Dermal micro-coring technology (MCT) mechanically removes micro-cores of skin through a modified, hollow needle system without surgery or the use of thermal energy. It is currently cleared for the treatment of moderate to severe wrinkles in the mid to lower face for adults aged 22 and older with Fitzpatrick Skin Types I-IV.

Potential complications of laser used on Asians and other ethnicities include scarring, dyschromia, and prolonged erythema. Given MCT does not use thermal energy, the potential for post-inflammatory hyperpigmentation often induced by lasers may be reduced. The purpose of this case series was to evaluate the safety and efficacy of MCT with the dermal micro-coring device for the perioral rejuvenation in Asian subjects.

Our experience of MCT use at UCLA was with 10 Asian patients, 8/10 were Koreans. The primary endpoint was to assess the safety and improvement of rhytids after MCT for treatment of Asian patients. Secondary measures were patient satisfaction. Patients were evaluated at 1,2,4,8, and12 weeks post final treatment. In this case series, patients were treated in the lower face at 2.5-4 mm depths and with skin removal densities ranging between 3 and 7% depending on specific treatment area, skin texture, and skin thickness. Three out of 10 patients received two treatments, spaced 4-6 weeks apart.

Adverse events were captured for each patient and included expected treatment related side effects such as bruising, erythema, and pain. All adverse events were reported as mild. Three patients had bruising. While most of the patients exhibited an average healing time of several days (5) one patient experienced erythema lasting 4 weeks.

Mild improvement of skin laxity and rhytids was seen in the areas treated by MCT. All patients were at least slightly satisfied according to the patient satisfaction scale.

Our experience using MCT on Asian subjects demonstrated safety and effectiveness of MCT for the treatment of rhytids of lower face. Further studies are needed to define settings to achieve optimal treatment for Asian patients.