Safety and efficacy of Dalbavancin for treatment of periprosthetic Joint Infection: A retrospective multicentre cohort study. EP 380

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Conclusion:

- Dalbavancin was safe and effective for PJI patients.
- Clinical outcomes matched standard antibiotic regimens.
- No serious adverse events occurred.
- Different dosing regimens did not affect treatment success.

Patient characteristics		Causative bacteria	
No of patients	45	*Staphylococcus aureus*	6
Age (years)	78 [70-81]	Coagulase negative *staphylococcus*	11
Men (%)	47	Beta-haemolytic *streptococcus*	1
BMI [IQR]	27 [25-31]	*Corynebacterium striatum*	2
Type of infection		*Bacillus* spp	1
Acute hematogenous	7	*Peptoniphilus* spp	1
Early postoperative	29	Polymicrobial infection	11
Chronic	9	Polymicrobial w *S. aureus*	8
Type of operation		Culture negative	4
DAIR	33		
One stage	5		
Two stage	5		
Antibiotics only	1		
Missing data	1		
Affected joint			
Hips	30		
Knees	15		

Table1. Population characteristics, causative bacteria and surgery treatment. DAIR Debridement, Antibiotics and Implant Retention

Introduction and aim:

Dalbavancin is a second-generation glycopeptide with a long terminal half-life. Dalbavancin is potentially safer and easier to administrate compared to traditional antibiotics in the treatment of multi-resistant Gram-positive bacteria.
The study aimed to evaluate dalbavancin safety and efficacy for treatment of PJI in patients followed for one year.

Type of adverse event	No of patients	No of patients with co drug to dalbavancin
All adverse events	16	
Diarrhea	3	0
Vomiting	2	1 (rifampicin)
Rash	3	1 (rifampicin)
Itching	3	1 (rifampicin)
Elevetaed level of s-Kreatinin	1	1 (ciprofloxacin)
Fever/chills during infusion	2	0
Other	2	0
None reported	34	

Table 2. Reported adverse events during treatment with dalbavancin

Dosing schedule	No of patients (n=45)	No of doses of dalbavancin	Successful outcome of evaluated patients (n=42)
1,0/1,5 g followed by 0,5 g weekly	10	5 [3-6]	78%
1,0/1,5g followed by 1,0 g every 14 days	12	5 [5-6]	75%
1,5g x 1	3	1 [1-1]	67%
1,5g x 2	9	2 [2-2]	89%
> 2 doses of 1,5g	11	5 [3-7]	67%

Table 3. Dosing regimens of dalbavancin

Methods:

This was a retrospective cohort study conducted at two PJI referral centres in Sweden. Inclusion criteria were PJI of the hip or knee joint defined according to EBJIS criteria and treated with dalbavancin. Primary outcome was the absence of infection relapse one year after surgery.

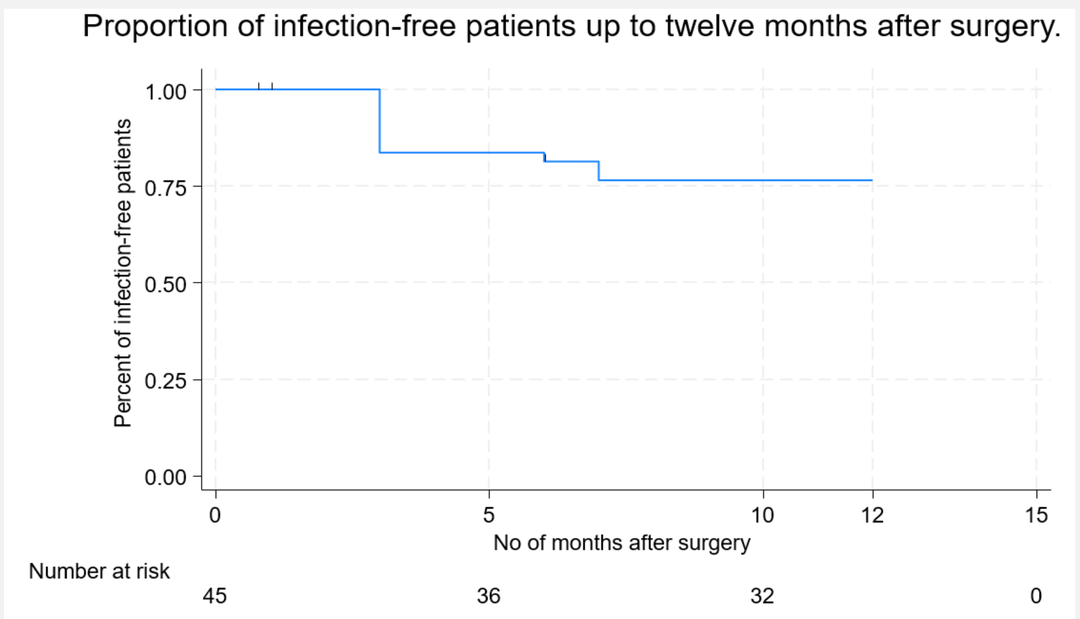

Figure 1. Graph showing outcome related to time, up to twelve months after surgery.

Results:

Forty-two patients were evaluated after one year (two patients lost to follow up, one new infection). 76 % were infection free. Outcome was not obviously affected by type of infection, type of surgery, causative bacteria or dalbavancin dosing regimen but numbers are small.

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