

Oral Abstracts

Free Papers E

[O86] ANTIBIOTIC PROPHYLAXIS NOT INDICATED FOR DENTAL PROCEDURES IN PATIENTS WITH JOINT PROSTHESES: A NEW DUTCH GUIDELINE

Geert Walenkamp¹, Dirk Jan Moojen², Hans Hendriks³, Theo Goedendorp⁴, Willem Rademacher⁵, Fred Rozema⁵

¹Emeritus Dept Orthopedic Surgery, Maastricht University Medical Centre, Dutch Orthopedic Society, Maastricht, Netherlands

²Onze Lieve Vrouwe Hospital, Dutch Orthopedic Society, Amsterdam, Netherlands

³Dept Orthopedic Surgery Groot-Eindhoven, Dutch Orthopedic Society, Eindhoven, Netherlands

⁴Dental Practice Maarssen, Dutch Dental Society, Maarssen, Netherlands

⁵Acta Academic Dental Research Centre, Dutch Dental Society, Amsterdam, Netherlands

Aim: A previous Dutch guideline for prophylaxis of hematogenous PJI (HPJI) caused defensive medicine and incorrect own guidelines. There was a need for a better national guideline, developed cooperatively by orthopedic surgeons and dentist.

Method: A committee of Dutch Orthopedic and Dental Society, performed a systematic literature review to answer the question: *“Is there a difference in the risk for hematogenous infection between always or never giving antibiotic prophylaxis to patients with a joint prosthesis undergoing a dental procedure”*.

We included 9 papers as follows:

1. RCT's and systematic reviews: 539 abstracts > 33 full papers > 1 paper included.
2. observational studies: 289 abstracts > 12 full papers > 5 papers.
3. reference-to-reference: 3 papers.

The nine papers' quality was scored according the GRADE method.

In addition we studied in non-included literature on further information about additional questions of pathophysiology, risk factors and risk procedures.

Results: No evidence was found that prophylactic antibiotics have an effect on the incidence of HPJI (Grade score: very low).

We concluded from the non-included literature that:

1. Bacteremia in dental procedures is frequent, but even more frequent in daily life. The influence of antibiotics on bacteremia is uncertain.
2. There is no evidence that in the first 2 years after implantation the risk for HPJI is increased.
3. There is no evidence that “bleeding” during dental procedures is associated with more bacteremia.
4. The relation between decreased immune status and the risk for HPJI is unclear. Also in these patients the cumulative dose of bacteremia is much higher in daily life as compared with dental procedures.
5. A risk/benefit analysis could not be made, since the data are too uncertain of effectivity of antibiotics, incidence of HPJI and of side effects of antibiotics.
6. For the same reason a cost/effectivity analysis was not possible. Even reliable data are missing about the prevalence of joint prosthesis patients.

7. There are increasing data about the relation between the oral and general health. Therefore good oral hygiene and regular dental controls is advised.
8. We could not conclude if the prophylactic use of oral Chlorhexidine prior to a dental procedure has any positive influence on HPJI incidence.

Conclusions: the guideline states:

1. there is no indication for antibiotic prophylaxis in dental procedures
2. also not in case of decreased immunity
3. patients should be advised to maintain good oral hygiene and have regular dental control.