

# Material loss at the taper junction of retrieved large head replacements

Journal of Orthopaedic Research

31, 1677-1685

DOI: [10.1002/jor.22431](https://doi.org/10.1002/jor.22431)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Does taper angle clearance influence fretting and corrosion damage at the headâ€“stem interface? A matched cohort retrieval study. <i>Seminars in Arthroplasty</i> , 2013, 24, 246-254.	0.3	61
2	Wear patterns of taper connections in retrieved large diameter metalâ€“metal bearings. <i>Journal of Orthopaedic Research</i> , 2013, 31, 1116-1122.	1.2	101
3	Trunnionosis: A pain in the neck. <i>World Journal of Orthopedics</i> , 2013, 4, 161.	0.8	64
4	Do Retrieval Analysis and Blood Metal Measurements Contribute to Our Understanding of Adverse Local Tissue Reactions?. <i>Clinical Orthopaedics and Related Research</i> , 2014, 472, 3718-3727.	0.7	41
5	What is the Trouble With Trunnions?. <i>Clinical Orthopaedics and Related Research</i> , 2014, 472, 3652-3658.	0.7	110
6	The Relation Between Titanium Taper Corrosion and Cobalt-Chromium Bearing Wear in Large-Head Metal-on-Metal Total Hip Prostheses. <i>Journal of Bone and Joint Surgery - Series A</i> , 2014, 96, e157.	1.4	54
7	The Reliability of a Scoring System for Corrosion and Fretting, and Its Relationship to Material Loss of Tapered, Modular Junctions of Retrieved Hip Implants. <i>Journal of Arthroplasty</i> , 2014, 29, 1313-1317.	1.5	68
8	Utility of Modular Implants in Primary Total Hip Arthroplasty. <i>Journal of Arthroplasty</i> , 2014, 29, 657-658.	1.5	12
9	The Local Effects of Metal Corrosion in Total Hip Arthroplasty. <i>Orthopedic Clinics of North America</i> , 2014, 45, 9-18.	0.5	39
10	Repeated metal ion measurements in patients with high risk metal-on-metal hip replacement. <i>International Orthopaedics</i> , 2014, 38, 1353-1361.	0.9	40
11	Component Size Mismatch of Metal on Metal Hip Arthroplasty: An Avoidable Never Event. <i>Journal of Arthroplasty</i> , 2014, 29, 1629-1634.	1.5	10
12	Quantification of material loss from the neck piece taper junctions of a bimodular primary hip prosthesis. A retrieval study from 27 failed Rejuvenate bimodular hip arthroplasties. <i>Bone and Joint Journal</i> , 2015, 97-B, 1350-1357.	1.9	27
13	The effect of frictional torque and bending moment on corrosion at the taper interface. <i>Bone and Joint Journal</i> , 2015, 97-B, 463-472.	1.9	49
14	Assessing the material loss of the modular taper interface in retrieved metal-on-metal hip replacements. <i>Surface Topography: Metrology and Properties</i> , 2015, 3, 025002.	0.9	6
15	Volumetric assessment of material loss from retrieved cemented metal hip replacement stems. <i>Tribology International</i> , 2015, 89, 105-108.	3.0	6
16	Diagnostic utility of joint fluid metal ion measurement for histopathological findings in metal-on-metal hip replacements. <i>BMC Musculoskeletal Disorders</i> , 2015, 16, 393.	0.8	24
17	Shorter, rough trunnion surfaces are associated with higher taper wear rates than longer, smooth trunnion surfaces in a contemporary large head metalâ€“metal total hip arthroplasty system. <i>Journal of Orthopaedic Research</i> , 2015, 33, 1868-1874.	1.2	63
18	The Prevention and Treatment of Dislocation following Total Hip Arthroplasty: Efforts to Date and Future Strategies. <i>HIP International</i> , 2015, 25, 388-392.	0.9	27

#	ARTICLE	IF	CITATIONS
19	Complications Related to Metal-on-Metal Articulation in Trapeziometacarpal Joint Total Joint Arthroplasty. <i>Journal of Functional Biomaterials</i> , 2015, 6, 318-327.	1.8	7
20	Quantification of the Contact Area at the Head-Stem Taper Interface of Modular Hip Prostheses. <i>PLoS ONE</i> , 2015, 10, e0135517.	1.1	31
21	Is There Material Loss at the Backside Taper in Modular CoCr Acetabular Liners?. <i>Clinical Orthopaedics and Related Research</i> , 2015, 473, 275-285.	0.7	30
22	Clinically Significant Corrosion at the Head-Neck Taper Interface in Total Hip Arthroplasty: A Systematic Review and Case Series. <i>HIP International</i> , 2015, 25, 7-14.	0.9	37
23	The Evolution of the Trunnion. <i>HIP International</i> , 2015, 25, 2-6.	0.9	8
24	Characterisation of the oxide film on the taper interface from retrieved large diameter metal on polymer modular total hip replacements. <i>Tribology International</i> , 2015, 89, 86-96.	3.0	9
25	Basic Principles and Uniform Terminology for the Head-Neck Junction in Hip Replacement. <i>HIP International</i> , 2015, 25, 115-119.	0.9	21
26	Influence of stem type on material loss at the metal-on-metal pinnacle taper junction. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2015, 229, 91-97.	1.0	30
27	Revision of Articular Surface Replacement (ASR) Total Hip Arthroplasty: Correlation of Perioperative Data and Early Post-Revision Outcome Results. <i>Journal of Arthroplasty</i> , 2015, 30, 1607-1617.	1.5	8
28	Femoral diameter and stem type are independent risk factors for ARMD in the Large-headed ASR THR group. <i>BMC Musculoskeletal Disorders</i> , 2015, 16, 118.	0.8	14
29	Sequelae of large-head metal-on-metal hip arthroplasties. <i>EFORT Open Reviews</i> , 2016, 1, 345-353.	1.8	15
30	Prevalence of Failure due to Adverse Reaction to Metal Debris in Modern, Medium and Large Diameter Metal-on-Metal Hip Replacements – The Effect of Novel Screening Methods: Systematic Review and Metaregression Analysis. <i>PLoS ONE</i> , 2016, 11, e0147872.	1.1	37
31	Large-diameter total hip arthroplasty modular heads require greater assembly forces for initial stability. <i>Bone and Joint Research</i> , 2016, 5, 338-346.	1.3	21
32	The effect of using components from different manufacturers on the rate of wear and corrosion of the head-stem taper junction of metal-on-metal hip arthroplasties. <i>Bone and Joint Journal</i> , 2016, 98-B, 917-924.	1.9	12
33	The clinical implications of metal debris release from the taper junctions and bearing surfaces of metal-on-metal hip arthroplasty. <i>Bone and Joint Journal</i> , 2016, 98-B, 925-933.	1.9	35
34	Metal-on-Metal Total Hip Arthroplasty at Five to Twelve Years Follow-Up: A Concise Follow-Up of a Previous Report. <i>Journal of Arthroplasty</i> , 2016, 31, 1773-1778.	1.5	13
35	The Relationship Between Cobalt/Chromium Ratios and the High Prevalence of Head-Stem Junction Corrosion in Metal-on-Metal Total Hip Arthroplasty. <i>Journal of Arthroplasty</i> , 2016, 31, 1123-1127.	1.5	50
36	Leukocyte Esterase: Metal-on-Metal Failure and Periprosthetic Joint Infection. <i>Journal of Arthroplasty</i> , 2016, 31, 2260-2263.	1.5	19

#	ARTICLE	IF	CITATIONS
37	Influence of particulate and dissociated metal-on-metal hip endoprosthesis wear on mesenchymal stromal cells in vivo and in vitro. <i>Biomaterials</i> , 2016, 98, 31-40.	5.7	62
38	Evidence for the dissolution of molybdenum during tribocorrosion of CoCrMo hip implants in the presence of serum protein. <i>Acta Biomaterialia</i> , 2016, 45, 410-418.	4.1	30
39	Medium-Term Results following Large Diameter Metal-on-Metal Total Hip Arthroplasty: Increasing Failure after 6 Years. <i>HIP International</i> , 2016, 26, 226-232.	0.9	7
40	Cobalt serum levels differ in well functioning Birmingham resurfacing and Birmingham modular THA. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2016, 136, 715-721.	1.3	11
41	Trunnionosis in total hip arthroplasty: a review. <i>Journal of Orthopaedics and Traumatology</i> , 2016, 17, 1-6.	1.0	100
42	Ceramic Heads Decrease Metal Release Caused by Head-taper Fretting and Corrosion. <i>Clinical Orthopaedics and Related Research</i> , 2016, 474, 985-994.	0.7	69
43	Explant Analysis from a Patient Exhibiting Rapid Acceleration of Parkinson Disease Symptoms and Hypercobaltemia Following Metal-on-Metal Total Hip Arthroplasty. <i>JBJS Case Connector</i> , 2016, 6, e45.	0.1	11
44	Clinical significance of corrosion of cemented femoral stems in metal-on-metal hips: a retrieval study. <i>International Orthopaedics</i> , 2016, 40, 2247-2254.	0.9	17
45	Higher Blood Cobalt and Chromium Levels in Patients With Unilateral Metal-on-Metal Total Hip Arthroplasties Compared to Hip Resurfacings. <i>Journal of Arthroplasty</i> , 2016, 31, 1261-1266.	1.5	23
46	Elevated Intra-Articular Cobalt and Chromium Levels in Mechanically Assisted Crevice Corrosion in Metal-on-Polyethylene Total Hip Arthroplasty. <i>Journal of Arthroplasty</i> , 2017, 32, 1654-1658.	1.5	34
47	A large taper mismatch is one of the key factors behind high wear rates and failure at the taper junction of total hip replacements: A finite element wear analysis. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 69, 257-266.	1.5	56
48	Clinically insignificant trunnionosis in large-diameter metal-on-polyethylene total hip arthroplasty. <i>Bone and Joint Research</i> , 2017, 6, 52-56.	1.3	18
49	Assessment of the equivalence of a generic to a branded femoral stem. <i>Bone and Joint Journal</i> , 2017, 99-B, 310-316.	1.9	6
50	Comparative study of material loss at the taper interface in retrieved metal-on-polyethylene and metal-on-metal femoral components from a single manufacturer. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017, 231, 683-690.	1.0	2
51	Response to Letter to the Editor on "Factors Associated With Trunnionosis in the Metal-on-Metal Pinnacle Hip". <i>Journal of Arthroplasty</i> , 2017, 32, 1045-1046.	1.5	2
52	Investigation of Taper Failure in a Contemporary Metal-on-Metal Hip Arthroplasty System Through Examination of Unused and Explanted Prostheses. <i>Journal of Bone and Joint Surgery - Series A</i> , 2017, 99, 427-436.	1.4	21
53	Retrieval analysis of metal and ceramic femoral heads on a single CoCr stem design. <i>Bone and Joint Research</i> , 2017, 6, 345-350.	1.3	11
54	Assessment of Corrosion, Fretting, and Material Loss of Retrieved Modular Total Knee Arthroplasties. <i>Journal of Arthroplasty</i> , 2017, 32, 2279-2284.	1.5	9

#	ARTICLE	IF	CITATIONS
55	Wear of dual-mobility cups: a review article. <i>International Orthopaedics</i> , 2017, 41, 625-633.	0.9	42
56	A comparison study of stem taper material loss at similar and mixed metal head-neck taper junctions. <i>Bone and Joint Journal</i> , 2017, 99-B, 1304-1312.	1.9	16
57	Mild or moderate renal insufficiency does not increase circulating levels of cobalt and chromium in patients with metal-on-metal hip arthroplasty. <i>Bone and Joint Journal</i> , 2017, 99-B, 1147-1152.	1.9	8
58	Comparison of metal ion levels in patients with hip resurfacing versus total hip arthroplasty. <i>Journal of Orthopaedics</i> , 2017, 14, 561-564.	0.6	6
59	Lack of evidenceâ€”the anti-stepwise introduction of metal-on-metal hip replacements. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2017, 88, 478-483.	1.2	10
60	Factors Associated With Trunnionosis in the Metal-on-Metal Pinnacle Hip. <i>Journal of Arthroplasty</i> , 2017, 32, 286-290.	1.5	42
61	Clinical Cold Welding of the Modular Total Hip Arthroplasty Prosthesis. <i>Journal of Arthroplasty</i> , 2017, 32, 610-615.	1.5	7
62	Letter to the Editor on â€œFactors Associated With Trunnionosis in the Metal-on-Metal Pinnacle Hipâ€. <i>Journal of Arthroplasty</i> , 2017, 32, 1044.	1.5	2
63	Damage Patterns at the Head-Stem Taper Junction Helps Understand the Mechanisms of Material Loss. <i>Journal of Arthroplasty</i> , 2017, 32, 291-295.	1.5	21
64	Variation in taper surface roughness for a single design effects the wear rate in total hip arthroplasty. <i>Journal of Orthopaedic Research</i> , 2017, 35, 1784-1792.	1.2	17
65	Trunnionosis: Is it really a problem?. <i>Seminars in Arthroplasty</i> , 2017, 28, 206-210.	0.3	3
66	Outcome of Revision Arthroplasty for Failed Metal-On-Metal Total Hip Replacements; is there a Relation with Metal Ions?. <i>HIP International</i> , 2017, 27, 235-240.	0.9	4
67	Technical note: Comparison of metal-on-metal hip simulator wear measured by gravimetric, CMM and optical profiling methods. <i>Surface Topography: Metrology and Properties</i> , 2018, 6, 014002.	0.9	0
68	Effect of Bearing Type on Taper Material Loss in Hips From 1 Manufacturer. <i>Journal of Arthroplasty</i> , 2018, 33, 1588-1593.	1.5	7
69	Predictive factors for metal ion levels in metal-on-metal total hip arthroplasty. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2018, 138, 281-286.	1.3	8
70	Trunnion corrosion. <i>Bone and Joint Journal</i> , 2018, 100-B, 44-49.	1.9	68
71	Five Hundred Fifty-five Retrieved Metal-on-metal Hip Replacements of a Single Design Show a Wide Range of Wear, Surface Features, and Histopathologic Reactions. <i>Clinical Orthopaedics and Related Research</i> , 2018, 476, 261-278.	0.7	22
72	Does the Additional Articulation in Retrieved Bipolar Hemiarthroplasty Implants Decrease Trunnionosis Compared to Total Hip Arthroplasty?. <i>Journal of Arthroplasty</i> , 2018, 33, 268-272.	1.5	6

#	ARTICLE	IF	CITATIONS
73	Wear performance of retrieved metal-on-metal Pinnacle hip arthroplasties implanted before and after 2007. <i>Bone and Joint Research</i> , 2018, 7, 595-600.	1.3	5
74	Understanding outcomes and toxicological aspects of second generation metal-on-metal hip implants: a state-of-the-art review. <i>Critical Reviews in Toxicology</i> , 2018, 48, 839-887.	1.9	31
75	The Distribution and Severity of Corrosion Damage at Eight Distinct Zones of Metallic Femoral Stem Implants. <i>Metals</i> , 2018, 8, 840.	1.0	6
76	Retrieval Findings of Recalled Dual-Taper Hips. <i>Journal of Bone and Joint Surgery - Series A</i> , 2018, 100, 1661-1672.	1.4	12
77	Association between periprosthetic tissue metal content, whole blood and synovial fluid metal ion levels and histopathological findings in patients with failed metal-on-metal hip replacement. <i>PLoS ONE</i> , 2018, 13, e0197614.	1.1	25
78	Implant Failure After Motec Wrist Joint Prosthesis Due to Failure of Ball and Socket-Type Articulation—Two Patients With Adverse Reaction to Metal Debris and Polyether Ether Ketone. <i>Journal of Hand Surgery</i> , 2018, 43, 1044.e1-1044.e4.	0.7	17
79	Profound Trunnion Wear Resulting in Femoral Head-Neck Dissociation in Total Hip Arthroplasty. <i>Case Reports in Orthopedics</i> , 2018, 2018, 1-4.	0.1	5
80	The effect of the inflammatory species hypochlorous acid on the corrosion and surface damage of Ti-6Al-4V and CoCrMo alloys. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 3185-3194.	2.1	15
81	Influence of Cobalt Ions on Collagen Gel Formation and Their Interaction with Osteoblasts. <i>ACS Omega</i> , 2018, 3, 10129-10138.	1.6	14
82	A case of bilateral hip mechanically assisted crevice corrosion after staged total hip arthroplasty. <i>Arthroplasty Today</i> , 2018, 4, 261-265.	0.8	2
83	Revision for adverse local tissue reaction following metal-on-polyethylene total hip arthroplasty is associated with a high risk of early major complications. <i>Bone and Joint Journal</i> , 2018, 100-B, 720-724.	1.9	31
84	The effect of altering head length on corrosion using a material loss method. <i>HIP International</i> , 2019, 29, 368-372.	0.9	4
85	Retrieval Analysis And Principal Variable Analysis Of 127 M2a-38mm Metal On Metal Hip Replacements. <i>Biotribology</i> , 2019, 19, 100102.	0.9	0
86	Is There Material Loss at the Conical Junctions of Modular Components for Total Knee Arthroplasty?. <i>Journal of Arthroplasty</i> , 2019, 34, 2479-2486.	1.5	9
87	Host-specific factors affect the pathogenesis of adverse reaction to metal debris. <i>BMC Musculoskeletal Disorders</i> , 2019, 20, 195.	0.8	6
88	Changes in the morphology of microgrooved stem tapers with differing assembly conditions. <i>Biotribology</i> , 2019, 18, 100096.	0.9	6
89	Wear at the taper-trunnion junction of contemporary ceramic-on-ceramic hips shown in a multistation hip simulator. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2019, 107, 1199-1209.	1.6	14
90	Femoral head material loss at the head-neck junction in total hip arthroplasty: the effect of head size, stem material and stem offset. <i>HIP International</i> , 2019, 29, 647-651.	0.9	5

#	ARTICLE	IF	CITATIONS
91	Hip simulator testing of the taperâ€”trunnion junction and bearing surfaces of contemporary metalâ€”onâ€”crossâ€”linkedâ€”polyethylene hip prostheses. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 156-166.	1.6	12
92	Histopathological patterns seen around failed metalâ€”onâ€”metal hip replacements: Cluster and latent class analysis of patterns of failure. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1085-1096.	1.6	3
93	Gross trunnion failure in metal on polyethylene total hip arthroplastyâ€”a systematic review of literature. International Orthopaedics, 2020, 44, 609-621.	0.9	23
94	Does diametrical clearance influence the wear of Pinnacle hip implants?. Bone and Joint Research, 2020, 9, 515-523.	1.3	4
95	Taper corrosion: a complication of total hip arthroplasty. EFORT Open Reviews, 2020, 5, 776-784.	1.8	21
96	Assessing the quality of inspection for tapered aircraft fastener holes using an engineerâ€™s blue contact test. Precision Engineering, 2020, 63, 62-67.	1.8	2
97	A comparative study on the physicochemical characteristics of nanoparticles released in vivo from <sc>CoCrMo</sc> tapers and cementâ€”stem interfaces of total hip replacements. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 3311-3322.	1.6	0
98	Does modularity of metal-on-metal hip implants increase cobalt: chromium ratio?. HIP International, 2021, 31, 109-114.	0.9	1
99	Semiâ€”quantitative histology confirms that the macrophage is the predominant cell type in metalâ€”onâ€”metal hip tissues. Journal of Orthopaedic Research, 2021, , .	1.2	6
100	Comparison and appraisal of techniques for the determination of material loss from tapered orthopaedic surfaces. Wear, 2021, 478-479, 203903.	1.5	1
101	Validation of an Optical Coordinate Measuring Machine for the Measurement of Wear at the Taper Interface in Total Hip Replacement. , 2015, , 362-378.		6
102	Factors Related to Imprinting Corrosion in Modular Head-Neck Junctions. , 2015, , 83-98.		6
103	Microgrooved Surface Topography Does Not Influence Fretting Corrosion of Tapers in Total Hip Arthroplasty: Classification and Retrieval Analysis. , 2015, , 99-112.		6
104	Trunnion Corrosion causing Failure in Metal-on-Polyethylene Total Hip Arthroplasty with Monolithic Femoral Components. Reconstructive Review, 2016, 6, .	0.1	7
105	Hip Arthroplasty Pseudotumors: Pathogenesis, Imaging, and Clinical Decision Making. Journal of Clinical Imaging Science, 2016, 6, 17.	0.4	34
106	Metallic debris from metal-on-metal total hip arthroplasty regulates periprosthetic tissues. World Journal of Orthopedics, 2014, 5, 660.	0.8	41
107	Diagnosis and Management of Adverse Local Tissue Reactions Secondary to Products of Tribocorrosion. , 2015, , 396-409.		0
108	Metrology for Dual Taper Total Hip Arthroplasty. , 2015, , 164-180.		2

#	ARTICLE	IF	CITATIONS
109	Method for Characterization of Material Loss from Modular Head-Stem Taper Surfaces of Hip Replacement Devices. , 2015, , 132-146.		2
110	Fretting Corrosion and Modularity: A Critical Review of the Literature and Three Registries. , 2015, , 34-44.		0
111	Methods for Characterization of Edge Wear in Ceramic-on-Ceramic Acetabular Cups. , 2018, , 156-172.		0
112	Using Coordinate Measuring Machine Validated with White Light Interferometry to Identify Contributors to Material Loss Due to Corrosion of Total Hip Replacement Modular Junctions. , 2018, , 118-130.		3
113	Characterization of Material Loss from Femoral Stem Taper Surfaces through Development of a Responsive Morphological Filtering Technique. , 2018, , 173-190.		0
114	Electrochemical Testing of Modular Taper Junctions: Effect of Assembly Force and Head Offset. , 2019, , 114-136.		1
115	Metal-on-metal total hip arthroplasty: does increasing modularity affect clinical outcome?. HIP International, 2020, , 112070002097927.	0.9	1
116	In vitro testing for hip head-neck taper tribocorrosion: A review of experimental methods. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2022, , 095441192210745.	1.0	1
117	Effect of surface topography and residual stress on the taper connection stability in total hip arthroplasty. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 128, 105119.	1.5	2
118	Taper corrosion in total hip arthroplasty â€“ How to assess and which design features are crucial?. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 133, 105307.	1.5	1
119	Preâ€œclinical evaluation of frettingâ€œcorrosion at stemâ€œhead and stemâ€œcement interfaces of hip implants using in vitro and in silico models. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 2521-2532.	1.6	0