

Peer Review File

Article information: <https://dx.doi.org/10.21037/jss-22-77>

Reviewer A

Comment 1.

Introduction is too short in my opinion for non-spine surgeons interested in the article. The introduction should include a short repetition of epidemiology and treatment options already used.

Reply 1.

I modified the introduction including classification, epidemiology, and treatment option for C2 fractures.

Comment 2.

Figure 1 should be changed according the time after trauma or surgery. Therefore, figures should be replaced as followed: A,C,B and D.

Reply 2.

I modified the figures of the manuscript to show the follow-up of the fractures.

Comment 3.

Figure 2: presented slices are not comparable and should be changed.

Reply 3.

I modified the figures of the manuscript to show the follow-up of the fractures.

Comment 4.

Discussion: First Paragraph should be included within the results.

Reply 4.

I inserted the first paragraph of the discussion in "Results".

Comment 5.

Discussion should be edited. Pro and contra of different surgical techniques should be discussed in more detail.

Reply 5.

I inserted information and pro and contra of different surgical techniques.

Comment 6.

Advantage of the new technique should be highlighted.

Reply 6.

The advantages of the new technique have been highlighted in the discussion.

Reviewer B

The authors describe a nuance (novel material) for stabilization to treat a common cervical traumatic injury. With modifications, this paper could be a meaningful contribution to the

literature.

Comment 1.

This is a very limited series. The only conclusion that can be drawn is that it is a feasible technique. I don't think the "safety and effectiveness of a sublaminar fixation with polyester bands and a titanium-peek fixation system" has been proven. A larger series is needed to help define the safety and clinical utility of the technique.

Reply 1.

We can suggest the "safety and effectiveness of a sublaminar fixation with polyester bands and a titanium-peek fixation system".

Comment 2.

The Figure labels are confusing. The labels have (B) being used for 2 different patients. Fig.1. Pre-operative and Post-operative CT scans of Cases 1A (A, B) and 1B (B, C). Fig. 2. Pre-operative and Post-operative CT scans of Cases 2 (A, B) and 3 (B, C).

Reply 2.

I modified the figure of every case.

Comment 3.

This does not make sense: "Blood loss during surgery occurred only in 1 surgical procedure and amounted to approx. 150 cc." Are the authors claiming 3 of the surgeries were bloodless?

Reply 3.

The loss of blood of the other 3 procedures had not been counted because it was lesser than 150 cc.

Comment 4.

I think a technical description of the fixation system would be helpful. How is it tightened and secured? Please add pictures of the system.

Reply 4.

The paragraph "surgical strategy" has been inserted.

Reviewer C

Comment 1.

Specify in each case whether the patients had conditions that could influence the postoperative prognosis, such as type 2 diabetes mellitus or smoking.

Reply 1.

No patient had conditions that could influence the postoperative prognosis, such as type 2 diabetes mellitus or smoking.

Comment 2.

Specify in the computed tomography exams which software was used to measure the parameters and distances used and present the measures in the figures, such as the diastase in the fractures.

Reply 2.

We used the instrument “ruler” of Carestream PACS.

Comment 3.

Explore in the discussion possible and/or potential disadvantages of sublaminar fixation with the use of polyester bands and a titanium-peek fixation system.

Reply 3.

We inserted in Discussion possible and/or potential disadvantages of sublaminar fixation with the use of polyester bands and a titanium-peek fixation system.

Comment 4.

It was not made clear whether all patients were instructed on the study and signed the free and informed consent form.

Reply 4.

Every patient has been instructed on the surgical procedure with its pro and contra and instructed on the study and signed informed consent form.

Comment 5.

Also specify the approval of the study by the Ethics and Research Committee of the institution where the research was carried out.

Reply 5.

It is a case series and we didn't ask for the approval by the Ethics and Research Committee of the institution where the research was carried out.