Background: The poly-L-lactic acid (PLLA) is an injectable synthetic polymer, which injection into the deep dermis or superficial hypodermis induces local and gradual reaction, with synthesis of new collagen by fibroblasts and consequent increase of dermal thickness. The treatment of sagging skin in body areas is a challenge and there is a paucity of published studies on body rejuvenation with PLLA, including the knee area skin laxity treatment.

Observation: We report the cases of 3 female patients (ages 35, 38 and 45), with sagging skin in the area above the knees. We performed the injection of PLLA with the reconstitution of each vial in 8 ml sterile water for injection, 24 hours before the procedure. We used 12 syringes of 1 ml per session, each with 0.6 ml of the PLLA suspension, 0.2 ml of lidocaine and 0.2 of sterile water.

Injection points were marked with grid points of 5 rows and 5 columns above the knees. 0.1 to 0.2 ml of the product was injected at each injection site in a retrograde manner between deep dermis and hypodermis with 26G needle.

The treated area was immediately massaged vigorously to ensure an even distribution of the product and prevent the formation of papules and nodules.

3 sessions were performed for each patient, with 1 vial per session and 4-week interval between sessions.

Key message: In these cases, an increase in skin thickness with improved sagging and skin quality was noted in the area just above the knees, with high patient satisfaction. The use of PLLA is promising in terms of results, safety and patient satisfaction for body rejuvenation, including the area above the knees.