

Table E-1 Data for impact-tested patellae with a sharp-cornered defect

NO.	ENERGY (J)	RESULT*
1	11.7	NF (0)
2	19.6	MF (1)
3	27.4	CF (4)
4	35.3	MF (1)
5	41.2	IEF (2)
6	49.4	CEF (3)
7	57.6	CF (4)
8	61.8	CF (4)
9	61.8	MF (1)
10	70	CF (4)

*NF (0) indicates no fracture; MF (1), microfracture; IEF (2), incomplete extra-articular fracture; CEF (3), complete extra-articular fracture; and CF (4), complete fracture.

Table E-2 Data for impact-tested patellae with a round-cornered plug

NO.	ENERGY (J)	RESULT*
1	11.7	NF (0)
2	19.6	NF (0)
3	39.2	NF (0)
4	54.9	NF (0)
5	58.8	MF (1)
6	61.8	NF (0)
7	64.7	MF (1)
8	64.7	IEF (2)
9	76.7	CF (4)
10	76.7	CF (4)

*NF (0) indicates no fracture; MF (1), microfracture; IEF (2), incomplete extra-articular fracture; CEF (3), complete extra-articular fracture; and CF (4), complete fracture.

Table E-3 Probability of a complete fracture for given energy level and treatment

Energy(J)	Sharp Corners	Sharp Corners Drill	Trapezoidal	Round Corners	Normal
7	0.009	0.001	0.003	0	0
12	0.017	0.003	0.005	0	0
17	0.031	0.005	0.009	0.001	0
22	0.055	0.009	0.016	0.001	0
27	0.096	0.016	0.028	0.002	0.001
32	0.162	0.029	0.050	0.004	0.001
37	0.260	0.051	0.088	0.006	0.002
42	0.391	0.089	0.149	0.012	0.004
47	0.539	0.152	0.243	0.021	0.007
52	0.681	0.246	0.369	0.038	0.013
57	0.796	0.373	0.516	0.067	0.024
62	0.877	0.521	0.661	0.117	0.042
67	0.928	0.665	0.780	0.194	0.075
72	0.959	0.783	0.866	0.305	0.128
77	0.977	0.868	0.922	0.445	0.212
82	0.987	0.923	0.956	0.594	0.329
87	0.993	0.956	0.975	0.727	0.472
92	0.996	0.976	0.986	0.830	0.620
97	0.998	0.987	0.992	0.899	0.749
102	0.999	0.993	0.996	0.942	0.845
107	0.999	0.996	0.998	0.967	0.909

Table E-4 Probability of a no fracture result for given energy levels and treatment

Energy(J)	Sharp Corners	Sharp Corners Drill	Trapezoidal	Round Corners	Normal
7	0.675	0.931	0.883	0.991	0.997
12	0.532	0.882	0.806	0.984	0.995
17	0.384	0.803	0.694	0.971	0.990
22	0.254	0.691	0.555	0.948	0.982
27	0.157	0.550	0.406	0.910	0.968
32	0.093	0.402	0.272	0.847	0.943
37	0.053	0.269	0.170	0.752	0.900
42	0.030	0.168	0.101	0.624	0.832
47	0.017	0.099	0.058	0.476	0.730
52	0.009	0.057	0.033	0.333	0.598
57	0.005	0.032	0.018	0.214	0.449
62	0.003	0.018	0.010	0.130	0.308
67	0.002	0.010	0.006	0.076	0.196
72	0.001	0.005	0.003	0.043	0.118
77	0	0.003	0.002	0.024	0.068
82	0	0.002	0.001	0.013	0.039
87	0	0.001	0.001	0.007	0.022
92	0	0	0	0.004	0.012
97	0	0	0	0.002	0.007
102	0	0	0	0.001	0.004
107	0	0	0	0.001	0.002