Clinical Application:
980nm diode laser for lipolysis from GIGAALASER

Clinic Explanation:
Liposuction is to remove fat through very small skin incisions. Laser lipolysis is designed to provide selective adipose damage, while simultaneously facilitating fat removal, enhancing hemostasis and increasing tissue tightening.

Related Keywords:
Lipolysis, liposuction, fat removal, high-density lipoprotein (HDL), low-density lipoprotein (LDL), adipocyte

Medical device:
Velas30w 980nm (operation power 6-20w), CW
chin, arm, knee: about 6w
abdomen, back: about 10w
thigh, hips, buttock: about 15~18w

Accessories:
600um optical fiber, lipolysis handpiece, 18G needle, cannula

Operation procedure:
1. Marketing the treated volume and the thickness of the fat layer; anesthesia using the wet infiltration technique.
2. Made a 1-2mm small incision with an 18G needle, and then insert the cannula through the incision into the subcutaneous fat. The laser light is conveyed into the fat layer using the cannula which incorporates a 600um optical fiber.
3. After inserted in the hypodermis, the canula is moved back and forth in the fat layer in a vertical plane parallel to the surface. This motion is related 10-15 times while maintaining the same horizontal plane. And then, the cannula is moved to the adjacent area with the same motion.
4. Aspirated or massaged out the liquefied fat with cannula.
5. The tape remains in place for 1 week and compression garments should be used for 1 month.
Advantage:

1. No scaring, infection, burns, hypopigmentation, bruising, swelling or edema
2. Less pain and discomfort; excellent tolerance and quick recovery time.
3. The removal of small volumes of fat with concurrent subdermal tissue constraction can be performed safely and effectively.

Notice:

1. The distal end is rounded to minimize potential tissue trauma resulting from the back-and-forth motion used.
2. Enough energy must be cumulatively delivered throughout the different fat layers and into the subdermal plane so as to reach the collagenous layer.
3. Optimal dosage is reached when the skin feels warm to the touch.