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Author Correction: *IL-1* β gene (+ 3954 C/T, exon 5, rs1143634) and *NOS2* (exon 22) polymorphisms associate with early aseptic loosening of arthroplasties

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The original version of this Article contained errors in reference citations in the Discussion section.

IL-1 and *TNF- α* genes are transcriptionally activated in patients and in experimental models of APL^{44–48}. *IL-1* and *TNF- α* activate bone-resorbing giant cells that can increase bone loss around implants, which is characteristic of APL⁴⁹. Osteoporotic fractures due to a reduction in the bone mineral density are associated with an 86-base pair repeat polymorphism in the *IL-1RN* gene⁵⁰. There is a linkage disequilibrium between *IL-1 α* , *IL-1 β* and *IL-1RN* genes, all of which are encoded very close to each other on the long arm of chromosome 2⁵¹. Thus, it is difficult to be sure whether these associations are specific for a particular gene in the *IL-1* family, or even depend on other unknown gene from the same chromosome. Some haplotypes of the *IL1R1-IL1A-IL1BIL1RN* gene cluster associated with enhancement to (*IL1A-IL1B-IL1RN* haplotype) or protection against knee osteoarthritis (*IL1B-IL1RN* haplotype)²⁰. Associations between polymorphisms in the *IL-1* gene and aseptic loosening have been studied in maxillofacial surgery. An association between carriage of the *IL-1 β* (+ 3954 C/T, exon 5) *T* allele and other *IL-1* polymorphisms and unsuccessful retaining overdentures and periodontitis in smokers and non-smokers was reported^{21,52–56}.

now reads:

IL-1 and *TNF- α* genes are transcriptionally activated in patients and in experimental models of APL^{44–47}. *IL-1* and *TNF- α* activate bone-resorbing giant cells that can increase bone loss around implants, which is characteristic of APL⁴⁸. Osteoporotic fractures due to a reduction in the bone mineral density are associated with an 86-base pair repeat polymorphism in the *IL-1RN* gene⁴⁹. There is a linkage disequilibrium between *IL-1 α* , *IL-1 β* and *IL-1RN* genes, all of which are encoded very close to each other on the long arm of chromosome 2⁵⁰. Thus, it is difficult to be sure whether these associations are specific for a particular gene in the *IL-1* family, or even depend on other unknown gene from the same chromosome. Some haplotypes of the *IL1R1-IL1A-IL1BIL1RN* gene cluster associated with enhancement to (*IL1A-IL1B-IL1RN* haplotype) or protection against knee osteoarthritis (*IL1B-IL1RN* haplotype)²⁰. Associations between polymorphisms in the *IL-1* gene and aseptic loosening have been studied in maxillofacial surgery. An association between carriage of the *IL-1 β* (+ 3954 C/T, exon 5) *T* allele and other *IL-1* polymorphisms and unsuccessful retaining overdentures and periodontitis in smokers and non-smokers was reported^{21,51–56}.

The original Article has been corrected.

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