

Quantitative Histological Analysis of Ligamentum Flavum

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Dear Sir:

We read the article “Histopathological analysis of ligamentum flavum in lumbar spinal stenosis and disc herniation” with a lot of interest [1]. Going through literature—searching this topic; we came across some papers which have done histological studies of ligamentum flavum using stains and even immunohistochemical markers, but their findings are qualitative as they describe the morphological differences between stenosis and the non-stenotic groups [2,3] or at best have semiquantitative measurements [4] using some scoring system [5]. The authors have done quantitative measurement but the methodology of measure of concentration is unexplainable. We would like to bring to your notice some of our observations pertinent to this article

1. The authors used hematoxylin & eosin (HE) and Orcein dyes to look for hemosiderin, amyloid, collagen fibres, elastin, and calcification. HE stain may not be able to differentiate amyloid with elastin and fibres, so did the authors use some special stains like Congo red? This could lead to a higher value of elastin we fear or no amyloid being observed as reported.
2. The authors have interpreted their results with collagen concentrations in mg/mL. They have not elaborated the methodology how they have measured this with stains. Did they do some morphometric analysis or use some scoring criterion?

3. In results they have quantified elastic fibres malalignment in numbers which is not described as to how in methodology.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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Received Jan 9, 2018; Accepted Jan 9, 2018

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