

# JOURNAL OF BIOLOGICAL REGULATORS & HOMEOSTATIC AGENTS

Volume 32, No. 6 (Supplement 1), November - December, 2018

Italian Orthopaedic Research Society 2018

Guest editors: F. Benazzo and A. Castelli

## CONTENTS

L. Senesi, L. Farinelli, S. Manzotti, M. Fravisini and A. Gigante. Nerve growth factor administration on cultured human ligamentocytes: an in vitro pilot study	1
G. Vicenti, D. Bizzoca, M. Carrozzo, G. Solarino and B. Moretti. Multi-omics analysis of synovial fluid: a promising approach in the study of osteoarthritis	9
G. Vicenti, D. Bizzoca, I. Caruso, V. Nappi, G. Giancaspro, M. Carrozzo and B. Moretti. New insights into the treatment of non-healing diabetic foot ulcers	15
G. Vicenti, D. Bizzoca, V.S. Nappi, F. Moretti, M. Carrozzo, V. Belviso and B. Moretti. Biophysical stimulation of the knee with PEMFs: from bench to bedside	23
O. Galasso, M. De Gori, S. Cerbasi, F. Familiari, P. Recano, G. Balato, G. Gasparini and Massimo Mariconda. Tantalum monoblock cups in total hip arthroplasty: clinical results and outcome predictors	29
G. Cassiolas, M. Berni, G. Marchiori, M. Bontempi, L. Bragonzoni, G. Valente, A. Grassi, S. Zaffagnini, A. Visani and N. F. Lopomo. How cartilage status can be related to joint loads in anterior cruciate ligament reconstruction: a preliminary analysis including MRI T2 mapping and joint biomechanics	35
L. Fassina, N. Bloise, G. Montagna, L. Visai, M.E. Mognaschi, F. Benazzo and G. Magenes. Biomaterials and biophysical stimuli for bone regeneration	41
A. Ziranu, M. Lillo, M. Fantoni, N. Maffulli and G. Maccauro. Single dose Cefazolin is safe and effective for pre-operative prophylaxis in orthopaedic oncology	45
P. Di Benedetto, M.M. Buttironi and A. Causero. Biomarkers and infections in orthopedics: our experience and literature review	51
A. Poggetti, A. Del Chiaro, M. Nicastro, P. Parchi, N. Piolanti and M. Scaglione. A local anesthesia without tourniquet for distal fibula hardware removal after open reduction and internal fixation: the safe use of epinephrine in the foot. A randomized clinical study	57
S. Colangeli, P. Parchi, L. Andreani, G. Beltrami, G. Scoccianti, F. Sacchetti, M. Ceccoli, F. Totti, D.A. Campanacci and R. Capanna. Cryotherapy efficacy and safety as local therapy in surgical treatment of musculoskeletal tumours. A retrospective case series of 143 patients	65
R. Ghermandi, V. Pipola, S. Colangeli, P. Parchi, L. Andreani, R. Capanna and A. Gasbarrini. Polymethylmethacrylate-augmented fenestreted pedicle-screw fixation in low bone quality patients: a case series and literature review	71
I. Simonetti, V. Chianca, M. Zappia, M. Carfora, E. Jannelli and F. Di Pietto. A rare case of Hoffa's fat pad herniation in a young patient: dynamic ultrasound and MRI diagnosis	77
P. Lomoro, I. Simonetti, A. Nanni, R. Cassone, G. Vinci, V. Fichera, E. Jannelli and L. Sammarchi. Musculoskeletal hydatid disease: report of a rare case with primary and exclusive localization in right hemi-pelvis and femur	83
P. Sirtori, G.M. Peretti, M. Ulivi, R. Ciliberto, M.D. Lombardo, F. Verdoni, G. Michielon and L. Mangiavini. Comparison of early functional outcomes between two different surgical approaches for total hip arthroplasty	89
I. Tessaro, V.T. Nguyen, A. Di Giancamillo, M. Agnoletto, F. Verdoni, M. Domenicucci, R. Scurati, G.M. Peretti and L. Mangiavini. Animal models for cartilage repair	97
I. Tessaro, A. Di Giancamillo, E. Benasciutti, V.T. Nguyen, U. Polito, L. Mangiavini and G.M. Peretti. Characterization of different <i>in vitro</i> culture conditions to induce a fibro-chondrogenic differentiation of swine adipose-derived stem cells	105
F. Verdoni, D. Curci, F. Grasso, M. Agnoletto, R. Scurati, G.M. Peretti and L. Mangiavini. External fixation versus titanium endomedullary nail in the treatment of diaphyseal fractures of the lower limb in pediatric age: our experience	117
A. Perna, Luca Ricciardi, Giuseppe Barone, F. C. Tamburrelli, L. Proietti and Enrico Pola. Medical management of acute non-specific low back pain: comparison of different medical treatments, one center's retrospective analysis	121
O. Galasso, D. Castioni, M. Mercurio, M. Sticozzi, E. Porco, M. De Gori and G. Gasparini. Reinfusion-drains reduce blood transfusions in total joint arthroplasty	131
R. Vanelli, M. Ghiara, E. Jannelli, M.C. Rivellino, E. Ferranti Calderoni, M.R. Fiore, F. Benazzo and F. Cuzzocrea. Aggressive hemangioma starting from L5 body, treated with mass embolization and radiation therapy with protons: a case report	139
G. Pasta, R. Vanelli, E. Jannelli, A. Castelli, M. Mosconi, P.S. Preti, C. Ambaglio and F. Benazzo. Primary total knee replacement in hemophiliacs: experience of a single institution over fourteen years of surgical procedures	145
G. Cazzato, G. Masci, F. Liuzza, L. Capasso, M. Florio, C. Perisano, R. Vitiello, G. Ciolli and G. Maccauro. Secondary femur fracture following treatment with anterograde nailing: the state of the art	151
C. Perisano, T. Greco, R. Vitiello, G. Maccauro, F. Liuzza, F.C. Tamburelli and F. Forconi. Mueller-Weiss disease: review of the literature	157
F. Liuzza, L. Capasso, M. Florio, F. Mocini, G. Masci, G. Cazzato, G. Ciolli, N. Silluzio and G. Maccauro. Transiliacal fixation using the O-ARM 2® and STEALTH STATION S8® navigation system	163
C. Carulli, M. Innocenti, F. Lazzarini, M. Villano, G. Pasta, M.L. Brandi and M. Innocenti. The biomolecular interactions between endothelium and bone cells: an overview	173
S.M.P Rossi, M. Ghiara, A. Castelli, A. Ivone, E. Jannelli and F. Benazzo. How to obtain better results, choice of implant or surgical technique? A new surgical technique with an extramedullary referenced cutting guide and a blended alignment method	181
F. Cuzzocrea, E. Jannelli, A. Ivone, R. Vanelli, M. Ghiara, A. Fioruzzi, E. Brunetti and F. Benazzo. Hydatid cyst in the spine. The alliance between surgeon and infectiologist is winning: a case report	187
G.M. Peretti, M. Ulivi, L. De Girolamo, V. Meroni, M.D. Lombardo, F. Verdoni and L. Mangiavini. Evaluation of the use of autologous micro-fragmented adipose tissue in the treatment of knee osteoarthritis: preliminary results of a randomized controlled trial	193
T. Chomposang, R. D'apolito, C. Lacagnina, G. Peretti and L. Zagra. Total hip arthroplasty in rapidly progressive osteoarthritis of the hip: clinical and radiological outcome of a consecutive series of patients	201
A. Castelli, S.M.P. Rossi, E. Jannelli, L. Rocca and F. Benazzo. Treatment of vancouver B1, C periprosthetic hip fractures with periprosthetic polyaxial locking plate system: A 3-year follow-up	209
G. Vadalà, F. Russo, M. Musumeci, A. Giacalone, R. Papalia and V. Denaro. Targeting VEGF-A in cartilage repair and regeneration: state of the art and perspectives	217