

EV0263

ePoster Viewing

Skin, soft tissue, bone & joint & central nervous system infections

Where is the evidence? The role of microbiology in the treatment of medication-related osteonecrosis of the jaw (MRONJ)

James Mcdonald¹, Huma Changez¹, Andrew Smith¹, Pauline Wright²

¹*Glasgow Royal Infirmary, Microbiology, Glasgow, United Kingdom*

²*Queen Elizabeth University Hospital, Microbiology, Glasgow, United Kingdom*

Background: To review the current evidence regarding the microbiological aspects of MRONJ disease and its management including appropriate sampling, microbiological investigations, optimal antimicrobial choice and duration and outcome measures used to establish response to treatment.

Material/methods: A detailed search using The Knowledge Network was performed and databases including OVID (Medline, Embase), EBSCO collections (CINAHL), Cochrane Library, Pub Med (the US National Library of Medicine) and Google Scholar. The last date of final search was 20th December, 2014. Only articles in English were included in this review. Initial search identified 113 articles of which 18 articles were deemed relevant based on the objective of this literature review

Results: Optimum sampling techniques have not been clearly defined in any of the studies re-viewed. Actinomyces spp are the mostly commonly identified microorganisms from tissue and bone samples (in addition to other oral commensals) however, there is very little information available of how these samples were processed in the microbiology laboratory. Similarly, there was vast variation in the choice, route and duration of antimicrobials used. Follow-up periods and outcome measures used to establish response to treatment were also not clearly defined.

Conclusions: More robust studies are required to better understand not only the role of infection in this disease, but also, to standardise microbiological investigations and management of the infectious aspects of the disease in order to guide future therapeutic interventions.