



Fig. E-1

Example of an adapter still connected to the stem after revision (left). After disassembly, severe corrosion was visible on the stem taper and the female adapter taper (right). The distal part of the female adapter taper (middle right) showed thicker oxide layers than the proximal part (bottom right).



Fig. E-2

All thirteen female adapter taper samples with severe corrosion.

**TABLE E-1 Demographic and Surgical Data**

| Case | Sex, Age at Revision (yr) | Duration in Vivo (mo) | Side | Approach* | Body Mass Index (kg/m <sup>2</sup> ) | Reason for Revision† | Procedure‡ |
|------|---------------------------|-----------------------|------|-----------|--------------------------------------|----------------------|------------|
| 1    | F, 62                     | 64                    | R    | 1         | 26                                   | 1                    | 1          |
| 2    | M, 69                     | 57                    | L    | 1         | 28                                   | 2                    | 2          |
| 3    | F, 66                     | 34                    | R    | 2         | 29                                   | 2                    | 2          |
| 4    | F, 64                     | 46                    | R    | 1         | 27                                   | 1                    | 3          |
| 5    | M, 44                     | 18                    | L    | 2         | 24                                   | 5                    | 1          |
| 6    | F, 70                     | 37                    | L    | 1         | 19                                   | 2                    | 3          |
| 7    | F, 68                     | 60                    | L    | 2         | 24                                   | 2                    | 1          |
| 8    | M, 63                     | 38                    | R    | 2         | 29                                   | 2                    | 3          |
| 9    | F, 68                     | 22                    | L    | 2         | 40                                   | 1                    | 1          |
| 10   | M, 50                     | 31                    | R    | 2         | 28                                   | 1                    | 3          |
| 11   | F, 58                     | 26                    | L    | 2         | 26                                   | 2                    | 3          |
| 12   | F, 65                     | 25                    | R    | 2         | 29                                   | 2                    | 3          |
| 13   | F, 56                     | 11                    | R    | 2         | 36                                   | 1                    | 2          |
| 14   | F, 52                     | 40                    | R    | 2         | 31                                   | 2                    | 3          |
| 15   | M, 62                     | 50                    | L    | 2         | 29                                   | 2                    | 5          |
| 16   | F, 59                     | 62                    | R    | 2         | 25                                   | 2                    | 2          |
| 17   | F, 75                     | 59                    | R    | 2         | 24                                   | 5                    | 4          |
| 18   | F, 70                     | 15                    | L    | 2         | 29                                   | 2                    | 2          |
| 19   | F, 56                     | 35                    | L    | 1         | 24                                   | 2                    | 1          |
| 20   | M, 65                     | 56                    | L    | 1         | 30                                   | 1                    | 3          |
| 21   | F, 69                     | 52                    | R    | 2         | 28                                   | 3                    | 2          |
| 22   | F, 67                     | 53                    | L    | 2         | 32                                   | 5                    | 1          |
| 23   | F, 43                     | 63                    | R    | 2         | 26                                   | 5                    | 2          |
| 24   | F, 58                     | 35                    | L    | 2         | 40                                   | 2                    | 3          |
| 25   | F, 70                     | 74                    | L    | 1         | 31                                   | 1                    | 5          |
| 26   | M, 66                     | 29                    | L    | 1         | 22                                   | 2                    | 1          |
| 27   | M, 54                     | 34                    | R    | 2         | 24                                   | 5                    | 3          |
| 28   | F, 62                     | 17                    | R    | 1         | 31                                   | 1                    | 1          |
| 29   | F, 56                     | 77                    | R    | 2         | 28                                   | 2                    | 2          |
| 30   | M, 65                     | 58                    | R    | 2         | 30                                   | 2                    | 1          |
| 31   | F, 58                     | 37                    | R    | 1         | 26                                   | 1                    | 1          |
| 32   | F, 64                     | 47                    | R    | 1         | 24                                   | 1                    | 3          |
| 33   | M, 56                     | 20                    | L    | 1         | 27                                   | 2                    | 1          |
| 34   | M, 46                     | 26                    | L    | 2         | 27                                   | 4                    | 3          |
| 35   | M, 68                     | 78                    | R    | 2         | 26                                   | 2                    | 1          |
| 36   | F, 63                     | 34                    | R    | 1         | 23                                   | 2                    | 1          |
| 37   | F, 55                     | 56                    | R    | 2         | 22                                   | 2                    | 2          |
| 38   | F, 67                     | 44                    | R    | 2         | 43                                   | 1                    | 1          |
| 39   | F, 64                     | 49                    | R    | 2         | 24                                   | 2                    | 2          |
| 40   | F, 60                     | 38                    | R    | 2         | 28                                   | 1                    | 2          |
| 41   | M, 69                     | 75                    | R    | 2         | 29                                   | 2                    | 1          |
| 42   | F, 64                     | 59                    | R    | 2         | 31                                   | 2                    | 2          |
| 43   | F, 57                     | 21                    | R    | 2         | 35                                   | 3                    | 1          |

\*1 indicates a lateral approach and 2, posterolateral approach. †1 indicates pain; 2, tumor; 3, other tissue reaction; 4, metallosis; and 5, loosening of stem or cup.  
 ‡1 indicates metal-on-metal unilateral hip arthroplasty; 2, metal-on-metal bilateral hip arthroplasty; 3, metal-on-metal and conventional total hip arthroplasty; 4, metal-on-metal bilateral hip arthroplasty and bilateral total knee arthroplasty; and 5, metal-on-metal and conventional total hip arthroplasty and unilateral total knee arthroplasty.