

Persistence of bacterial growth on antibiotic-loaded beads

Is it actually a problem?

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Table 1A: Patient data, primary surgical indications, and procedures in 15 cases of implantation of beads

Case	Age/ Gender	Primary surgical indication	Time period between primary surgery and manifestation of infection	Time period between manifestation of infection and implantation of beads	No. of revisions prior to implantation of beads	Antibiosis	Patient's general diseases
1	52/M	rotator cuff reconstruction	24 days	3 days	none	flucloxacillin clindamycin	diabetes mellitus
2	76/F	pilon tibiale fracture	6 months	10 weeks	none	vancomycin rifampicin	diabetes mellitus,renal

						clindamycin	insufficiency, hypertension
3	73/F	total knee arthroplasty	4.5 years	4 weeks	none	flucloxacillin clindamycin	hypertension, hypothyreosis
4	63/F	fibula fracture	7 months	20 months	2	ciprofloxacin piperacillin + tazobactam	glaucoma
5	17/F	ACL reconstruction	7 months	1 week	none	vancomycin flucloxacillin rifampicin	neurodermitis
6	71/M	total knee arthroplasty	15 days	4 days	1	cefuroxime gentamicin rifampicin clindamycin	hypertension, myelo- proliferative syndrome
7	59/M	chronic foot osteomyelitis	7 years	n.r.	1	flucloxacillin clindamycin vancomycin rifampicin linezolid	diabetes mellitus, NYHA III–IV, hypertension
8	58/M	femoral tumor prosthesis at thyroidal cancer	2 months	n.r.	1	vancomycin rifampicin linezolid	thyroidal cancer, penicillin allergy
9	52/M	total hip arthroplasty	4.5 years	4 weeks	none	cefuroxime vancomycin gentamicin levofloxacin linezolid	obesity, diabetes mellitus, hypertension
10	42/M	hematogenous shoulder and knee joint infection	1 day	1 week	none two times arthroscopic lavage	flucloxacillin clindamycin	hypertension, alcohol abuse
11	52/F	total hip arthroplasty	1 week	1 day	none	flucloxacillin clindamycin	endogene psychosis
12	71/M	chronic foot osteomyelitis	14 months	1 week	1	vancomycin ampicillin + sulbactame	hypertension, Non-Hodgkin lymphoma
13	81/F	chronic elbow osteomyelitis	1 year	1 day	none	cefuroxime flucloxacillin clindamycin ciprofloxacin moxifloxacin	osteoporosis, NYHA II, asthma bronchiale
14	41/F	dorsal spondylodesis	13 months	1 month	2	cefuroxime gentamicin cefuroxime	obesity, chronic hepatitis B, hypertension
15	40/F	dorsal spondylodesis	20 years	1 month	2	ciprofloxacin	renal pelvis plastic before 18 y.

n.r.: not relevant. [or some other explanation]

Table 1B: Data on impregnation of beads, implantation, and follow-up

Case	Impregnation of beads	Length of time beads were implanted	Number of beads implanted	Length of follow-up (months)
1	gentamicin	5 months	1	8
2	gentamicin	3 months	1	10
3	gentamicin	3 months	1	38
4	gentamicin	3 weeks	1	14
5	gentamicin vancomycin	5 weeks	1	15
6	gentamicin (2x)	7 days 24 days	2	22
7	gentamicin vancomycin (2x)	5 months	1	11
8	gentamicin vancomycin	9 months	3	26
9	gentamicin	5 months	1	10
10	gentamicin (2x)	1 month	1 1	20
11	gentamicin vancomycin	1 month	1	14
12	gentamicin	1 month	1	6
13	gentamicin vancomycin	2 weeks	1	26
14	gentamicin	11 months	1	38
15	gentamicin vancomycin	7 days	1	2

