Sex	Age	Prior TBC	Psoas Abscess	Miliary TBC	Joint	Time From Surgery	Treatment	Months of treatment	Species	Surgery	Outcome	Reference
M	80	No	No	No	Hip	132	IRE (15)	15	BCG	DAIR	SUPRESSION	[1]
F	73	No	No	No	Knee	8	IREP (9)+IRP (3)	12	TBC	DAIR	CURE	[2]
F	75	No	No	No	Shoulder	3	IRP (2)+IR (7)	9	TBC	REVISION ARTHROPLASTY	CURE	[3]
M	37	No	No	No	Elbow	14	IREP (6)	6	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[4]
M	61	No	No	No	Hip	24			TBC	RESECTION ARTHROPLASTY	CURE	[5]
M	80	No	No	Yes	Knee	96	IREP (2)+IR (10)	12	TBC	NO	CURE	[6]
F	52	No	No	No	Hip	120	IR (15)	15	TBC	REVISION ARTHROPLASTY	CURE	[7]
F	44	No	No	No	Hip	276	IE (16)	16	TBC	RESECTION ARTHROPLASTY	CURE	[7]
F	52	Yes	No	No	Hip	24	IRE (6) + IE (18)	24	TBC	DAIR	CURE	[7]
M	74	Yes	No	No	Hip	36	IRE (3) + IR (9) + I (12)	24	TBC	DAIR	THERAPEUTIC FAILURE	[7]
F	55	Yes	No	No	Hip	24	IRES(6) + IR (33)	39	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[7]
M	60	Yes	No	No	Hip	12	IRE(7)+IE(2)+I(3)	12	TBC	RESECTION ARTHROPLASTY	CURE	[7]
M	60	No	No	No	Hip	360	IRE (1)+IR (18)	19	TBC	RESECTION ARTHROPLASTY	CURE	[7]
M	65	No	No	No	Knee	1			TBC	NO	CURE	[8]
F	55	No	No	No	Hip	24	IREP (4)+IR (13)	17	TBC	NO	CURE	[9]
F	47	Yes	No	No	Hip	36	IREP (3)+IR (3)	6	TBC	REVISION ARTHROPLASTY	CURE	[9]
M	70	No	No	No	Hip	12	IREP (2)+IR (6)	8	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[10]
M	77	Yes	No	Yes	Hip	18	RES (7)	7	TBC	REVISION ARTHROPLASTY	CURE	[11]
F	72	No	No	No	Knee	96	IRP (24)	24	TBC	ARTHRODESIS	CURE	[12]
M	79	No			Knee	120			TBC	REVISION ARTHROPLASTY		[13]
F	46	No	No	No	Hip	4	IRP (8)	8	TBC	NO	NO DATA	[14]
M	74	No	No	No	Hip	30			TBC	RESECTION ARTHROPLASTY	CURE	[15]
F	40	No	No	No	Hip	8			TBC	RESECTION ARTHROPLASTY	CURE	[15]
M	75	Yes	No	No	Hip	4	IRP (2)+IR (10)	12	TBC	REVISION ARTHROPLASTY	CURE	[16]

M	68	No	No	No	Wrist	24	IREP (2)+IR (12)	14	TBC	REVISION ARTHROPLASTY	CURE	[17]
F	92	No	No	No	Hip	36	IRE (1)+IE (8), L	9	TBC	REVISION ARTHROPLASTY	CURE	[17]
F	72	No	No	No	Hip	84	IRP (2)+IR (10)	12	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[17]
F	79	No	No	No	Hip	1	IRE (5)	5	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[17]
F	80	No	No	No	Knee	1	IRP (2)+IR (12)	14	TBC	2-STAGE REVISION ARTHROPLASTY	DIED (OTHER CAUSES)	[17]
M	77	No	No	No	Knee	96	IREP (2)+IRE (22)	24	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[18]
F	75	Yes	No	No	Knee	3	IREP (9)	9	TBC	DAIR	CURE	[19]
F	67	Yes	Yes	No	Hip	16	IREP (2)+IR (18)	20	TBC	DAIR	CURE	[20]
F	69	No	No	No	Hip	12			TBC	RESECTION ARTHROPLASTY	CURE	[21]
F	71	No	No	No	Hip	12	IRE (18)	18	TBC	NO	CURE	[21]
F	22	Yes	No	No	Hip	36	IRE (19)	19	TBC	DAIR	CURE	[21]
F	64	No	No	No	Hip	48		18	TBC	DAIR	CURE	[21]
F	75	No	No	No	Hip	120			TBC	RESECTION ARTHROPLASTY	CURE	[21]
F	77	No	No	Yes	Knee		IRP		TBC	NO	CURE	[22]
M	73	No	No	No	Knee	14	IREP (2)+IR (10)	12	TBC	REVISION ARTHROPLASTY	CURE	[23]
F	54	No	No	No	Hip	48	REPL (6)	6	TBC	DAIR	CURE	Present study
M	74	Yes	No	No	Knee	60	IREP (2)+IR (6)	8	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	Present study
M	76	Yes	No	No	Hip	96	IREL (3)+IR (12)	15	TBC	DAIR	CURE	Present study
M	47	No	No	No	Hip	1			TBC	1-STAGE EXCHANGE	CURE	Present study
M	87	No	No	No	Hip	10	IREP		TBC	NO	DIED (OTHER)	Present study
F	76	No	No	No	Hip	2	IRP (2)+IR (7)	9	TBC	RESECTION ARTHROPLASTY	CURE	Present study
F	86	Yes	No	No	Hip	2	IRP (2)+IR (9)	11	TBC	NO	CURE	Present study
F	64	Yes	No	No	Knee	3	IREP (2)+IR (6)	8	TBC	1-STAGE EXCHANGE	CURE	Present study
F	87	No	No	No	Hip	3	IREPAL		TBC	DAIR	CURE	Present study
F	70	No	No	No	Hip	6	IREP (2)+1R (10)	12	TBC	DAIR	CURE	Present study

F	81	No	No	No	Hip	12		12	TBC	1-STAGE EXCHANGE	CURE	Present study
F	59	No	No	No	Hip			14		1-STAGE EXCHANGE	CURE	Present study
F	71	No	No	No	Hip			12		1-STAGE EXCHANGE	CURE	Present study
M	81	No	No	No	Hip	132	IREP (3)+RP (5)	8	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	Present study
F	82	No	No	No	Hip	60	IRPL (4)+IP (8)	12	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	Present study
M	47	Yes	No	No	Knee	18	IRE (12)	12	TBC	DAIR	CURE	[24]
M	78	No	No	No	Hip	6	IRE (3)+IR (6)	9	TBC	RESECTION ARTHROPLASTY	CURE	[25]
M	67	No	No	Yes	Knee	1	IRE (6)+IR (6)	12	TBC	NO	CURE	[26]
M	77	No	No	No	Hip	216	IRE (12)	12	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[27]
M	82	No	No	No	Hip	120	IREP+IR (12)	12	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[28]
M	66	No	No	No	Hip	60	IR (6)	6	BCG	REVISION ARTHROPLASTY	DIED (OTHER CAUSES)	[29]
F	60	Yes	No	No	Knee	7	IREP (12)+IR (9)	21	TBC	REVISION ARTHROPLASTY	CURE	[30]
F	78	No	No	No	Hip	5	IR		TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[31]
M	27	Yes	No	No	Hip	3	IE		TBC	RESECTION ARTHROPLASTY	CURE	[32]
M	71	Yes	No	No	Hip	5	IRE (12), P	12	TBC	DAIR	CURE	[33]
F	54	No	No	No	Hip	108	IE		TBC	RESECTION ARTHROPLASTY	CURE	[34]
F	79	No	No	No	Knee	31	IEP		TBC	DAIR	RELAPSE	[34]
M	49	No	No	No	Hip	120	IRP+C/O		TBC	2-STAGE REVISION ARTHROPLASTY		[34]
M	83	No	No	No	Knee	10	IRE		TBC	DAIR	CURE	[34]
M	61	No	No	No	Hip	7	IRE		TBC	RESECTION ARTHROPLASTY	CURE	[34]
F	48	Yes	No	No	Hip	420	NO ANTIBIOTIC		TBC	GIRDLESTONE	CURE	[35]
F	51	Yes	No	No	Hip	492	IRE		TBC	NO	CURE	[35]
F	85	No	No	No	Knee	1			TBC	NO	CURE	[36]
F	72	No	No	Yes	Hip	108	IEP		TBC	RESECTION ARTHROPLASTY	CURE	[37]

F	75	No	No	No	Knee	3	IE (18), R	18	TBC	RESECTION ARTHROPLASTY	CURE	[38]
F	36	Yes	No	No	Knee	11	IREPM (19)	19	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[39]
F	67	Yes	No	No	Hip	2	IRSP (3)+IR (9)	12	TBC	REVISION ARTHROPLASTY	CURE	[40]
F	66	No	No	No	Hip	48	IRP (9), R	9	TBC	REVISION ARTHROPLASTY	CURE	[41]
F	73	No	No	Yes	Shoulder	2	IREL (2)+IL (10)	12	BOV	RESECTION ARTHROPLASTY	DIED (OTHER CAUSES)	[42]
F	77	No	No	No	Knee	36	IRPM (2)+IR (9)	11	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[43]
M	84	No	No	No	Knee	72	RE		BCG	GIRDLESTONE	CURE	[44]
M	74	No	No	No	Shoulder	444	IREP (2)+IR (8)	10	TBC	RESECTION ARTHROPLASTY	CURE	[45]
F	79	No	No	No	Knee	2	IREP (12)	12	TBC	DAIR	CURE	[46]
F	81	No	No	Yes	Hip	48	IRS (4)+IR (32)	36	TBC	RESECTION ARTHROPLASTY	CURE	[47]
F	70	No	No	No	Hip	8			TBC	NO	CURE	[48]
F	49	No	No	No	Hip	8			TBC	NO	CURE	[48]
M	50	No	No	No	Hip	36	IREP (2)+IR (10)	12	TBC	REVISION ARTHROPLASTY	CURE	[49]
F	71	No	No	No	Hip	2	IRE (2)+IR (10)	12	TBC	REVISION ARTHROPLASTY	CURE	[49]
F	75	No	No	No	Knee	180	IREP (1)+IEP (4)+IP (1)	6	TBC	RESECTION ARTHROPLASTY	DIED	[50]
M	64	No	No	No	Hip	3	IREP (2)+IRE (8)+IR (8)	18	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[51]
F	71	Yes	No	No	Hip	24	NO ANTIBIOTIC		TBC	GIRDLESTONE	CURE	[52]
M	66	No	No	No	Knee	2	IRP (6)	6	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[53]
F	65	Yes	No	Yes	Knee	3	IRP (6)	6	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[53]
F	77	No	No	No	Knee	4	IEP (8)	8	TBC	DAIR	CURE	[53]
M	48	No	No	Yes	Knee	9	IREPM (1)	1	TBC	NO	DIED	[54]
F	77	Yes	No	No	Hip	84	IRS (2)+IR (16)	18	TBC	DAIR	CURE	[55]
M		No			Hip	1			TBC	NO		[56]
M	70	No	No	No	Hip	144	IREM (1)+IRE (11)	12	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[57]

F	32	No	No	No	Hip	60	ACP (2)+P (2)	4	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[58]
M	80	No	No	No	Hip	12	IREP (2)+IR (16)	18	TBC	NO	CURE	[59]
M	69	No	No	Yes	Hip	12	IREP (2)+IR (16)	18	TBC	NO	CURE	[59]
F	64	No	No	No	Hip	12	IREP (2)+IR (16)	18	TBC	NO	CURE	[59]
F	83	No	No	No	Hip	12			TBC	NO	LOST	[59]
M	56	Yes	No	No	Hip	24	IREP (2)+IR (10)	12	TBC	REVISION ARTHROPLASTY	CURE	[59]
M	86	No	No	Yes	Hip	42	IREP (2)+IR (13)	15	TBC	NO	CURE	[59]
M	84	No	No	No	Hip	84	IREP (2)+IR (12)	14	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[59]
M	59	No	No	Yes	Hip	156	IREP (2)+IR (10)	12	TBC	REVISION ARTHROPLASTY	CURE	[59]
F	84	Yes	No	No	Hip	240	IREP (2)+IR (13)	15	TBC	NO	CURE	[59]
M	37	No	No	No	Hip	12			TBC	RESECTION ARTHROPLASTY		[60]
F	82	No	No	Yes	Hip	24	IREP (2)+IR		TBC	NO	CURE	[61]
F	73	No	No	No	Knee	168	IREP (4)+IRP (3)+IR (11)	18	TBC	NO	CURE	[62]
M	90	No	No	No	Hip	372	IREP (2)+IRE (10)	12	BCG	DAIR	CURE	[63]
M	64	No			Hip	24			TBC	REVISION ARTHROPLASTY		[64]
M	91	No	No	No	Hip	204	IRE (2)+IR (10)	12	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[65]
M	84	No	No	No	Hip	1	IREP (2)+IR (7)	9	TBC	NO	CURE	[66]
F	82	No	No	No	Hip	1	IRP (2)+IR (2)	4	TBC	REVISION ARTHROPLASTY	LOST	[66]
M	86	No	No	No	Hip	120	IRP (6)+IR (6)+ I(12)	24	BCG	REVISION ARTHROPLASTY	CURE	[67]
M	66	No	No	No	Hip	60	IR (12)	12	BCG	DAIR	CURE	[68]
M	79	No	No	No	Hip	18	IREM (6)	6	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[69]
M	76	No	No	No	Knee	216	IRE (24)	24	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[70]
		Yes			Hip	34			TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[71]
		No			Knee	34			TBC	NO	DIED	[71]
		No			Hip	34			TBC	DAIR	CURE	[71]

		Yes			Hip	34			TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[71]
		Yes			Hip	34			TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[71]
F	59	No	No	No	Hip	15	REP (12)	12	TBC	DAIR	CURE	[72]
F	70	No	No	No	Knee	54	RE (12), I	12	TBC	DAIR	CURE	[13]
M	76	No	No	No	Hip	72	IRE	9	BCG	2-STAGE REVISION ARTHROPLASTY	CURE	[73]
M	86	No	No	No	Shoulder	24	REL (1)	1	BCG	REVISION ARTHROPLASTY	DIED (OTHER CAUSES)	[73]
M	66	No	No	No	Hip	324	IRE (6)	6	BCG	REVISION ARTHROPLASTY	CURE	[74]
F	74	Yes	No	Yes	Knee	12	IRE (14)	14	TBC	DAIR	RELAPSE	[75]
M	68	Yes	No	No	Knee	1	IRE (14)	14	TBC	NO	RELAPSE	[75]
M	70	Yes	No	No	Knee	2	IRE (14)	14	TBC	NO	RELAPSE	[75]
F	61	Yes	No	No	Knee	6	IRE (14)	14	TBC	NO	RELAPSE	[75]
M	55	No	No	No	Knee	1	IREP (2)+IR (10)	12	TBC	NO	CURE	[76]
F	72	No	No	No	Hip	36	IR (12)	12	TBC	RESECTION ARTHROPLASTY		[77]
F	70	No	No	No	Knee	456	IR (12)	12	TBC	RESECTION ARTHROPLASTY	CURE	[77]
F	71	Yes	No	No	Knee	20	IE (18)	18	TBC	RESECTION ARTHROPLASTY	CURE	[77]
M	62	No	No	Yes	Hip	18	IRP (24)	24	TBC	REVISION ARTHROPLASTY	CURE	[78]
M	40	No	No	Yes	Hip	180	IRE (12)	12	TBC	RESECTION ARTHROPLASTY	CURE	[78]
M	61	No	No	No	Hip	24	IRE (3)+IR (6)	9	TBC	DAIR	CURE	[79]
F	84	No	No	No	Knee	36	IREP (2)+IR (10)	12	TBC	NO	CURE	[79]
M	79	Yes	No	No	Hip	48	IREP (1)+REP (3)+RP (11)	15	TBC	REVISION ARTHROPLASTY	DIED (OTHER CAUSES)	[79]
M	60	Yes	No	No	Hip	60	IRE (14)+IR (4)	18	TBC	NO	CURE	[79]
M	79	Yes	No	Yes	Knee	84	IREP (2)+IR (10)	12	TBC	NO	CURE	[79]
M	86	No	No	No	Knee	108	IREO (4)+IRO (2)	6	TBC	RESECTION ARTHROPLASTY	CURE	[79]
F	82	No	No	No	Knee	108	IRP (1)+IR (14)	15	TBC	RESECTION ARTHROPLASTY	CURE	[79]
M	69	Yes	No	No	Hip	120	IREP (6)+IR (18)	24	TBC	REVISION ARTHROPLASTY	CURE	[79]
M	84	Yes	No	Yes	Knee	156	IRE (2)+IR (7)	9	TBC	DAIR	DIED (OTHER CAUSES)	[79]

F	85	No	No	No	Knee	168	IREP (1)+IRE (1)+ IR (10)	12	TBC	RESECTION ARTHROPLASTY	CURE	[79]
M	71	Yes	No	Yes	Hip	240	NO ANTIBIOTIC		TBC	NO	DIED BEFORE DX	[79]
F	81	No	No	Yes	Hip	5	IREP (2)+IR (15)	17	TBC	DAIR	CURE	[79]
F	64	No	No	No	Shoulder	6	IRP (2)+IR (30)	32	TBC	DAIR	CURE	[79]
F	27		NO	NO	Knee	36	IREP (2)+IR (16)	18	TBC	DAIR	CURE	[80]
M	39	Yes	No	No	Hip	48	MR (31)	31	TBC	2-STAGE REVISION ARTHROPLASTY	CURE	[81]
F	84	No	No	No	Hip	6	IRP (12)	12	TBC	REVISION ARTHROPLASTY	CURE	[82]
F	84	No	No	No	Hip	4	IRP (12)	12	TBC	REVISION ARTHROPLASTY	CURE	[83]
M	67	No	No	Yes	Hip	24	IRE (18)	18	TBC	REVISION ARTHROPLASTY	CURE	[83]
M	61	No	No	No	Hip	48	IRP (18)	18	TBC	REVISION ARTHROPLASTY	CURE	[83]
M	35	No	No	Yes	Hip	12	IRE (12)	12	TBC	RESECTION ARTHROPLASTY	CURE	[83]
M	62	No	No	No	Knee	36	IRP (2)+IR (16)	18	TBC	DAIR	CURE	[84]
F	34	No	No	No	Knee	48	IREP (2)+IR (16)	18	TBC	NO	CURE	[84]
M	84	Yes	No	No	Knee	5	IREP (12)+IR (9)	21	TBC	REVISION ARTHROPLASTY	CURE	[85]
M	73	No	No	Yes	Hip	108	IREP (9)	9	TBC	RESECTION ARTHROPLASTY	CURE	[86]
M	72	Yes	No	Yes	Knee	36	IREP (1)	1	TBC	DAIR	DIED	[87]
M	70	No	No	No	Hip	108	IREM (3)+IRM (6)+IR (3)	12	BCG	REVISION ARTHROPLASTY	CURE	[88]
M	61	No	No	No	Knee	12	IR (24)	24	TBC	STAGED EXCHANGE	CURE	[89]
F	70	No	No	No	Hip	4			TBC	NO		[89]
M	62	No	No	No	Knee	1	IRE (12)	12	TBC	NO	CURE	[90]
M	63	No	No	No	Knee	1	IR (12)	12	TBC	NO	CURE	[90]
F	40		NO	NO	Knee	48			TBC	RESECTION ARTHROPLASTY	CURE	[91]

M: Male; F: Female. Prior TBC: Previous diagnosis of tuberculosis. I: Isoniazid; R: Rifampin; E: Ethambutol; P: Pyrazinamide; S: Streptomycin; L: Levofloxacin; M: Moxifloxacin; C: Ciprofloxacin; O: Ofloxacin; A: Amikacin. TBC: *Mycobacterium tuberculosis*; BOV: *Mycobacterium bovis* subsp. *bovis*; BCG: *Mycobacterium bovis* BCG strain. DAIR: Debridement, Antibiotics, and Implant Retention.

References

1. Aitchison LP, Jayanetti V, Lindstrom ST, Sekel R. Myobacterium bovis peri-prosthetic hip infection with successful prosthesis retention following intravesical BCG therapy for bladder carcinoma. Australas Med J 2015;8:307–14. doi: 10.4066/AMJ.2015.2475

2. Al-Shaikh R, Goodman SB. Delayed-onset Mycobacterium tuberculosis infection with staphylococcal superinfection after total knee replacement. Am J Orthop (Belle Mead NJ) 2003;32:302–5.

3. Amouyel T, Gaeremynck P, Gadisseux B, Saab M, Senneville E, Maynou C. Mycobacterium tuberculosis infection of reverse shoulder arthroplasty: a case report. J Shoulder Elbow Surg 2019;28:e271–4. doi: 10.1016/j.jse.2019.04.052

4. Asopa V, Wallace AL. Case report: Management of occult tuberculosis infection by 2-stage arthroplasty of the elbow. J Shoulder Elbow Surg 2004;13:364–5. doi: 10.1016/j.jse.2003.12.012

5. Baldini N, Toni A, Greggi T, Giunti A. Deep sepsis from Mycobacterium tuberculosis after total hip replacement. Case report. Arch Orthop Trauma Surg (1978) 1988;107:186–8. doi: 10.1007/BF00451602

6. Barry M, Akkielah L, Askar MA, Bin Nasser AS. Miliary tuberculosis with delayed-onset total knee arthroplasty Mycobacteria tuberculosis infection successfully treated with medical therapy alone: A case report and literature review. Knee 2019;26:1152–8. doi: 10.1016/j.knee.2019.07.010

7. Berbari EF, Hanssen AD, Duffy MC, Steckelberg JM, Osmon DR. Prosthetic joint infection due to Mycobacterium tuberculosis: a case series and review of the literature. Am J Orthop (Belle Mead NJ) 1998;27:219–27.

8. Besser MI. Total knee replacement in unsuspected tuberculosis of the joint. Br Med J 1980 14;280:1434. doi: 10.1136/bmj.280.6229.1434

9. Bernard L, Arvieux C, Brunschweiler B, Touchais S, Ansart S, Bru J-P, et al. Antibiotic Therapy for 6 or 12 Weeks for Prosthetic Joint Infection. N Engl J Med 2021 27;384:1991–2001. doi: 10.1056/NEJMoa2020198

10. Brown A, Grubbs P, Mongey A-B. Infection of total hip prosthesis by Mycobacterium tuberculosis and Mycobacterium chelonae in a patient with rheumatoid arthritis. Clin Rheumatol 2008;27:543–5. doi: 10.1007/s10067-007-0788-6

11. Bruns J, Luessenhop S, Behrens P. Haematogenous tuberculous infection following revision of a loosened total hip replacement. Langenbecks Arch Surg 1998;383:265–8. doi: 10.1007/s004230050130

12. Bryan WJ, Doherty JH, Sculco TP. Tuberculosis in a rheumatoid patient. A case report. Clin Orthop Relat Res 1982;206–8.

13. Spinner RJ, Sexton DJ, Goldner RD, Levin LS. Periprosthetic infections due to Mycobacterium tuberculosis in patients with no prior history of tuberculosis. J Arthroplasty 1996;11:217–22. doi: 10.1016/s0883-5403(05)80023-3

14. Cansü E, Erdogan F, Ulusam AO. Incision infection with Mycobacterium tuberculosis after total hip arthroplasty without any primary tuberculosis focus. J Arthroplasty 2011;26:505.e1-3. doi: 10.1016/j.arth.2009.11.025

15. Carbon C, Brion NV, Darcy M, Thomas M, Lamotte-Barrillon S. [Tuberculous infection of total hip prosthesis: report on two cases (author's transl)]. Ann Med Interne (Paris) 1981;132:124–5.

16. Carlsson AS, Sanzén L, Mikulowski P. Bilateral tuberculous infection of replaced hips--reactivation 54 years after infection in one knee. Acta Orthop Scand 1997;68:74–6. doi: 10.3109/17453679709003982

17. Carrega G, Bartolacci V, Burastero G, Finocchio GC, Ronca A, Riccio G. Prosthetic joint infections due to Mycobacterium tuberculosis: A report of 5 cases. Int J Surg Case Rep 2013;4:178–81. doi: 10.1016/j.ijscr.2012.11.011

18. Chazerain P, Desplaces N, Mamoudy P, Leonard P, Ziza JM. Prosthetic total knee infection with a bacillus Calmette Guerin (BCG) strain after BCG therapy for bladder cancer. J Rheumatol 1993;20:2171–2.

19. de Haan J, Vreeling AWJ, van Hellemondt GG. Reactivation of ancient joint tuberculosis of the knee following total knee arthroplasty after 61 years: a case report. Knee 2008;15:336–8. doi: 10.1016/j.knee.2008.03.004

20. De Nardo P, Corpolongo A, Conte A, Gentilotti E, Narciso P. Total hip replacement infected with Mycobacterium tuberculosis complicated by Addison disease and psoas muscle abscess: a case report. J Med Case Rep 2012 10;6:3. doi: 10.1186/1752-1947-6-3

21. Delrieu F, Slaoui O, Evrard J, Amor B, Postel M, Kerboull M. [Mycobacterial infection of the hip following total prosthesis. Study of 6 cases]. Rev Rhum Mal Osteoartic 1986;53:113–8.

22. Egües Dubuc C, Uriarte Ecenarro M, Errazquin Aguirre N, Belzunegui Otano J. Prosthesis infection by Mycobacterium tuberculosis in a patient with rheumatoid arthritis: A case report and literature review. Reumatol Clin 2014;10:347–9. doi: 10.1016/j.reuma.2014.02.003

23. Elzein FE, Haris M, Alolayan SS, Al Sherbini N. Total knee prosthesis infected with Mycobacterium tuberculosis. BMJ Case Rep 2017 7;2017:bcr2017220596, bcr-2017–220596. doi: 10.1136/bcr-2017-220596

24. Eskola A, Santavirta S, Konttinen YT, Tallroth K, Lindholm ST. Arthroplasty for old tuberculosis of the knee. J Bone Joint Surg Br 1988;70:767–9. doi: 10.1302/0301-620X.70B5.3192576

25. Fernández-Valencia JA, García S, Riba J. Presumptive infection of a total hip prosthesis by Mycobacterium tuberculosis: a case report. Acta Orthop Belg 2003;69:193–6.

26. Gale DW, Harding ML. Total knee arthroplasty in the presence of active tuberculosis. J Bone Joint Surg Br 1991;73:1006–7. doi: 10.1302/0301-620X.73B6.1955424

27. Goedertier W, Sioen W. Prosthetic joint infection due to Mycobacterium bovis 5-years after BCG-instillations. Acta Orthop Belg 2020;86:239–42.

28. Gomez E, Chiang T, Louie T, Ponnapalli M, Eng R, Huang DB. Prosthetic Joint Infection due to Mycobacterium bovis after Intravesical Instillation of Bacillus Calmette-Guerin (BCG). Int J Microbiol 2009;2009:527208. doi: 10.1155/2009/527208

29. Guerra CE, Betts RF, O'Keefe RJ, Shilling JW. Mycobacterium bovis osteomyelitis involving a hip arthroplasty after intravesicular bacille Calmette-Guérin for bladder cancer. Clin Infect Dis 1998;27:639–40. doi: 10.1086/514714

30. Harwin SF, Banerjee S, Issa K, Kapadia BH, Pivec R, Khanuja HS, et al. Tubercular prosthetic knee joint infection. Orthopedics 2013;36:e1464-1469. doi: 10.3928/01477447-20131021-35

31. Hattrup SJ, Bhagia UT. Shoulder arthroplasty complicated by mycobacterium tuberculosis infection: a case report. J Shoulder Elbow Surg 2008;17:e5-7. doi: 10.1016/j.jse.2008.01.146

32. Hecht RH, Meyers MH, Thornhill-Joynes M, Montgomerie JZ. Reactivation of tuberculous infection following total joint replacement. A case report. J Bone Joint Surg Am 1983;65:1015–6.

33. Hugate R, Pellegrini VD. Reactivation of ancient tuberculous arthritis of the hip following total hip arthroplasty: a case report. J Bone Joint Surg Am 2002;84:101–5. doi: 10.2106/00004623-200201000-00015

34. Jitmuang A, Yuenyongviwat V, Charoencholvanich K, Chayakulkeeree M. Rapidly-growing mycobacterial infection: a recognized cause of early-onset prosthetic joint infection. BMC Infect Dis 2017 28;17:802. doi: 10.1186/s12879-017-2926-3

35. Johnson R, Barnes KL, Owen R. Reactivation of tuberculosis after total hip replacement. J Bone Joint Surg Br 1979;61-B:148–50. doi: 10.1302/0301-620X.61B2.438263

36. Kadakia AP, Williams R, Langkamer VG. Tuberculous infection in a total knee replacement performed for medial tibial plateau fracture: a case report. Acta Orthop Belg 2007;73:661–4.

37. Kaya M, Nagoya S, Yamashita T, Niiro N, Fujita M. Peri-prosthetic tuberculous infection of the hip in a patient with no previous history of tuberculosis. J Bone Joint Surg Br 2006;88:394–5. doi: 10.1302/0301-620X.88B3.17006

38. Khater FJ, Samnani IQ, Mehta JB, Moorman JP, Myers JW. Prosthetic joint infection by Mycobacterium tuberculosis: an unusual case report with literature review. South Med J 2007;100:66–9. doi: 10.1097/01.smj.0000232972.50186.4c

39. Klein GR, Jacquette GM. Prosthetic knee infection in the young immigrant patient--do not forget tuberculosis! J Arthroplasty 2012;27:1414.e1-4. doi: 10.1016/j.arth.2011.09.020

40. Krappel FA, Harland U. Failure of osteosynthesis and prosthetic joint infection due to Mycobacterium tuberculosis following a subtrochanteric fracture: a case report and review of the literature. Arch Orthop Trauma Surg 2000;120:470–2. doi: 10.1007/s004029900091

41. Kreder HJ, Davey JR. Total hip arthroplasty complicated by tuberculous infection. J Arthroplasty 1996;11:111–4. doi: 10.1016/s0883-5403(96)80169-0

42. Langlois ME, Ader F, Dumistrescu O, Servien E, Saison J, Ferry T, et al. Mycobacterium bovis prosthetic joint infection. Med Mal Infect 2016;46:445–8. doi: 10.1016/j.medmal.2016.07.005

43. Lara-Oya A, Liébana-Martos MC, Rodríguez-Granger J, Sampedro-Martínez A, Aliaga-Martínez L, Gutierrez-Fernández J, et al. [Tuberculous prosthetic knee joint infection: a case report and literature review]. Rev Esp Quimioter 2016;29:214–9.

44. Leach WJ, Halpin DS. Mycobacterium bovis infection of a total hip arthroplasty: a case report. J Bone Joint Surg Br 1993;75:661–2. doi: 10.1302/0301-620X.75B4.8331128

45. Lederman E, Kweon C, Chhabra A. Late Mycobacterium tuberculosis infection in the shoulder of an immunocompromised host after hemiarthroplasty: a case report. J Bone Joint Surg Am 2011 15;93:e67(1-4). doi: 10.2106/JBJS.J.00710

46. Lee C-L, Wei Y-S, Ho Y-J, Lee C-H. Postoperative Mycobacterium tuberculosis infection after total knee arthroplasty. Knee 2009;16:87–9. doi: 10.1016/j.knee.2008.09.006

47. Levin ML. Miliary tuberculosis masquerading as late infection in total hip replacement. Md Med J 1985;34:153–5.

48. Lin E, Oliver S, Caspi I, Ezra E, Bubis JJ, Nerubay J. Hip arthroplasty in quiescent mycobacterial infection of hip. Orthop Rev 1986;15:232–6.

49. Lo CKL, Chen L, Varma S, Wood GCA, Grant J, Wilson EW. Management of Mycobacterium tuberculosis Prosthetic Joint Infection: 2 Cases and Literature Review. Open Forum Infect Dis 2021;8:ofab451. doi: 10.1093/ofid/ofab451

50. Lusk RH, Wienke EC, Milligan TW, Albus TE. Tuberculous and foreign-body granulomatous reactions involving a total knee prosthesis. Arthritis Rheum 1995;38:1325–7. doi: 10.1002/art.1780380921

51. Mahale YJ, Aga N. Implant-associated mycobacterium tuberculosis infection following surgical management of fractures: a retrospective observational study. Bone Joint J 2015;97-B:1279–83. doi: 10.1302/0301-620X.97B9.35227

52. Maricevic A, Dogas Z, Goic-Barisić I, Barisić I. Reactivation of tuberculosis after total hip replacement - 58 years after primary infection. Wien Klin Wochenschr 2008;120:642–3. doi: 10.1007/s00508-008-1006-5

53. Marmor M, Parnes N, Dekel S. Tuberculosis infection complicating total knee arthroplasty: report of 3 cases and review of the literature. J Arthroplasty 2004;19:397–400. doi: 10.1016/j.arth.2003.10.015

54. Marschall J, Evison J-M, Droz S, Studer UC, Zimmerli S. Disseminated tuberculosis following total knee arthroplasty in an HIV patient. Infection 2008;36:274–8. doi: 10.1007/s15010-007-7011-1

55. McCullough CJ. Tuberculosis as a late complication of total hip replacement. Acta Orthop Scand 1977;48:508–10. doi: 10.3109/17453677708989739

56. McLaughlin RE, Allen JR. Total hip replacement in the previously infected hip. South Med J 1977;70:573–5. doi: 10.1097/00007611-197705000-00022

57. Metayer B, Menu P, Khatchatourian L, Preuss P, Dauty M, Fouasson-Chailloux A. Prosthetic joint infection with pseudo-tumoral aspect due to Mycobacterium bovis infection after Bacillus-Calmette-Guerin therapy. Ann Phys Rehabil Med 2018;61:62–4. doi: 10.1016/j.rehab.2017.08.001

58. Mete B, Yemisen N, Aydin S, Babacan M, Ozaras R, Erdogan F, et al. An unusual cause of prosthetic joint infection:: Mycobacterium tuberculosis. Journal of Microbiology and Infectious Diseases 2012;2:72–5. doi: 10.5799/AHINJS.02.2012.02.0046

59. Meyssonnier V, Zeller V, Malbos S, Heym B, Lhotellier L, Desplaces N, et al. Prosthetic joint infections due to Mycobacterium tuberculosis: A retrospective study. Joint Bone Spine 2019;86:239–43. doi: 10.1016/j.jbspin.2018.09.008

60. Mouterde P, Deburge A. [Tuberculous infection after total hip replacement. Report of a case (author's transl)]. Rev Chir Orthop Reparatrice Appar Mot 1978;64:171–4.

61. Moya Megías R, Fernández Roldán C, Constán Rodríguez J, Javier Martínez MR. Tuberculosis on joint prosthesis as a form of presentation of miliary tuberculosis. Enferm Infecc Microbiol Clin (Engl Ed) 2023;41:441–2. doi: 10.1016/j.eimce.2023.04.013

62. Neogi DS, Kumar A, Yadav CS, Singh S. Delayed periprosthetic tuberculosis after total knee replacement: is conservative treatment possible? Acta Orthop Belg 2009;75:136–40.

63. Nguyen M-VH, Giordani MM, Thompson GR. The double-edged sword - prosthetic joint infection following BCG treatment for bladder cancer: a case report. BMC Infect Dis 2019 18;19:331. doi: 10.1186/s12879-019-3951-1

64. Olsson SS. [Tuberculous infection after hip replacement]. Lakartidningen 1981 29;78:1890–1.

65. Patel A, Elzweig J. Mycobacterium bovis prosthetic joint infection following intravesical instillation of BCG for bladder cancer. BMJ Case Rep 2019 18;12:e231830. doi: 10.1136/bcr-2019-231830

66. Perez-Jorge C, Valdazo-Rojo M, Blanco-Garcia A, Esteban-Moreno J. Mycobacterium tuberculosis as cause of therapeutic failure in prosthetic joint infections. Enferm Infecc Microbiol Clin 2014;32:204–5. doi: 10.1016/j.eimc.2013.04.022

67. Reigstad O, Siewers P. A total hip replacement infected with mycobacterium bovis after intravesicular treatment with Bacille-Calmette-Guérin for bladder cancer. J Bone Joint Surg Br 2008;90:225–7. doi: 10.1302/0301-620X.90B2.20038

68. Rispler DT, Stirton JW, Gilde AK, Kane KR. Mycobacterium bovid infection of total knee arthroplasty after bacille Calmette-Guérin therapy for bladder cancer. Am J Orthop (Belle Mead NJ) 2015;44:E46-48.

69. Riste M, Davda P, Smith EG, Wyllie DH, Dedicoat M, Jog S, et al. Prosthetic hip joint infection by Bacillus Calmette-Guerin therapy following intravesical instillation for bladder cancer identified using whole-genome sequencing: a case report. BMC Infect Dis 2021 5;21:151. doi: 10.1186/s12879-021-05831-3

70. Segal A, Krauss ES. Infected total hip arthroplasty after intravesical bacillus Calmette-Guérin therapy. J Arthroplasty 2007;22:759–62. doi: 10.1016/j.arth.2006.07.010

71. Seng P, Honnorat E, Loffeier V, Drancourt M, Stein A. Mycobacterium tuberculosis and prosthetic joint infection. Lancet Infect Dis 2016;16:894. doi: 10.1016/S1473-3099(16)30149-9

72. Shanbhag V, Kotwal R, Gaitonde A, Singhal K. Total hip replacement infected with Mycobacterium tuberculosis. A case report with review of literature. Acta Orthop Belg 2007;73:268–74.

73. Srivastava A, Ostrander J, Martin S, Walter N. Mycobacterium bovis infection of total hip arthroplasty after intravesicular bacille Calmette-Guérin therapy. Am J Orthop (Belle Mead NJ) 2011;40:E226-228.

74. Stern R, Roscoe C, Misch EA. Mycobacterium bovis BCG osteoarticular infection complicating immune therapy for bladder cancer: a case report. J Bone Jt Infect 2021;6:107–10. doi: 10.5194/jbji-6-107-2021

75. Storandt M, Nagpal A. Prosthetic joint infection: an extremely rare complication of intravesicular BCG therapy. BMJ Case Rep 2019 10;12:e232809. doi: 10.1136/bcr-2019-232809

76. Su JY, Huang TL, Lin SY. Total knee arthroplasty in tuberculous arthritis. Clin Orthop Relat Res 1996;181–7. doi: 10.1097/00003086-199602000-00024

77. Tekin Koruk S, Sipahioğlu S, Calişir C. Periprosthetic tuberculosis of the knee joint treated with antituberculosis drugs: a case report. Acta Orthop Traumatol Turc 2013;47:440–3. doi: 10.3944/aott.2013.2511

78. Tokumoto JI, Follansbee SE, Jacobs RA. Prosthetic joint infection due to Mycobacterium tuberculosis: report of three cases. Clin Infect Dis 1995;21:134–6. doi: 10.1093/clinids/21.1.134

79. Ueng WN, Shih CH, Hseuh S. Pulmonary tuberculosis as a source of infection after total hip arthroplasty. A report of two cases. Int Orthop 1995;19:55–9. doi: 10.1007/BF00184916

80. Uhel F, Corvaisier G, Poinsignon Y, Chirouze C, Beraud G, Grossi O, et al. Mycobacterium tuberculosis prosthetic joint infections: A case series and literature review. J Infect 2019;78:27–34. doi: 10.1016/j.jinf.2018.08.008

81. Uppal S, Garg R. Tubercular infection presenting as sinus over ankle joint after knee replacement surgery. J Glob Infect Dis 2010;2:71–2. doi: 10.4103/0974-777X.59257

82. Upton A, Woodhouse A, Vaughan R, Newton S, Ellis-Pegler R. Evolution of central nervous system multidrug-resistant Mycobacterium tuberculosis and late relapse of cryptic prosthetic hip joint tuberculosis: complications during treatment of disseminated isoniazid-resistant tuberculosis in an immunocompromised host. J Clin Microbiol 2009;47:507–10. doi: 10.1128/JCM.01473-08

83. Van Le T, Duong TB, Hien KQ, Ton QNQ, Huyn T, Binh TP, et al. Two-stage revision for treatment of tuberculous prosthetic hip infection: an outcome analysis. Eur J Orthop Surg Traumatol 2023;33:645–51. doi: 10.1007/s00590-022-03317-9

84. Veloci S, Mencarini J, Lagi F, Beltrami G, Campanacci DA, Bartoloni A, et al. Tubercular prosthetic joint infection: two case reports and literature review. Infection 2018;46:55–68. doi: 10.1007/s15010-017-1085-1

85. von Keudell A, Nathavitharana R, Yassa D, Abdeen A. An unusual pathogen for prosthetic joint infection. Lancet Infect Dis 2016;16:506. doi: 10.1016/S1473-3099(15)00398-9

86. Walczak H. [ON THE TREATMENT OF DIFFERENT TYPES OF RHEUMATIC DISEASES IN PULMONARY TUBERCULOSIS AND LUNG TUMORS]. Z Tuberk Erkr Thoraxorg 1964;121:79–82.

87. Wang P-H, Shih K-S, Tsai C-C, Wang H-C. Pulmonary tuberculosis with delayed tuberculosis infection of total knee arthroplasty. J Formos Med Assoc 2007;106:82–5. doi: 10.1016/S0929-6646(09)60221-7

88. Williams A, Arnold B, Gwynne-Jones DP. Mycobacterium bovis infection of total hip arthroplasty after intravesicular Bacillus Calmette-Guérin. Arthroplast Today 2019;5:416–20. doi: 10.1016/j.artd.2019.08.004

89. Wolfgang GL. Tuberculosis joint infection following total knee arthroplasty. Clin Orthop Relat Res 1985;162–6.

90. Wray CC, Roy S. Arthroplasty in tuberculosis of the knee. Two cases of missed diagnosis. Acta Orthop Scand 1987;58:296–8. doi: 10.3109/17453678709146492

91. Zeiger LS, Watters W, Sherk H. Scintigraphic detection of prosthetic joint and soft tissue sepsis secondary to tuberculosis. Clin Nucl Med 1984;9:638–9. doi: 10.1097/00003072-198411000-00008