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Basic Study

Sacroiliac joint stability: Finite element analysis of implant number, orientation, and superior implant length

Lindsey DP *et al.* FEA model of SI joint stability

Derek P Lindsey, Ali Kiapour, Scott A Yerby, Vijay K Goel

Abstract**AIM**

To analyze how various implant placement variables affect sacroiliac joint range of motion.

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METHODS

An experimentally validated finite element model of the lumbar spine and pelvis was used to simulate a fusion of the sacroiliac joint using various placement configurations of triangular implants (iFuse Implant System®). Placement configurations were varied by changing implant orientation, superior implant length, and number of implants. The range of motion of the sacroiliac joint was calculated using a constant moment of 10 N-m with a follower load of 400 N. The changes in motion were compared between the

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Sacroiliac Joint Stability: Finite Element Analysis of Implant Number, Orientation



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缺少字词 : superior

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缺少字词 : orientation



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缺少字词: superior

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