

First of all I want to thank the reviewers for their acute and constructive comments. I have made the corrections as suggested by them.

Reviewer 1: the number of references are decided by the journal. For an editorial they should be at least 70. Moreover I think that these great number of references is fundamental to underline the extreme debate in literature about this field. I have removed 4 citations.

Reviewer 2:

1 – as suggested by reviewer, selection of patients is the mainstay of surgical practice. In this field the selection is more important; in particular, as I say in the introduction and in the “indications and limits” paragraph, the indications of IPD actually in my opinion are absent: the IPD shouldn’t be implanted. The indications of IFD (that are different implants from IPD) are extremely restricted and I’ve described them in the same paragraph (underlined in yellow). Anywhere age and sex are not contraindication for using these devices. Moreover there are not a specific surgical technique that have more failure incidence; the failure rate is strictly related to the biomechanical properties of the device, as I described in the biomechanics chapter.

2 – I’ve added images of IPD which developed a spondylolisthesis after one year and a dislocation of an IPD that requires revision surgery

3 – as suggested by reviewer, the main problem is the instability of the metamere and its role in the decision making process: as I wrote in the “indications and Limits” paragraph, IPD doesn’t have any indications, in particular when spondilolisthesis is present, because they didn’t provide any type of fusion. IFD were used initially in the spondilolisthesis of I and II grade, with poor results in term of stability; In the light of this, also IFD must not be used in spondilolisthesis of any grade. I have decribed it in details in the “indications and limits” paragraph.

4 – as suggested by reviewer I’ve add the indications of IFD in the “indications and limits” paragraph. I prefer to add the indications and not the contraindications because indications are more restricted; so I think that surgeon must have a clear idea of when he can use a device, and not only when he can’t use it. It is deductive.

5 – other important aspect is the correlation between patients selection and poor outcomes: for the IPD the poor outcomes described in literature are strictly related to the biomechanical properties of these devices, and subsequently to the patients selections. For this reason IPD doesn’t have any indications actually. For the IFD is different because these devices have a strictly indications in which we can use them: In the light of this, the poor outcome is related to the selection of patient and not to the biomechanical properties. In any cases surgical technique is not responsible for the poor outcomes.

6 – I’ve experience in implanting both of these devices and more experience in their removal, but this article is conceived as an editorial, so a comment article about a debatable topic in literature focusing on literature data, and I prefer to miss my results. I’ve the aim to publish my results about it in a research article in the future.

7 – in literature are fully described the comparing results between IPD and decompression, and IFD and stabilization with screw and rods, as reported in the references. Anywhere the aim of this editorial is absolutely not to affirm the efficiency of IPD or IFD, but the careful description of why

these implants shouldn't be used at the moment. Only by the evolution in concepts and designs these devices should have a role in degenerative spinal surgery.

8 – as suggested by reviewer the English was corrected by a native speaker.

9 – the number of references are decided by the journal. For an editorial they should be at least 70. Moreover I think that these great number of references is fundamental to underline the extreme debate in literature about this field.

10 – I think that a table is not relevant because actually there are so many disadvantages in using these devices, and very poor advantages, and I have described them in the indications and limits paragraph.

10 – I've try to explain better what is the message form lecturers in the conclusions paragraph.