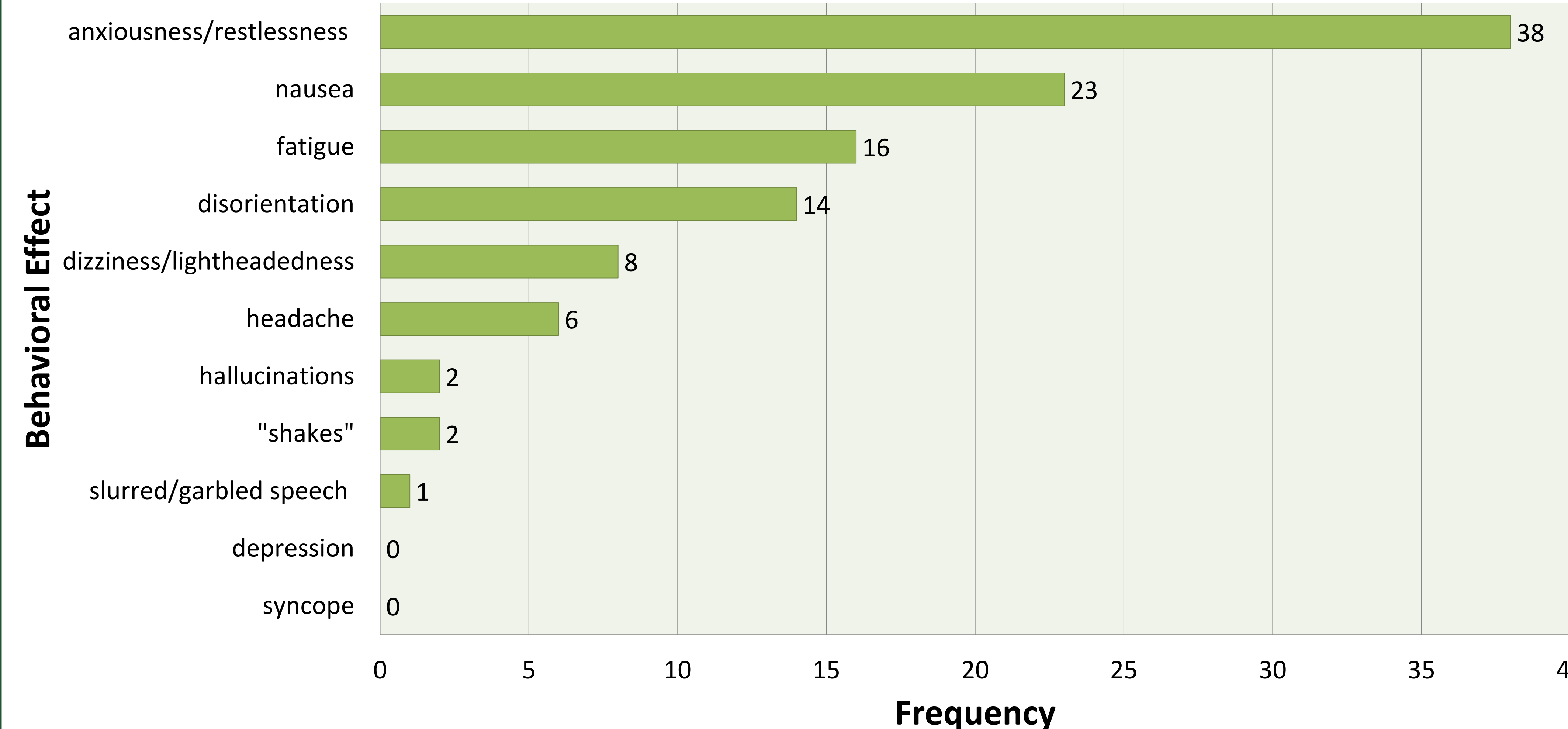


Figure 2: This figure displays the frequency of a given behavioral effect seen in the study population

Proportion of Behavioral Effects Found versus No Behavioral Effects Found

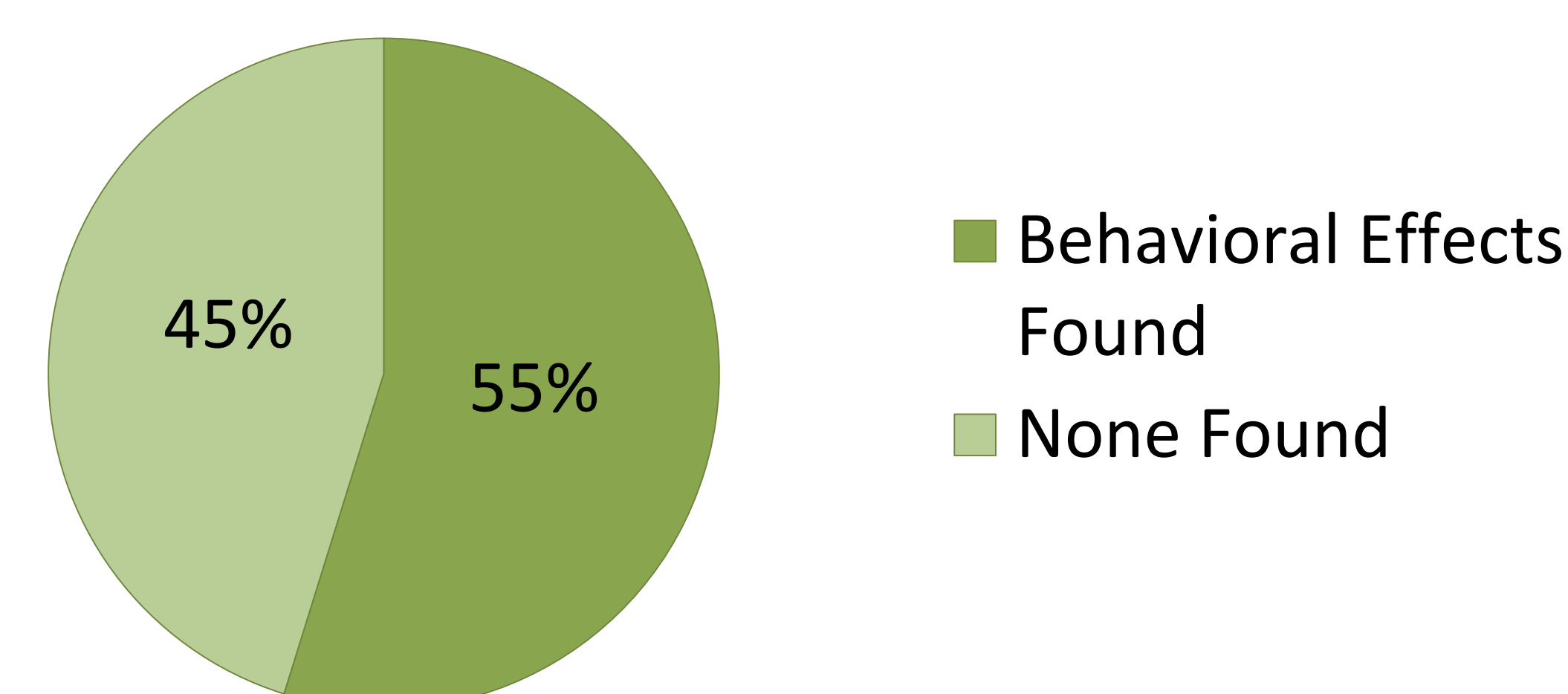


Figure 3: This figure depicts the relative amount of patients in which behavioral effects were found, and patients in which no effects were found

Conclusion

- The most frequently observed behavioral effect was anxiousness/restlessness
- There were observed behavioral effects in 55% of the patients
- It is possible that behavioral effects are caused secondary to a drop in blood pressure during medical treatment of Type B aortic dissections
- Next steps include determining if drops in blood pressure during treatment correlate with behavioral effects

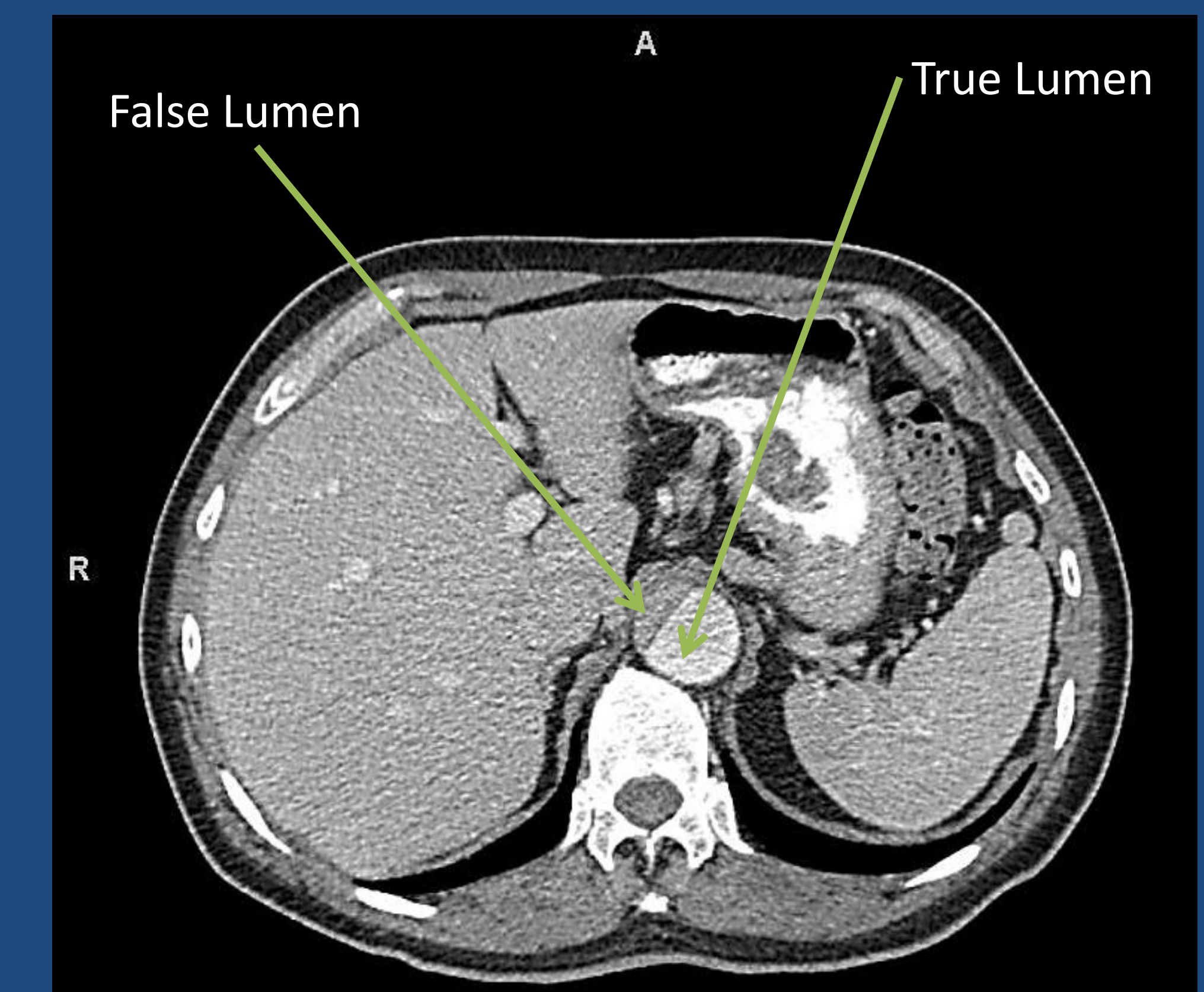


Figure 4: In this figure the false lumen created by the Type B dissection can clearly be seen

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