

FIGURE LEGENDS FOR SUPPLEMENTAL FIGURES

Figure.S1 The suture coming in at the core of the tendon stump “a” and coming out to the periphery at 10 mm purchase length at the point 0° and doing a 2 mm grasp, the suture crosses transversely the tendon to 180° point and the 2 mm grasp is made coming out through the tendon stump core.

Figure.S2 At the tendon stump “b”, the suture coming in at the core of the tendon stump and coming out to the periphery at 10 mm purchase length at the point 60° and doing a 2 mm grasp, the suture crosses transversely the tendon to 240° point and the 2 mm grasp is made coming out through the tendon stump core.

Figure.S3 In the same way like the step 1 and 2, the suture crosses transversely the tendon stump “a” from the 60° point to 240° point.

Figure.S4 The suture crosses transversely the tendon stump “b” from the 0° point to 180° point.

Figure.S5 The suture crosses transversely the tendon stump “a” from the 120° point to 300° point.

Figure.S6 The suture crosses transversely the tendon stump “b” from the 300° point to 120° point.

Figure.S7 Configuration of Adelaide tendon repair and Modified Kessler Tendon repair

Figure.S8 Repaired tendon mounted on universal testing machine

Figure.S9 Force [N] - extension [mm] ratio in helical tendon repairs

Figure.S10 Stress [MPa] – strain ratio in helical tendon repairs

Figure.S11 Ultimate tensile strength for each type of tendon repair