Reviewer's report

Title: An experimental animal model of aseptic loosening of hip prostheses in sheep to study early biochemical changes at the interface membrane

Version: 1 Date: 12 December 2003

Reviewer: Seppo Santavirta

Reviewer's report:

General

The authors used a relevant experimental sheep model to study the local host response to well cemented hip prostheses and to such where the femoral periprosthetic cement mantle had a standardized defect. The interface membrane, as well as joint capsules was studied by means of producing cell cultures, at 2 and 8.5 months, this corresponding with early host response. The supernatants of the cultures were tested for the most important chemical/biological markes for implant loosening. Both the thickness and biological activity where increased in the group with defect cementation. The methods are elegant and the reporting reliable. This animal model including the biological markers used could well serve for studies focused on search of better prosthesis fixation.

Discretionary Revisions (which the author can choose to ignore)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

What next?: Accept without revision

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

none