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- Austman, R.L., Milner, J.S., Holdsworth, D.W. and Dunning, C.E. (2008), "The effect of the density–modulus relationship selected to apply material properties in a finite element model of long bone", *J. Biomech.*, **41**(3), 171-3176.
- Bujtar, P., Sandor, G.K., Bojtos, A., Szucs, A. and Barabas, J. (2010), "Finite element analysis of the human mandible at 3 different stages of life", *Oral Surg. Oral Med. O.*, **110**(3), 301-309.
- Chen, G., Schmutz, B., Epari, D., Rathnayaka, K., Ibrahim, S., Schuetz, M.A. and Pearcy, M.J. (2010), "A new approach for assigning bone material properties from CT images into finite element models", *J. Biomech.*, **43**(5), 1011-1015.
- Chowdhury, A.R., Kashi, A. and Saha, S. (2011), "A comparison of stress distributions for different surgical procedures, screw dimensions and orientations for a Temporomandibular joint implant", *J. Biomech.*, **44**(14), 2584-2587.
- Gröning, F., Liu, J., Fagan, M.J. and O'Higgins, P. (2009), "Validating a voxel-based finite element model of a human mandible using digital speckle pattern interferometry", *J. Biomech.*, **42**(9), 1224-1229.
- Helgason, B., Perilli, E., Schileo, E., Taddei, F., Brynjolfsson, S. and Viceconti, M. (2008), "Mathematical relationships between bone density and mechanical properties: a literature review", *Clin. Biomech.*, **23**(2), 135-146.
- Helgason, B., Taddei, F., Palsson, H., Schileo, E., Cristofolini, L., Viceconti, M. and Brynjolfsson, S. (2008), "A modified method for assigning material properties to FE models of bones", *Med. Eng. Phys.*, **30**(4), 444-453.
- Huang, H.L., Tsai, M.T., Lin, D.J., Chien, C.S. and Hsu, J.T. (2010), "A new method to evaluate the elastic modulus of cortical bone by using a combined computed tomography and finite element approach", *Comput. Biol. Med.*, **40**(4), 464-468.
- Kalender, W. A. (2006), "X-ray computed tomography", *Phys. Med. Biol.*, **51**, 29-43.
- Iwashita, Y. (2000), "Basic study of the measurement of bone mineral content of cortical and cancellous bone of the mandible by computed tomography", *Dentomaxillofac. Rad.*, **29**, 209-215.
- Liu, J.G., Li, D.S., Ma, W.H., Zhou, Z.P. and Xu, X.X. (2004), "Computer assisted reconstruction of 3D canal model of femur and design for custom-made stem", *Chin. Med. J.* **117**(8), 1265-1267.
- Marinescu, R., Daegling, D.J. and Rapoff, A.J. (2005), "Finite-element modeling of the anthropoid mandible: the effects of altered boundary conditions", *Anat. Rec. Part A*, **283**(2), 300-309.
- Mesnard, M. (2005), *Elaboration et validation d'un protocole de caractérisation de l'Articulation Temporo-Mandibulaire*, University Bordeaux, IST Press.
- Mesnard, M., Ramos, A., Ballu, A., Morlier, J. Cid, M. And Simoes, J.A. (2011), "Biomechanical analysis comparing natural and alloplastic temporomandibular joint replacement using a finite element model", *J. Oral Maxil. Surg.*, **69**(4), 1008-1017.
- Panagiotopoulou, O., Curtis, N., O'Higgins, P. and Cobb, S.N. (2010), "Modelling subcortical bone in finite element analyses: a validation and sensitivity study in the macaque mandible", *J. Biomech.*, **43**(8), 1603-1611.
- Parascandolo, S., Spinzia, A., Piombino, P. and Califano, L. (2010), "Two load sharing plates fixation in mandibular condylar fractures: biomechanical basis", *J. Cranio Maxill. Surg.*, **38**(5), 385-390.
- Ramos, A., Completo, A., Relvas, C., Mesnard, M. and Simoes, J.A. (2011), "Straight, semi-anatomic and anatomic TMJ implants: the influence of condylar geometry and bone fixation screws", *J. Cranio Maxill. Surg.*, **39**(5), 343-350.
- Reina-Romo, E., Sampietro-Fuentes, A., Gomez-Benito, M.J., Dominguez, J., Doblare, M. And Garcia-Aznar, J.M. (2010), "Biomechanical response of a mandible in a patient affected with hemifacial microsomia before and after distraction osteogenesis", *Med. Eng. Phys.*, **32**, 860-866.
- Rho, J.Y., Hobatho, M.C., and Ashman, R.B. (1995), "Relations of mechanical properties to density and CT numbers in human bone", *Med. Eng. Phy.*, **17**(5), 347-355.
- Roberts, W.E., Huja, S. and Roberts, J.A. (2004), "Bone modeling: biomechanics, molecular mechanisms,

- and clinical perspectives", *Semin. Orthod.*, **10**(2), 123-161.
- Sato, H., Kawamura, A., Yamaguchi, M. and Kasai, K. (2005), "Relationship between masticatory function and internal structure of the mandible based on computed tomography findings", *Am. J. Orthod. Dentofac.*, **128**(6), 766-773.
- Sun, W. and Lal, P. (2002), "Recent development on computer aided tissue engineering - a review", *Comp. Methods Programs Biomed.*, **67**(2), 85-103.
- Tie, Y., Ma, R., Ye, M., Wang, D. and Wang, C. (2006), "Rapid prototyping fabrication and finite element evaluation of 3D medical pelvic model", *Int. J. Adv. Manuf. Tech.*, **28**(3-4), 302-306.
- Wong, R.C., Tideman, H., Merckx, M.A., Jansen, J., Goh, S.M. and Liao, K. (2011), "Review of biomechanical models used in studying the biomechanics of reconstructed mandibles", *Int. J. Oral Maxil. Surg.*, **40**, 393-400.
- Yosibash, Z., Trabelsi, N. and Milgrom, C. (2007), "Reliable simulations of the human proximal femur by high-order finite element analysis validated by experimental observations", *J. Biomech.*, **40**(16), 3688-3699.
- Zannoni, C., Mantovani, R. and Viceconti, M. (1998), "Material properties assignment to finite element models of bone structures: a new method", *Med. Eng. Phy.*, **20**(10), 735-740.
- Zhang, F., Peck, C.C. and Hannam, A.G. (2002), "Mass properties of the human mandible", *J. Biomech.*, **35**(7), 975-978.

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