



Fig. E-1

Anteroposterior radiographs made before revision procedure. **Fig. E-1a** A BICON-PLUS acetabular cup with a metal-on-metal (MoM) bearing and an SL-PLUS stem, implanted in a seventy-two-year-old woman with osteoarthritis, was revised due to aseptic loosening of the acetabular component 6.5 years postoperatively, as shown in **Fig. E-1b** (Case 3, Table E-1). The MoM bearing was exchanged for a metal-on-cross-linked polyethylene bearing combination. **Fig. E-1c** A BICON-PLUS acetabular cup with ceramic-on-ceramic (CoC) bearing and SL-PLUS stem, implanted in a fifty-two-year-old woman with osteoarthritis, was revised due to aseptic loosening of the acetabular component eight years postoperatively, as shown in **Fig. E-1d** (Case 10, Table E-1). The CoC bearing was exchanged for a metal-on-polyethylene bearing combination.

TABLE E-1 Details of Individual Revision Cases

No.	Bearing*	Sex	Diagnosis at Index Operation†	Reason for Revision	In situ (yr)	Revised‡	Implanted*
1	MoM	F	OA	Aseptic loosening of the acetabular component	8.6	C+L+H	MoP
2	MoM	F	OA	Aseptic loosening of the acetabular component	9.1	C+L+H	MoP
3	MoM	F	OA	Aseptic loosening of the acetabular component	6.5	C+L+H	MoXLP
4	MoM	F	OA	Aseptic loosening of the acetabular component	2.4	C+L+H	MoP
5	MoM	F	OA	Aseptic loosening of both components	8.9	C+L+H+S	MoP
6	MoM	F	OA	Dislocation	7.7	L+H	MoP
7	MoP	F	OA	Aseptic loosening of the acetabular component	3.8	C+L+H	MoP
8	MoP	F	OA	Periprosthetic fracture	5.7	H+S	MoP
9	MoP	F	OA	Periprosthetic fracture	0.02	C+L+H	MoP
10	CoC	F	OA	Aseptic loosening of the acetabular component	8.0	C+L+H	MoP
11	CoC	M	OA	Aseptic loosening of the acetabular component	4.4	C+L+H	MoP
12	CoC	M	Trauma	Fracture of the ceramic head; no trauma	2.1	L+H	MoP
13	CoC	F	ONFH	Fracture of the ceramic head; no trauma	6.6	L+H	MoP
14	CoC	M	ONFH	Fracture of the ceramic inlay; fall	5.0	L+H	CoP
15	CoC	M	PT	Fracture of the ceramic inlay; fall	2.4	C+L+H	MoP
16	CoC	F	OA	Dislocation	0.2	H	CoC
17	CoC	M	OA	Fracture of the metal base-plate	7.8	C+L+H	MoXLP
18	CoC	M	OA	Infection	0.4	C+L+H+S	Girdl.

*MoM = metal-on-metal, MoP = metal-on-polyethylene, MoXLP = metal-on-cross-linked-polyethylene, CoP = ceramic-on-polyethylene, CoC = ceramic-on-ceramic bearings, Girdl. = Girdlestone operation. †OA = osteoarthritis, ONFH = osteonecrosis of the femoral head, PT = posttraumatic disorder. ‡C = metal cup, L = polyethylene liner with metal inlay, H = head, S = stem.