

## Peer Review File

Article Information: <https://dx.doi.org/10.21037/jss-22-68>

### Reviewer A

**Comment 1: emphasize in the title and in the manuscript that the included patients are the ones WITHOUT worsening neurological deficits.**

#### Reply 1:

Many thanks. We have changed our title as advised to emphasise the above point.

We have also stated this in the conclusion (line 244 – 245)

**Changes in the text:** We have changed our title as advised to ‘The importance of “Time To Surgery” in the management of lumbar disc herniation in patients without progressive neurological deficits’ (line 2-3)

We have also highlighted this in our manuscript that patients with worsening neurological deficits were excluded from our sample (line 108 – 110).

#### Comment 2:

**discuss that there was a trend for better outcome in the early surgery group. but the p value is not statistically significant due to the small sample size**

**Reply 2a:** Many thanks. We have added this in the discussion to emphasise the above point.

**Changes in the text:** We have modified our text as advised (line 212 – 214)

**A power analysis should also be included to determine the appropriate sample size needed to demonstrate the effect size chosen**

**Reply 2b:** We have acknowledged that our study is underpowered in our methods (line 129 – 130) which gave a Type II error.

**Changes in text:** We have further emphasised the above point and added some data in the form of a power calculation in order to support this statement (line 133 – 136)

### Reviewer B

**Comment 1: I believe the study is too small to conclude on the value of time to surgery.**

**Reply 1:** Many thanks for your constructive comments. Unfortunately, due to our hospital being a small district general hospital with a relatively small department our cohort is indeed of a small sample size. We have made sure to well acknowledge in our manuscript as a major limitation of our study.

**Changes in text:** We have added/modified our text to better highlight the effects of the small sample size (line 232 – 236)

**Comment 2: In the "inclusion" part: patients of age 18-60 were included. In the flow-chart (Fig 1) you seem to have excluded patients under 25 and over 65. Please clarify these inconsistencies.**

**Reply 2:** The included patients are indeed 25 – 65 year olds. The initial intent was to include 18 – 60 years but we had no patients below the age of 25 during that period. Patients above the age of 65 mostly had degenerative stenotic picture and therefore not considered.

**Changes in text:** We have corrected the wrong values in our flow chart (please see Figure 1)

**Comment 3: Page 4, lines 116-123: Here you have cited references with different styles please be consistent.**

**Reply 3:** Apologies. This was an oversight on our part.

**Changes in text:** We have modified the text and the reference format as requested (line 118 – 120)

**Comment 4: Time to surgery: from referral to surgery! Have you any information about how long time elapsed from symptoms to referral?**

**Reply 4:** We do have the data regarding onset of symptoms although this was not included in the previous submission. We have used the date of referral because all patient with such pathology undergo a period of conservative treatment with variable response in primary care settings.

**Changes in text:** We have modified our text to include the data (median length of time between onset of symptoms and referral to specialist services) (line 190 – 194)

**Comment 5: The main concern I have with this study is the few numbers of patients in the groups. The study is probably too small to draw firm conclusions regarding the subject of time to surgery.**

**Reply 5:** Unfortunately, due to our hospital being a small district general hospital with a relatively small department our cohort is indeed of a small sample size. We have made sure to well acknowledge in our manuscript as a major limitation of our study. We have acknowledged in the text (232 – 236) that the study is underpowered resulting in a Type 2 error (line 127 – 130)

**Changes in text:** no changes made

**Comment 6: P6, line: 184: reference missing**

**Reply 6:** Apologies. This was an oversight on our part.

**Changes in text:** We have added the reference of the NERVE trial (line 184 – 186)

**Comment 7: P6, lines 190-191: reference should be added**

**Reply 7:** Apologies. This was an oversight on our part.

**Changes in text:** We have added the reference (line 196)

**Comment 8: P7, lines 211-213: The paragraph is unclear. Can you please try to formulate differently?**

**Reply 8:** Apologies. We will amend this.

**Changes in text:** We have reworded this sentence to make it clearer (line 216 – 223)

**Comment 9: Please be consistent how you write numbers: (one), (1) or (1-).**

**Reply 9:** Apologies. We will amend this.

**Changes in text:** Amended throughout the manuscript