Electronic Appendix

Contact Kinematics of Individual Patients Along the Anteroposterior and Mediolateral Directions

For the present study, all patients had one of three femoral component sizes: type E (two patients), type F (three patients), or type G (four patients). The differences between the largest and smallest femoral components were 9 mm in the anteroposterior direction and 9 mm in the mediolateral direction. All patients but one had the same size of tibial insert. Specifically, one patient had a size-3 insert, one patient had a size-5 insert, and seven patients had a size-6 insert. It must be noted that the polyethylene inserts for the size-5 and size-6 tibial tray components have the same geometry, although the size-6 tibial tray is 4 mm larger in the mediolateral direction than the size-5 tibial tray. The differences between the two sizes of polyethylene inserts were 4 mm in the anteroposterior direction and 8 mm in the mediolateral direction. Contact in the medial and lateral tibial compartments is presented for all nine patients in both the anteroposterior and mediolateral directions (Figs. E-1 and E-2).

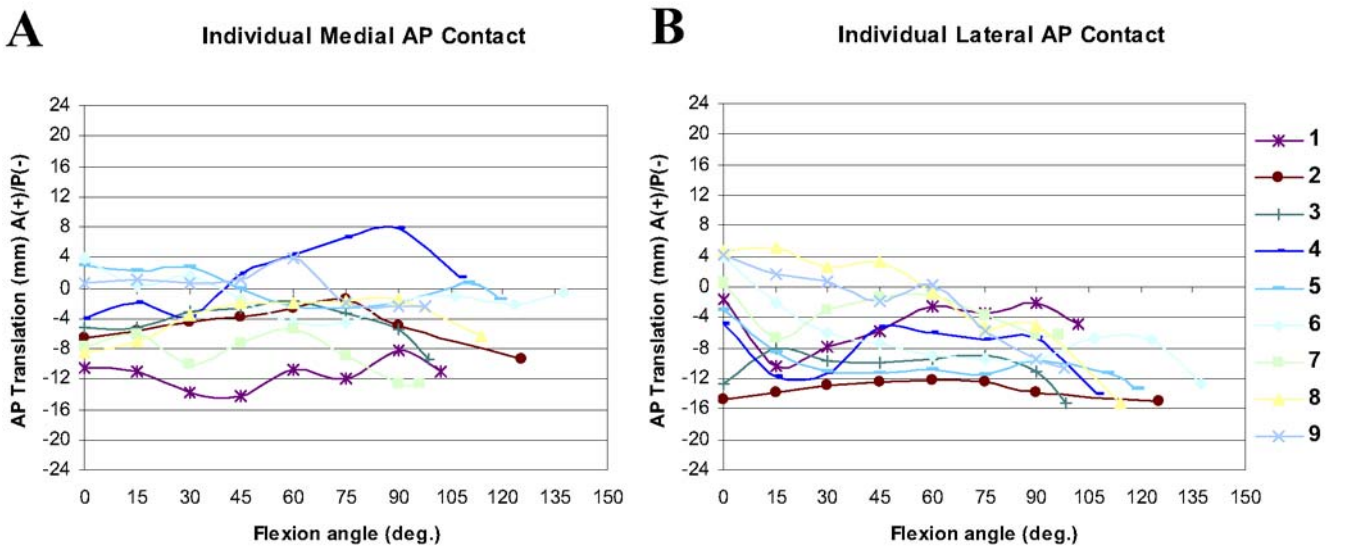

Fig. E-1

Graphs depicting the location of the medial (A) and lateral (B) contact points in the anteroposterior direction for nine patients after cruciate-retaining total knee arthroplasty.

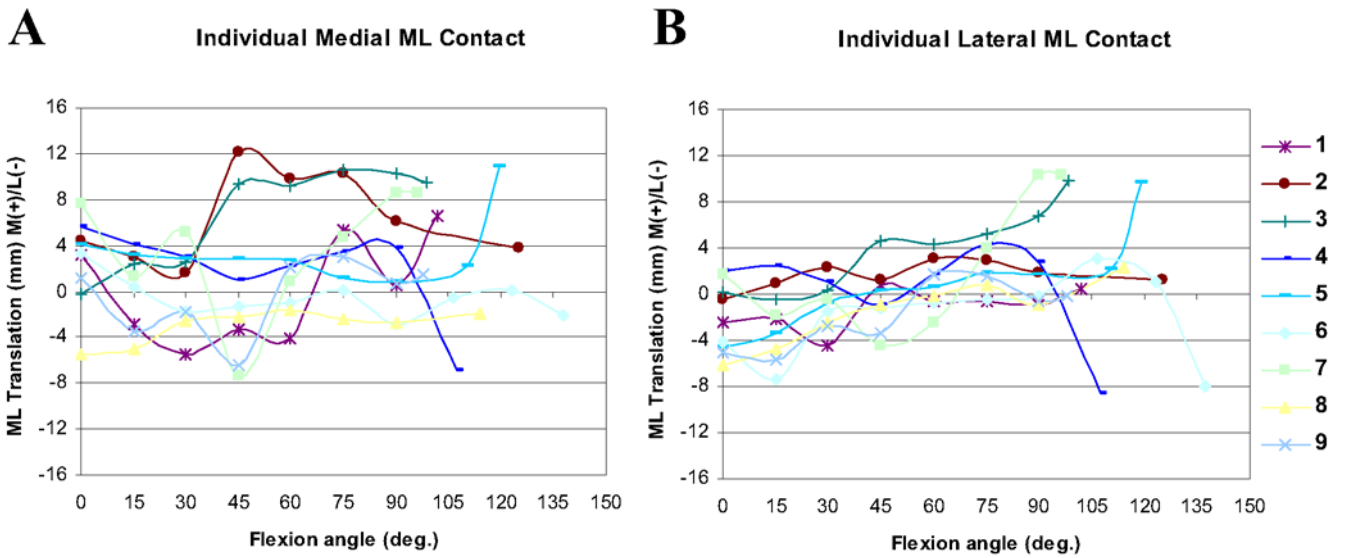

Fig. E-2

Graphs depicting the location of the medial (A) and lateral (B) contact points in the mediolateral direction for nine patients after cruciate-retaining total knee arthroplasty.