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Résumés des communications particulières

Mardi 8 novembre 2016, 8h00–10h00,
amphithéâtre Bordeaux
Communications particulières Hanche

1

Autologous osteoblastic cells (PREOBy) versus concentrated bone marrow implantation in osteonecrosis of the femoral head: A randomized study



Ostéoblastes autologues (PREOB) versus concentré de moelle autologue dans l'ostéonécrose de la tête fémorale : étude randomisée
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Background In non-traumatic osteonecrosis of the femoral head (ONFH), implantation of bone marrow concentrate (BMC) containing mesenchymal stem cells (MSC) could delay ONFH progression and improve symptoms (Hernigou 2002, Gangji 2004). The next step was to assess the hypothesis that a population of autologous osteoblastic cells (OB) consisting in a more differentiated cell than MSC, could be more efficacious than BMC in early stages ON.

Objectives To evaluate the efficacy of OB cells implantation in a randomized comparison with BMC implantation in precollapse ARCO stages ONFH. **Methods** In a randomized controlled single blind trial, hips were treated by a core decompression procedure followed by BMC or OB cells implantation. In the BMC group, 410.6 ± 84.9 mL of BM was concentrated to 41.8 ± 10.9 mL. In the OB group, MSC were isolated from BM aspirate (48.8 ± 17.7 mL), expanded and differentiated ex vivo under autologous conditions to obtain OB cells (18.6 ± 4.3 10⁶ cells). Hip pain, WOMAC score and x-rays were assessed at 24 and 36 months. The primary endpoint was the absence of progression to fractural stages and a significant pain improvement (responder).

Results From 72 hips randomized, 60 hips (30 group) were analyzed as the ITT efficacy cohort (50.6 ± 11.8 years). Baseline demographic data, risk factors, location and size of ON and

symptoms were not statistically different between groups. At 24 months, 70% versus 40% of hips ($P < 0.05$) and at 36 months, 60% versus 33% of hips ($P < 0.05$) in OB and BMC groups respectively were responders. The rate of progression to stage 3 or 4 was in favor of the OB group at 24 months, 20% versus 40% of hips (NS) and at 36 months, 20% versus 47% of hips ($P < 0.05$) in OB and BMC groups respectively progressed to stage 3 or 4. Pain decreased in the OB group compared to the BMC group at 24 months (NS) and 36 months ($P < 0.05$). Overall, 117 SAE (47 in the BMC group and 70 in the OB group) were reported of which 4% (5 SAE) were possibly related to the procedure or the cell therapy products.

Discussion OB cells seems able to improve ONFH better than BMC implantation. No difference was observed in the safety profiles of OB cells and BMC.

Conclusions OB cells (PREOBy) treatment seems to be more efficacious than BMC treatment to delay the evolution to subchondral fracture and to reduce pain in ONFH.

Disclosure of interest Consultant, expert : oui [Bone Therapeutics] détention d'un brevet ou inventeur d'un produit : oui [Bone Therapeutics].

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2

Traitement arthroscopique des conflits antérieurs de hanche par technique sans traction première. Résultats cliniques à 2 ans minimum de recul



Arthroscopic treatment of anterior hip impingements without primary traction. Clinical outcomes after a minimum of 2 years

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Introduction L'arthroscopie de hanche est une intervention dont la pratique augmente. Cependant, des complications dues à la traction peropératoire ont été rapportées avec parfois des conséquences graves en particulier l'atteinte du nerf pudendhal. Une technique arthroscopique sans traction première permettant l'abord du compartiment périphérique a été développée. Notre hypothèse était que cette technique permettrait de traiter le conflit de hanche en évitant les complications sus-citées. L'objectif