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## **Latest Clinical Report about DE-KA Titan from Chang-An Hospital, Xian/China/C**

We started with a new clinical trial at Chang-An Hospital in Department of Oncology and Pain Clinic in Nov 2006. Fifty patients were involved in this trial.

1. **Instrument:** DE-KA Titan Pain Reliever
2. **Hospital:** Department of tumor, Chang An Hospital
3. **Number of patients:** 50. age: 26-60
4. **Pain type:** headache (6), migraine (6), rheumatic pain (1), trigeminal nerve pain (3), teeth pain (3), rib pain after injury (2), pain after surgery (3), cancer patients including lung cancer, prostate cancer, bone metastasis of breast cancer, cervical cancer IIIb, totally 26 patients.
5. **Methods:** procedures were carried out according to the manual provided by DE-KA Titan manufacture. Results were recorded based on patients' complaints before and after instrument intervention.

### **6. Results:**

Headache: pain was relieved within 30 min, two patients were relieved at some extent while the other four reported pain was totally disappeared.

Migraine: pain was relieved within 20 min for 90%.

Rheumatic pain: definitely take longer time for pain getting relieved. Patients reported pain was significantly relieved after treatment.

Trigeminal nerve pain: some relieving affect on all three patients.

Toothache: two patients felt significantly relieved while one feel a little relieved.

Rib pain after injury and pain after surgery: all five patients reported pain relieved, but still need painkiller but the frequency was significantly reduced.

Pain caused by cancer: twelve patients reported pain relief, especially when co-treated with oral or injected painkiller; the other six people feel significant relief on the sustaining pain. No effect on sudden pain. Eight patients with serious cancer reported no relief with either this instrument or painkiller.

## **Evaluation:**

DE-KA Titan is very good at relieving headache and migraine; even for relief rheumatic pain and after-surgery pain. It can also improve the pain among cancer patients. Patient with late stage cancer reported less improvement. Most patients would like to involve in free trial. We are convinced that DE-KA is good for patients with sustaining and chronic headache, migraine and rheumatic pain. For late stage cancer patients, we suggest to use multiple treatments including the machine intervention and drug treatment.

# Analysis of effect of DE-KA Titan Pain Reliever

DE-KA Titan Pain Reliever, Made in Germany, relieves pain by inhibiting neural pulse in human and mammals. We started clinical trial of this instrument from Sept 2004 to End Dec 2004. Our second test was from Nov 2006 to End Feb 2007. Total 112 patients have been treated and the effect was reported as below:

diagnosis	numbers	effect				
		Somewhat relief	relief	Significant relief	disappear	No effect
idiopathic lung cancer	37	12	10	7	0	8
idiopathic liver cancer	13	4	4	1	0	4
Cranial metastasis of Otolaryngeal cancer	1	0	0	0	0	1
Bone metastasis of melanoma	2	1	0	0	0	1
Bone metastasis of esophagus cancer	6	3	0	0	0	3
Liver metastasis of gastric cancer	5	2	1	1	0	1
Bone metastasis of breast cancer	10	4	0	3	0	3
Thoracic and abdominal surgery	10	5	2	3	0	0
Recurrent cervical cancer	8	0	4	0	0	4
Distant metastasis of rectal cancer	4	0	4	0	0	0
Soft tissue pain sciatic nerve pain herniated disc	16	5	4	7	0	0
Total number	112	32% (36)	26%(29)	20% (22)	0	22 (25)

# Analysis:

The term of “pain”, originated from Latin “Poena”, means “punish”. It was a long before people started gaining knowledge about pain. With the development of medical science, the concept of pain has evolved from a single dimensional “sense model” into a multidimensional model which involves interaction among many factors including physical, psychological, sensational, emotional, social behavior and so on. Pain is not only a symptom but a disease. Patients who are complaining about pain needs treatment as those are suffering from other disease. Currently the treatment of pain is limited to oral, muscle injection and vein pain relieving pump. And recently rectal medical application or some pan relieving patch is getting more application. Health care professional are now adapting new rule to treat pain with individualized treatment plan to treat pain. The purpose is to improve the quality of life and relive patients from pain suffering.

Compare with using dose or medicines, DE-KA Titan Pain Reliever is special medical instrument that can relieve pain through inhibiting the neuronal excitation, thus inhibiting or decreasing the input from pain nerve. It

has no side effect and easy to use, does not need ancillary assistance.

Among this 112 cancer patients, there are 37 idiopathic lung cancer patients (20 patients have bone metastasis, 9 patients have spine metastasis and 7 have brain metastasis), 13 idiopathic liver cancer patients (including one gall bladder cancer patient), 1 otolaryngeal cancer patient with cranial metastasis, 2 melanoma patients with multiple metastasis, 6 esophagus patients with bone metastasis, 5 gastric cancer patients with liver metastasis after surgery, 10 breast cancer patients with multiple metastasis, 10 patients after thoracic and abdominal surgery, 8 recurrent cervical cancer patients, 4 rectal cancer patients with liver metastasis, 16 miscellaneous patients including elder rheumatic arthritis, herniated disc, sciatic pain and should pain. Those patients are all suffering middle to serious pain. Oral application of some painkiller such as Qiang Tong Ding, Shu Er Fen, or even morphine. Some serious patient has to be co-treated with morphine muscle injection or oral Mei Shi Kang Ding. Among those cancer metastasis patients co-treated with radiation, most reported relief of pain and decrease the dose for painkiller medicine, some even stopped oral medicine.



**In summary, application of DE-KA Titan Pain Reliever does relieve the pain even with different extent to different patients. About 70% of patients reported pain relief and 20% of patients reported significant pain relief, especially for patients with after surgery pain, rheumatic arthritis pain, soft tissue pain, sciatic pain or herniated disc pain. We are now trying to get more application, and educate**

**and encourage in-hospital patients to try new method for improving the pain symptom. For those late-stage cancer patients who undergo malnutrition and stay in bed for a long time, the application of the instrument cause some discomfort when the electrode press patients' back, therefore, they refuse to use it. We suggest improving the procedure by changing the shape and position of electrodes to minimize the discomfort caused by machine in order to get more application.**



**Overall the DE-KA Titan Pain Reliever will be a constant Instrument in our hospital to help our patient to relieve pain without or less using drugs. We will also recommend the DE-KA Titan to other hospitals. We are very confident, convinced and trust this “Made in Germany” medical product.**