**S5 Table. Histomorphometrical results**

**Cartilage thickness (µm)**

|  |  |  |
| --- | --- | --- |
|  | OA group | OAHS group |
|  | Operated | Sham | Operated | Sham |
| At 2 weeks | 332.7 ± 27.2(298.9–366.5) | 428.0 ± 30.0\*\*(390.7–465.4) | 328.8 ± 15.4(309.6–348.0) | 424.7 ± 15.6\*\*(405.2–444.1) |
| At 4 weeks | 253.2 ± 39.7(203.9–302.6) | 391.1 ± 33.3\*\*(349.7–432.5) | 304.6 ± 31.2(265.8–343.4) | 413.5 ± 15.7\*\*(393.9–433.1) |

**Matrix intensity (pixel value)**

|  |  |  |
| --- | --- | --- |
|  | OA group | OAHS group |
|  | Operated | Sham | Operated | Sham |
| At 2 weeks | 44.5 ± 17.6(22.6–66.4) | 40.3 ± 9.0(29.1–51.5) | 45.2 ± 5.3(38.5–51.8) | 39.1 ± 3.9(34.2–43.9) |
| At 4 weeks | 71.1 ± 25.6(39.3–103.0) | 41.1 ± 10.5\*\*(28.0–54.3) | 48.6 ± 15.4(29.4–67.8) | 50.0 ± 7.7(40.4–59.6) |

**Chondrocyte density (cells/mm2)**

|  |  |  |
| --- | --- | --- |
|  | OA group | OAHS group |
|  | Operated | Sham | Operated | Sham |
| At 2 weeks | 869.2 ± 92.4(754.4–984.1) | 1150.6 ± 186.1\*\*(919.5–1381.7) | 1197.8 ± 189.7\*(962.2–1433.4) | 1130.7 ± 139.7(1081.3–1180.0) |
| At 4 weeks | 679.5 ± 160.8(479.8–879.2) | 1016.6 ± 98.8\*\*(893.9–1139.4) | 1177.6 ± 173.1\*(962.6–1392.5) | 1062.5 ± 132.8(897.6–1227.4) |

**Osteophyte length (µm)**

|  |  |  |
| --- | --- | --- |
|  | OA group | OAHS group |
|  | Operated | Sham | Operated | Sham |
| At 2 weeks | 317.3 ± 76.8(221.8–412.7) | 181.5 ± 13.9\*\*(164.1–198.8) | 251.0 ± 24.5(220.5–281.4) | 160.3 ± 11.7\*\*(145.7–175.0) |
| At 4 weeks | 350.6 ± 55.4(281.8–419.4) | 201.8 ± 20.9\*\*(175.8–227.9) | 260.9 ± 13.8\*(243.7–278.2) | 174.2 ± 27.0\*\*(140.5–207.8) |

**Synovial thickness (µm)**

|  |  |  |
| --- | --- | --- |
|  | OA group | OAHS group |
|  | Operated | Sham | Operated | Sham |
| At 2 weeks | 8.8 ± 1.1(7.4–10.3) | 8.1 ± 1.4(6.3–9.9) | 5.7 ± 0.6\*(4.8–6.5) | 5.5 ± 1.0(4.3–6.8) |
| At 4 weeks | 7.0 ± 1.6(4.9–9.2) | 4.1 ± 0.7\*\*(3.2–5.1) | 6.7 ± 1.2(5.2–8.2) | 4.2 ± 0.3\*\*(3.9–4.6) |

Mean ± SD (95% CI), *P* < .05 for all.

\* \* The result was significantly different from those of OA group at the same time.

\*\* \* The result was significantly different from operated limb of the same group at the same time.