

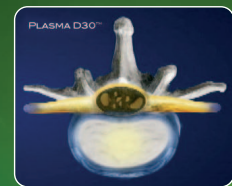
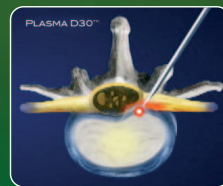
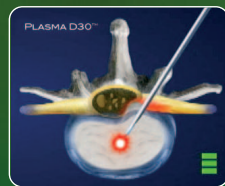
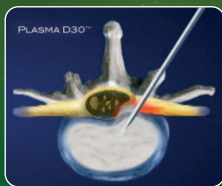
Footmarks for
Human beings... REV-MED

>> WHAT IS PDCT?

PDCT (Percutaneous Disc Coagulation Therapy) is a type of therapeutic surgery for disc coagulation and decompression with plasma light. It has maximized safety and efficiency compared to PLDD surgery which has been using the conventional lasers and other minimal invasive herniated disk surgery machines.

Through using plasma light that has less than 5% of straightness for therapy, it enables the surgeons to apply therapy to the selected area only which makes irradiation near nerves safer.

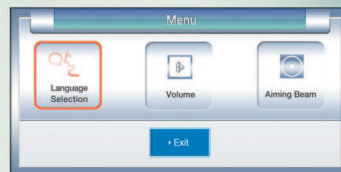
At the primary stage, an optimized cavity is formed within the disc. As a result, the internal pressure is decreased, releasing the pressure on the nerve by nucleus pulposus. Simultaneously, the protein organization around the released part is fixed solidly, preventing second release.



Target 1 : Nucleus pulposus

Target 2 : Annulus fibrosus

*"A small thing
makes a big difference !!"*



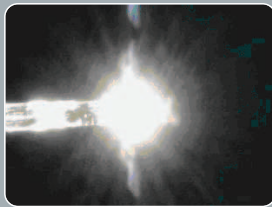
▲ PLASMA D30™ / MENU

◀ PLASMA D30™ / GP MODE

>> Technology of Plasma D30™

- It has high prospect for flexibility and sharp incision.
- With the support of patented plasma fiber in powerful and stable Plasma D30™, the product has full capabilities as laser for surgeries, showing excellence in light-degree evaporation, stanching, and coagulation.
- Safer and more effective surgery is possible because Plasma D30™ uses Plasma Fiber that has the most excellent penetrability of laser,
- Plasma Fiber is a specially processed fiber that was developed in 2005 for curing herniated disk.
- In Plasma Fiber System, heat damage area size in front of the Fiber could be adjusted. It enables a more reinforced irradiation.
- Hernia can be evaporated with minimum energy safely and effectively because all the energy released is condensed at the tip of the fiber in Plasma Fiber in PDCT.
- In the technical standpoint, Plasma Fiber System can set up a standardized process of PDCT and it can also establish total Jules value.

>> Difference laser and Plasma light



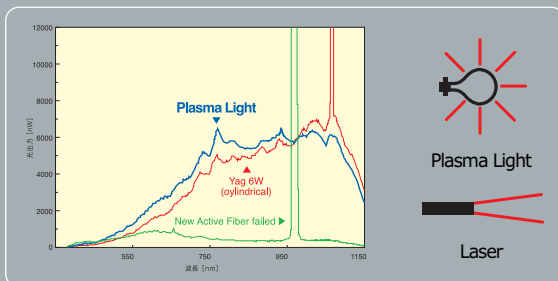
Plasma Light



Laser

- ▶ Plasma fiber decreases the property of laser which travel in straight line less than 5%.
- ▶ Plasma light never travel forward and attack surrounding tissue.

>> Broadband wavelength of Plasma D30™



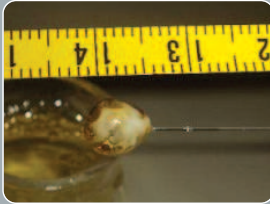
- ▶ The blue line shows that the wavelength of Plasma made by Plasma D30™

>> Plasma D30™

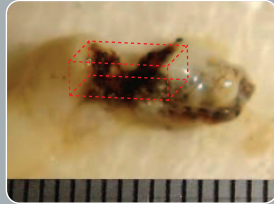


- ▶ We developed this technology called "The Group Pulse Mode" to reduce the thermal damage on the surrounding tissue.
- ▶ This technology could divide the light more minimally and guarantee better effect and safety.

>> Protein coagulation test [total used energy : 300J]



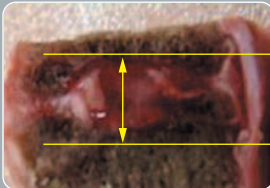
Picture 1



Picture 2

- ▶ Substance produced by coagulation effect. [Picture 1]
- ▶ Cavity produced by evaporation effect in the coagulated substance. [Picture 2]

>> After 300J of irradiation, a cavity of 4mm X 2.5mm X 2.5mm was created with appropriate coagulation



Before examination



After examination

Description: Through proper coagulation and contraction process, the internal pressure is decreased by reducing the volume of nuclear pulpous.

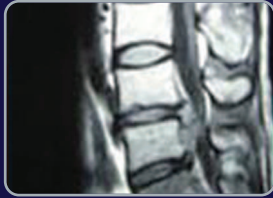
>> Characteristics

- The laser's straightness is reduced less than 5%. It can be irradiated by 360° from the tip of fiber.
 - It has high level of safety and excellence in the heat conversion rate of laser energy.
- Both early vaporization and coagulation of intervertebral disc are possible
 - Herniated intervertebral disc and internal derangement intervertebral disc could be cured
 - After the vaporization and coagulation of intervertebral disc, annulus fixation is possible.
- There is almost no transfer of heat to surrounding tissue.
 - The area within 4mm of the end tip on the fiber is less than 40°C, which indicates safety.
 - A highly safe, selective therapy without damage by heat is possible.
- The irradiation of plasma takes 5 minutes and the total surgery takes 20 minutes
- Through the development and application of GP MODE (Group Pulse), a safer heat energy delivery is possible.
- Patients can return home immediately after the surgery.

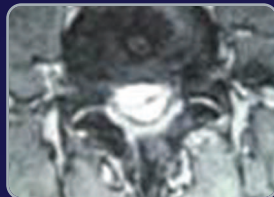
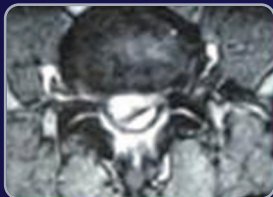
>> Benefits

- Local anesthesia applied
- No incision and bleeding
- No Hospitalization
- No side effect

>> PDCT Results



case 1
34, male
L4 / L5



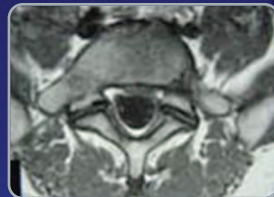
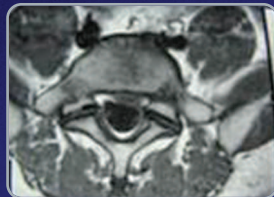
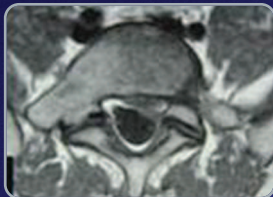
2005. 12. 14

2006. 6. 20

2006. 11. 15



case 2
41, male
L5 / S1



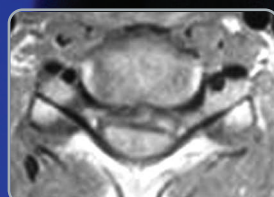
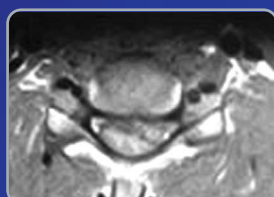
2005. 1. 7

2005. 6. 13

2005. 12. 5



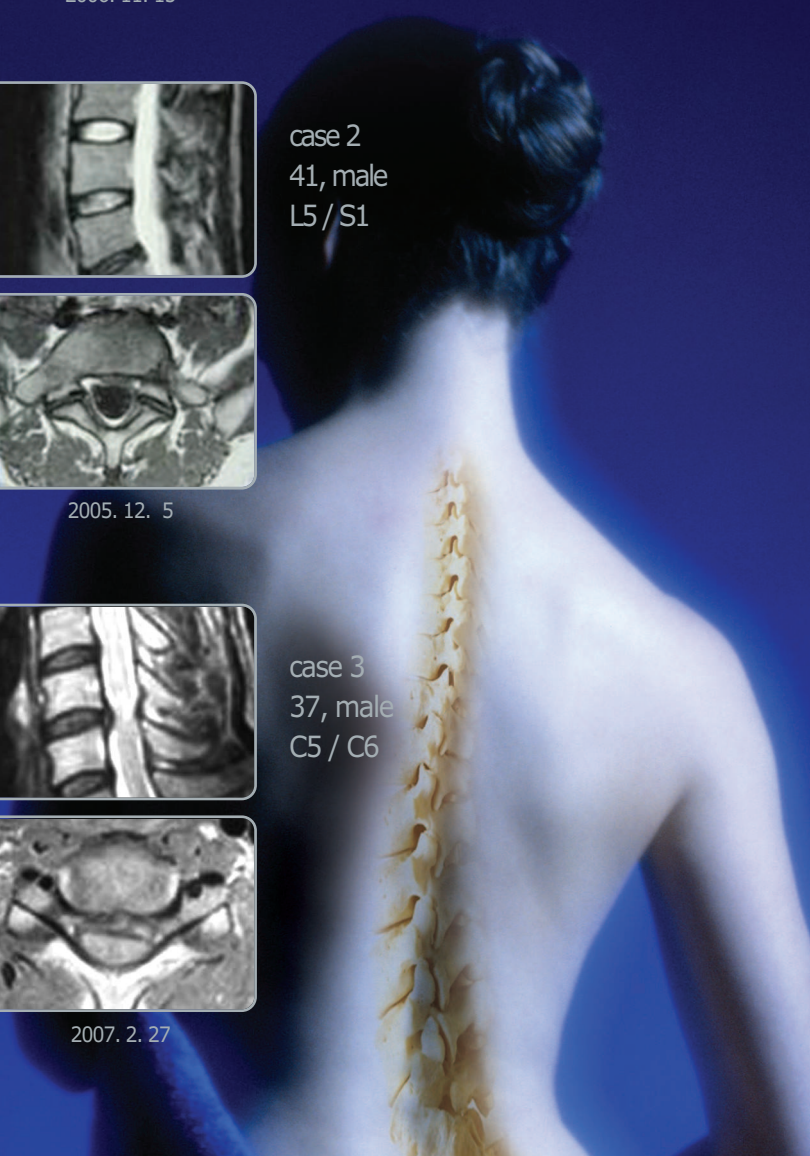
case 3
37, male
C5 / C6



2006. 10. 3

2006. 12. 6

2007. 2. 27





Specifications

- **Electric Requirements :** AC 110 / 220V (50 / 60 / Hz)
- **Power consumption :** 1.5KW
- **Power :** 1~30W(980nm) / aiming beam - 2mW(650nm)
- **Pulse Duration :**
 1. CW mode : continuous
 2. Repeat mode : on time 1~1000ms, off time 1~1000ms
 3. Group Repeat mode : on time 1~1000ms, off time 1~1000ms
Group-on 1~1000ms, Group-off 1~1000ms
- **Size of treated area :** 400 β ≠
- **Weight :** 10kg
- **Dimensions :** W410 D250 H150



REV-MED Inc.
We guarantee your smile