EOS solutions

Full List of Publications

November 2017
Publications on EOS


• Illés TS, Burkus M, Somoskeöy S, Lauer F, Lavaste F, Dubousset JF. The horizontal plane appearances of scoliosis: what information can be obtained from top-view images?. Int Orthop. 2017 Aug 11

- Hey HWD, Tan KA, Kantharajanna SB, Teo AQA, Chan CX, Liu KG, Wong HK. Using spinopelvic parameters to estimate residual lumbar lordosis assuming previous lumbosacral fusion—a study of normative values. Spine J. 2017 Aug 16


• Giudici F, Galbusera F, Zagra A, Wilke HJ, Archetti M, Scaramuzzo L. Determinants of the biomechanical and radiological outcome of surgical correction of adolescent idiopathic
scoliosis surgery: the role of rod properties and patient characteristics. Eur Spine J. 2017 May 23


Lazennec JY, Clark IC, Folinais D, Tahar IN, Pour A. What is the impact of a spinal fusion on acetabular implant orientation in functional standing and sitting positions? J Arthroplasty. 2017


• Price R, Okamoto M, Le Huec JC, Hasegawa K. Normative spino-pelvic parameters in patients with the lumbarization of S1 compared to a normal asymptomatic population. Eur Spine J. 2016 Sep 26


- Kim YC, Lenke LG, Lee SJ, Gum JL, Wilartratsami S, Blanke KM. The cranial sagittal vertical axis (CrSVA) is a better radiographic measure to predict clinical outcomes in adult spinal deformity surgery than the C7 SVA: a monocentric study. Eur Spine J. 2016 Oct 14


- Lazennec JY, Chometon Q, Folinais D, Robbins CB, Pour AE. Are advanced three-dimensional imaging studies always needed to measure the coronal knee alignment of the lower extremity? Int Orthop. 2016 Nov 14


- Ben Abdennebi A, Aubry S, Ounalli L, Fayache MS, Delabrousse E, Petegnief Y. Comparative dose levels between CT-scanner and slot-scanning device (EOS system) in pregnant women pelvimetry. Phys Med. 2016 Dec 16


- Rosskopf AB, Pfirrmann CW, Buck FM. Assessment of two-dimensional (2D) and three-dimensional (3D) lower limb measurements in adults: Comparison of micro-dose and low-dose biplanar radiographs. Eur Radiol. 2016


• Cogniet A, Aunoble S, Rigal J, Demezon H, Sadikki R, Le Huec JC. Clinical and radiological outcomes of lumbar posterior subtraction osteotomies are correlated to pelvic incidence and FBI index: Prospective series of 63 cases. Eur Spine J. 2016


• Meijer MF, Velleman T, Boerboom AL, Bulstra SK, Otten E, Stevens M, Reininga IH. The Validity of a New Low-Dose Stereoradiography System to Perform 2D and 3D Knee Prosthetic Alignment Measurements. Plos one. 2016


• Flecher X, Ollivier M, Argenson JN. Lower limb length and offset in total hip arthroplasty. Orthop Traumatol Surg Res. 2016 Feb;102(1 Suppl):S9-20


• Hey H, Teo AQ, Tan KA, Ng LW, Lau LL, Liu KG, Wong HK. How the spine differs in standing and in sitting—important considerations for correction of spinal deformity. Spine J. 2016


• Le Huec JC, Hasegawa K. Normative values for the spine shape parameters using 3D standing analysis from a database of 268 asymptomatic Caucasian and Japanese subjects. Eur Spine J. 2016


• Pasha S, Cahill PJ, Dormans JP, Flynn JM. Characterizing the differences between the 2D and 3D measurements of spine in adolescent idiopathic scoliosis. Eur Spine J. 2016


• Schmid SL, Buck FM, Böni T, Farshad M. Radiographic measurement error of the scoliotic curve angle depending on positioning of the patient and the side of scoliotic curve. Eur Spine J. 2015 Sep 30


• Courvoisier A, Garin C, Vialle R, Kohler R. The change on vertebral axial rotation after posterior instrumentation of idiopathic scoliosis. Childs Nerv Syst. 2015


• Masquefa T, Verdier N, Gille O, Boissière L, Obeid I, Maillot C, Tournier C, Fabre T. Change in acetabular version after lumbar pedicle subtraction osteotomy to correct post-


displacements from 3D reconstruction using biplane X-ray images: Accuracy and reproducibility of the technique and preliminary analysis in rotator cuff tear patients. J Electromyogr Kinesiol. 2015


• Guggenberger R, Pfirrmann CW, Koch PP, Buck FM. Assessment of Lower Limb Length and Alignment by Biplanar Linear Radiography: Comparison With Supine CT and Upright Full-Length Radiography. AJR. 2014


• Barbier O, Skalli W, Mainard L, Mainard D. The reliability of the anterior pelvic plane for computer navigated acetabular component placement during total hip arthroplasty: Prospective study with the EOS imaging system. Orthop Traumatol Surg Res. 2014


• Lazennec JY, Brusson A, Folinais D, Rousseau M, Pour AE, Offset and anteversion reconstruction after cemented and uncemented total hip arthroplasty: an evaluation with the low-dose EOS system comparing two- and three-dimensional imaging. Int Orthop. 2014.


• Rosskopf AB, Ramseier LE, Sutter R, Pfirrmann CW, Buck FM. Femoral and Tibial Torsion Measurement in Children and Adolescents: Comparison of 3D Models Based on Low-Dose Biplanar Radiography and Low-Dose CT. AJR. 2014


• Meijer MF, Boerboom AL, Stevens M, Bulstra SK, Reininga IHF. Assessment of prosthesis alignment after revision total knee arthroplasty using EOS 2D and 3D imaging: a reliability study. Plos one. 2014

• Meyrignac O, Moreno R, Baunin C, Vial J, Accadbled F, Sommet A, de Gauzy JS, Sans N. Low-dose biplanar radiography can be used in children and adolescents to accurately assess femoral and tibial torsion and greatly reduce irradiation. Eur Radiol, 2014


• Sangeux M, Pillet H, Skalli W. Which method of hip joint centre localisation should be used in gait analysis? Gait and Posture. 2014.


• Aubert B, Vergari C, Ilharreborde B, Courvoisier A, Skalli W. 3D reconstruction of rib cage geometry from biplanar radiographs using a statistical parametric model approach. CMBBE. 2014.


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• Somoskeoy S, Tunyogi-Csapo M, Bogyo C, Illes T. Accuracy and reliability of coronal and sagittal spinal curvature data based on patient-specific three-dimensional models created by the EOS 2D/3D imaging system. Spine J2012 Oct 23.


• Steffen JS, Obeid I, Aurouer N, Hauger O, Vital JM, Dubousset J, Skalli W. “3D postural balance with regard to gravity line: an evaluation in the transversal plane on 93 patients and 23 asymptomatic volunteers.” Eur Spine J. 2010 May;19(5)


• Humbert, L. et al. "3D reconstruction of the spine from biplanar X-rays using parametric models based on transversal and longitudinal inferences." Medical Engineering and Physics (2009)


• Humbert L, Carlioz H, Baudoin A, Skalli W, Mitton D. 3D Evaluation of the acetabular coverage assessed by biplanar X-rays or single anteroposterior X-ray compared with CT-scan. Computer Methods in Biomechanics and Biomedical Engineering 2008.


