AdipoLABs

Research & Development Medical Company

RE MISSION 1℃

HYPERTHERMIA

High-frequency heater

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ISO 13485 ISC GLOBAL

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GUARDING OUR LIFE

The MIRACLE of 1°C

REMISSION 1°C Gives You

CHAIRMAN

Greeting

We hope to bring “Healthy Life”, human’s biggest desire with REMISSION 1°C the high-frequency hyperthermia equipment.

The pioneer of medicine, Hippocrates says “Heat can cure all diseases” in his aphorism.

We are making our efforts to ease the pain of patients suffering from incurable diseases, opening a new field of “Hyperthermia treatment” through our continual R&D.

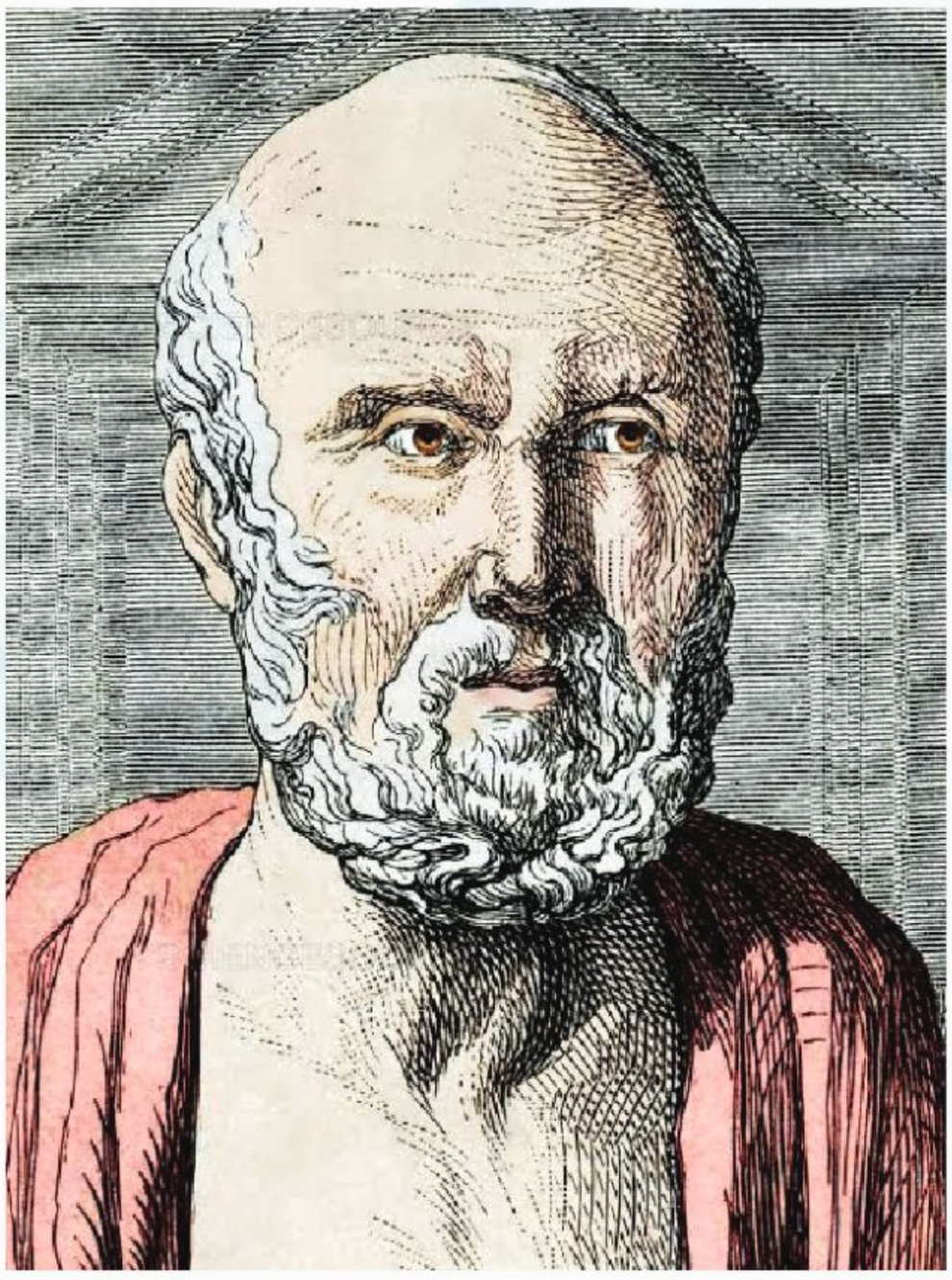
People must be healthy and happy free of the pain from diseases is our vision.

We are working honestly and diligently to be the world best company to make our vision come true.

HEAT CAN CURE ALL!

When body temperature decreases by 1°C, immunity decreases by 30% and metabolism decreases by 12%, but when body temperature increases *by 1°C*, immunity *increases by 3 to 5 times*, raising the body temperature to 1°C can prevent most diseases.

The Miracle of 1°C, REMISSION 1°C will be always with you.



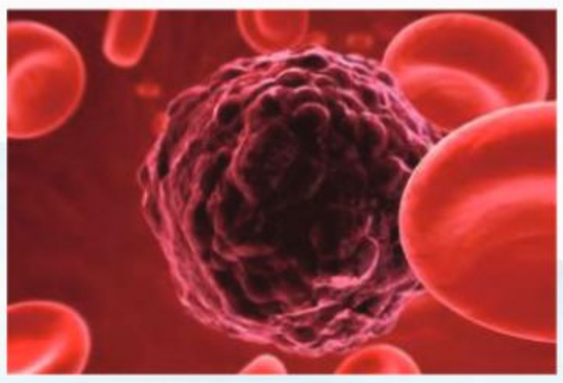
HIPPOCRATES
The Father of Medicine

What is Hyperthermia by High-frequency?

High-frequency hyperthermia is a cancer treatment method that raises body temperature by generating deep heat inside the body tissues during the treatment.

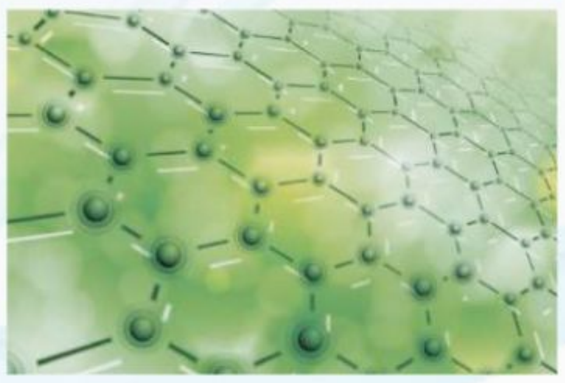
Hyperthermia of REMISSION 1°C

Heat Treatment



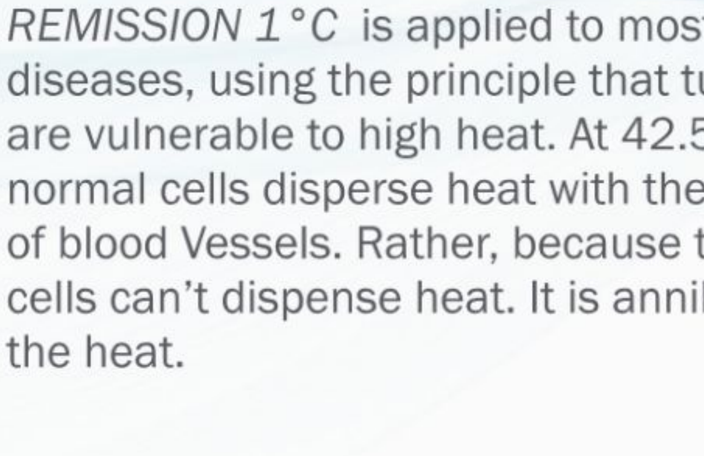
REMISSION 1°C is applied to most cancer diseases, using the principle that tumor cells are vulnerable to high heat. At 42.5˚C, the normal cells disperse heat with the expansion of blood Vessels. Rather, because the tumor cells can't dispense heat. It is annihilitated by the heat.

Immunity Treatment



When the body temperature is increased by 1˚C, the immunity of human body is increased by 3-5 times. And enhanced immunity may increase the chance to kill cancer cells, helping to prevent recurrence or metastasis of cancer.

Mechanism of Medical High-frequency Hyperthermia



Take high-frequency to human body

Induce vibration of water dipole ion

Generate Heat (Frictional Heat)

What is DEEP HEAT?

When high frequency electric energy is applied to body, frictional heat is generated by the molecular movements, namely rotation, friction, twist or collision.

While this high frequency electric energy has no effect on sensory and motor nerves in the body , it has its advantages of heating up specific parts of the body tissues without any discomfort or muscular contraction.

Also, the high frequency converted into heat energy helps to increase the cellular functions and blood flow rate by cellular temperature increase.

Generating heat in the organs by the molecular movements

Body Heat

Blood Flow Rate

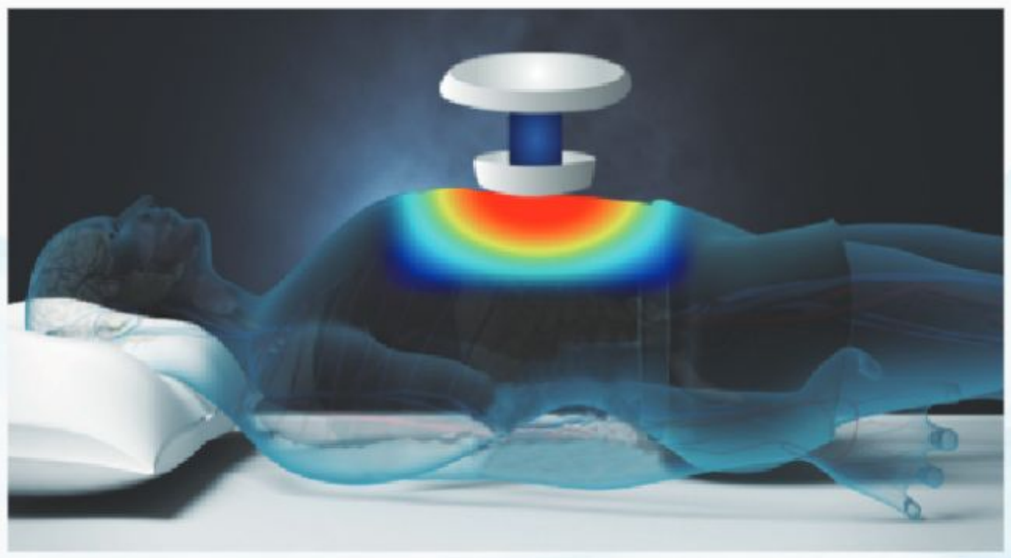
Increasing blood flow rate by the capillary vein expansion while the body temprature of specific parts increase over 40˚c

Deep Heat

Necrosis of cancer cells by the deep heat over 42˚C in the specific organs

Differences in Methods Cause I Differences in Effectiveness

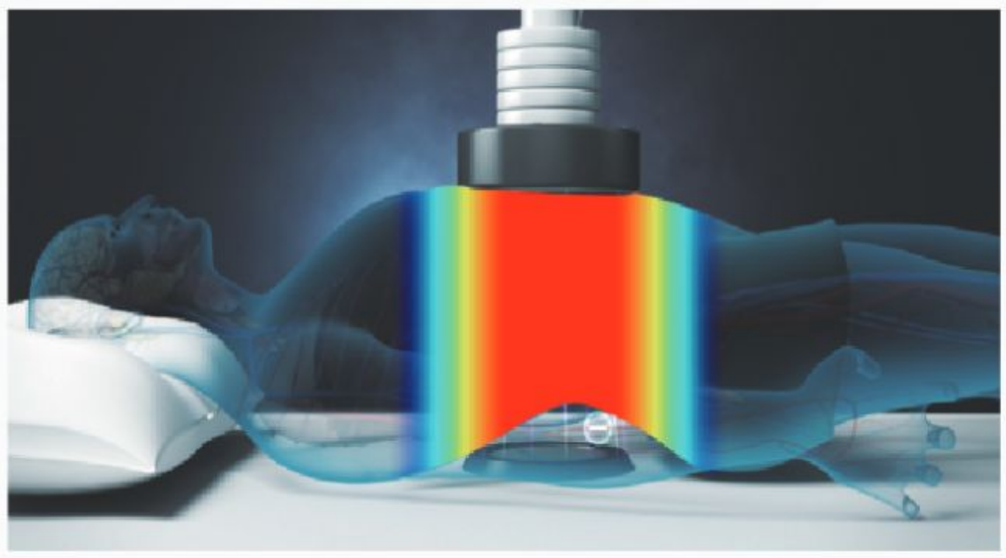
Existing Thermal Therapy of Others



Most conventional equipment is capacitive.

Since most capacitive methods only produce heat in the subcutaneous layer, deep heat is not enough.

Advanced Thermal Therapy of REMISSION 1°C

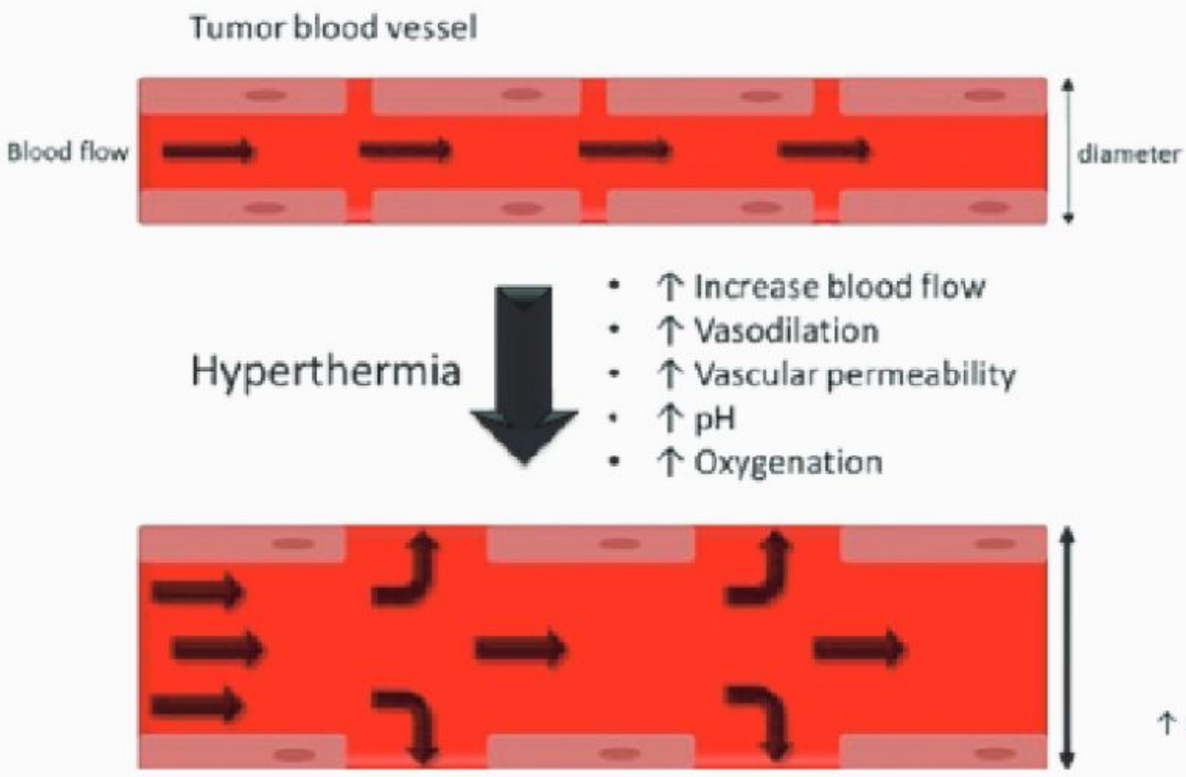


REMISSION 1°C, the equipment is a resistive method to generate friction heat from the body.

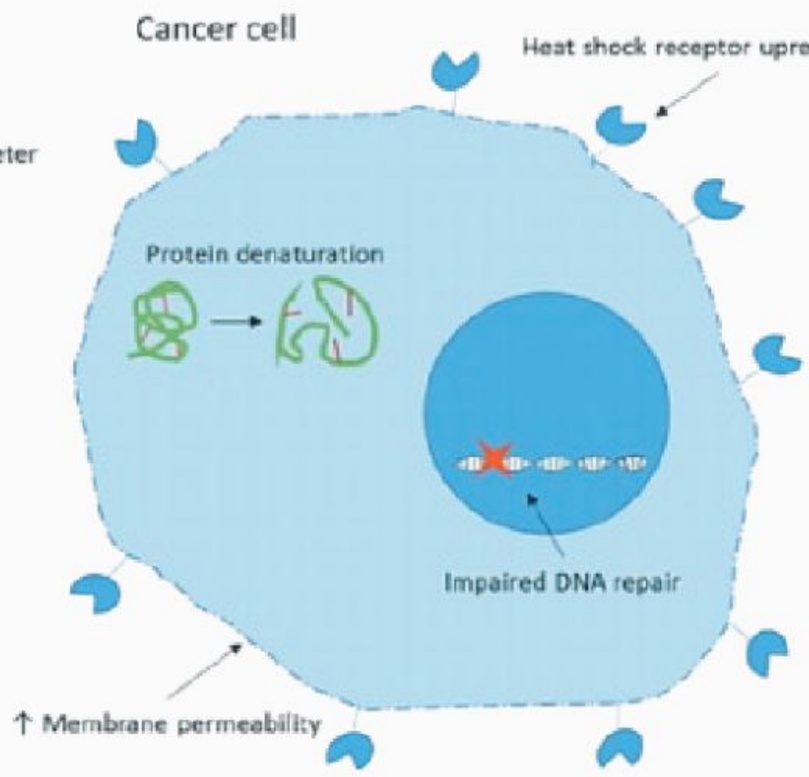
Resistive methods produce heat evenly in the subcutaneous layer and in the deep areas. So heat transfer is enough for the deep body.

Physiological changes in Tumor Tissue with Hyperthermia

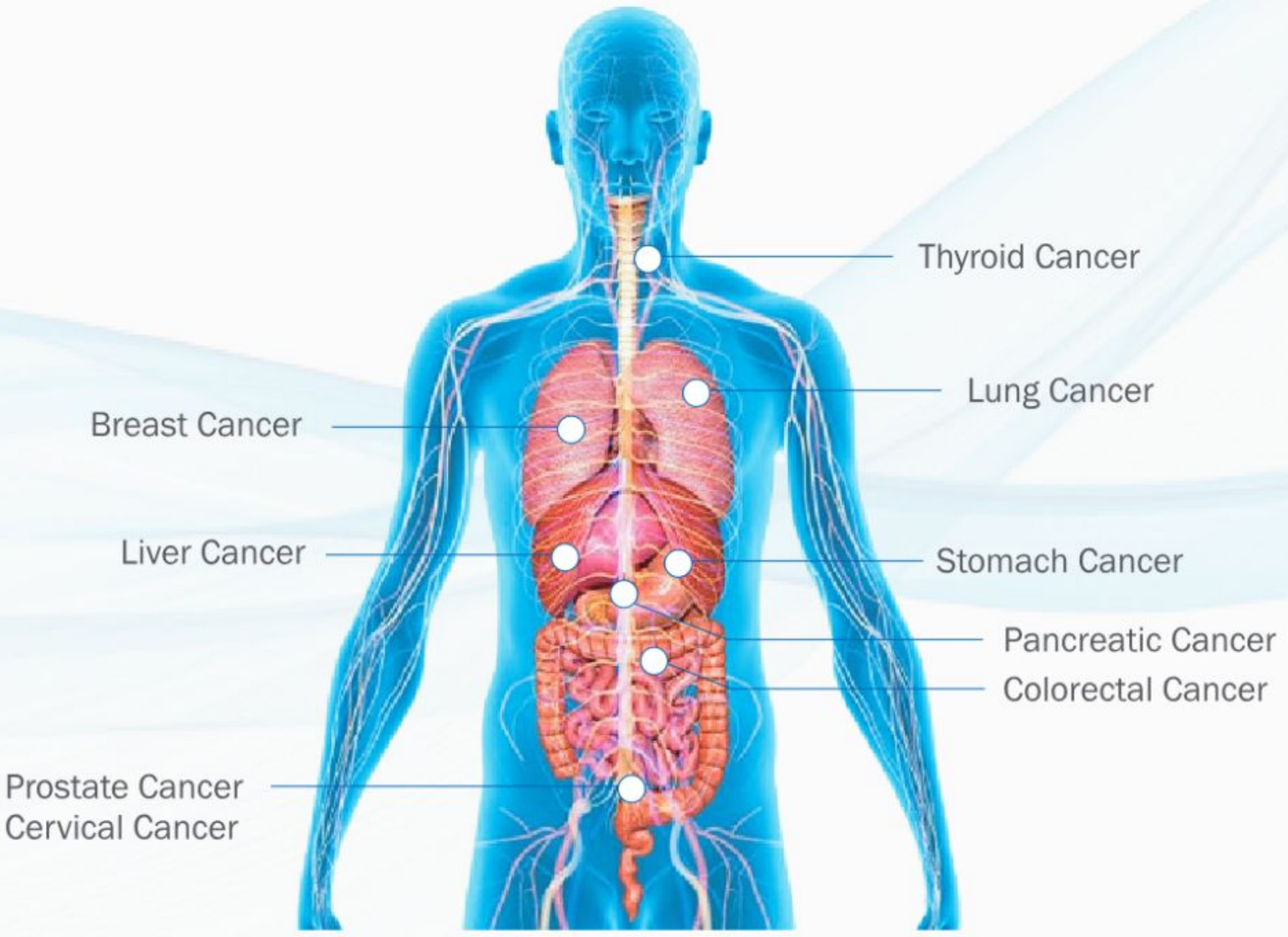
Vascular Effects



Celluar Effects



Coverage of REMISSION 1°C



REMISSION 1°C is a medical frequency hyperthermia equipment increasing deep heat with the duplex frequency transmission.

It cures cancer cells and increases immunity by increasing the temperature of organs, such as liver, lung, colorectal, and other organs. REMISSION 1°C is applicable for all cancer with the doctor's diagnosis.

Patients Applicable for REMISSION 1°C

Patients Before / After Surgery	Patients Taking Radiation Threapy	Non Improvement of Chemotherapy
Patients Taking Anticancer Drug	Patients With Severe Pain	Intractable Patients With Recurrence

REMISSION 1°C Treatment Program

Program Duration

- Duration and frequency of treatment program may vary on the patients condition.
- Combination Treatment is useful with other cancer treatments (surgery, radiation therapy, chemotherapy

Determine the treatment scheduled based on the results of the screening → ***Consult with a doctor about treatment part, time, etc*** → ***Select the applicator for the target area*** → ***High-Frrequency Thermal Therapy using deep heat*** → ***Followup planning according to patient's condition***

Advantages of Hyperthermia

Enhanced treatment effect for metastatis of cancer or last-stage cancer patients	Enhancement of patient's quality of life	Safe treatment without side effects or complications	Cure to deep inside the body	Cure to various Cancers	Outstanding safety
Can be solely effective in the difficult case of running radiation or chemotherapy	Can reduce the amount of painkillers taken by the patients, vitalizing their immunity and reducing their pain as well	Has no side effects or complications, such as vomit, nausea, loss of appetite, indigestion, hair loss	Enables to cure the tumor, delivering heat into the cancer cells located at deep inside the body	Can be applied to most cancer diseases	Guarantees the hazard free treatments such as erythema or burns applying the temperature control system to the electrodes on the skin

Permission & Authentication

Licenses & Certificates - International

Certificate of Authority
Medical Device Authority Malaysia
(Renewal Under Process)

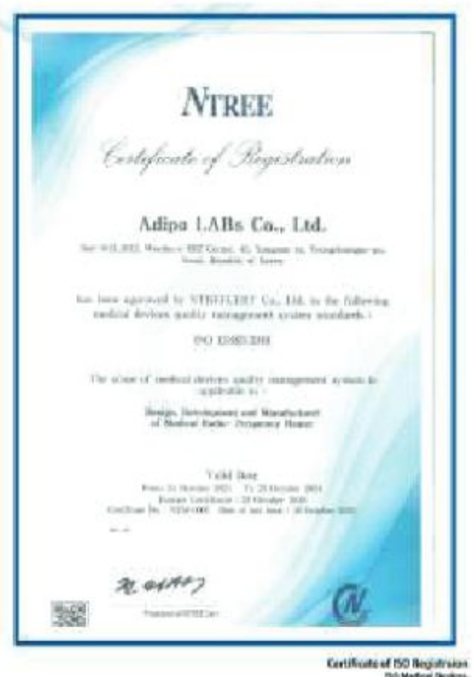
Licenses & Certificates - International

Certificate of EC Full Quality Assurance

Licenses & Certificates - International

Certificate of Manufacturer
Seoul Regional Food & Drug Administration, South Korea

Licenses & Certificates - International



Certificate of ISO Registration
ISO Medical Devices
Seoul, South Korea

Licenses & Certificates - India

Certificate of Bio-Objections
Directorate General of Health Services
Central Drugs Standard Control Organization,
India

Licenses & Certificates - India

Certificate of CDSCO
Registration Certificate to Sell, Stock, Exhibit or Offer for Sale or Distribute a Medical Device including In Vitro Diagnostic Medical Device
Department of Drugs Control, Govt of Puducherry

Licenses & Certificates - India

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Department of Drugs Control, Govt of Puducherry

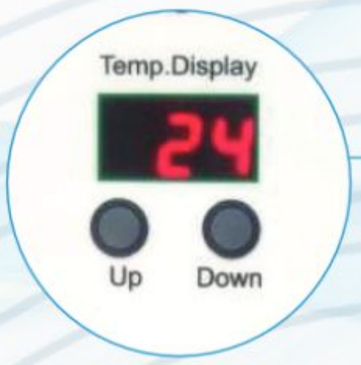
Licenses & Certificates - India

Certificate of Registration
Global Aero Accreditation Centers &
Continental Europeans

REMISSION 1°C System

Various Applicators

Different sized applicators for various parts of body



Temperature Check Function

Checking real time threshold temperature trend

Optional Time Selection System

treatment time may be manually modified based on the patient's condition

Applicators Crane (ARM)

comport positioning on the treatment area with 4 joints control

Output Control System

be manually controlled based on the patient's condition and diagnosis

Mobility

be easily movable and requires only small space

Patient Emergency Button

patient can stop alone in bed during the operation, just one button

RE MISSION 1°C
HYPERTHERMIA
High-frequency heater

REMISSION 1°C Clinical Experiment on Animals

In 2015 We have proved generating deep heat

REMISSION 1°C Animal Clinical Experiment About *DEEP HEAT*

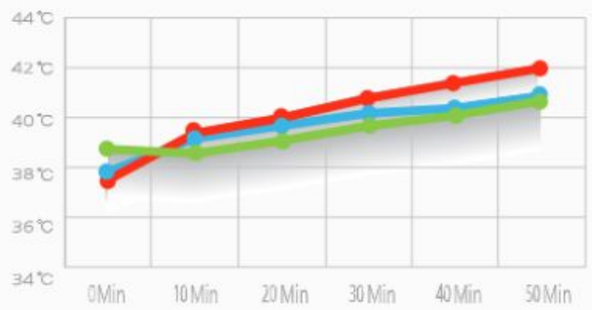
Date : May 30, 2015
Place: Animal Research Centre Korea University Medicine College 1F, Seoul.
Subject: 3 Yorkshrie pigs sterilized
Equipment: REMISSION 1° C

Exposing animal to electricity fields with the high frequency has direct correlation with increase of body temperature. Whether high frequency machinery (REMISSION 1° C) functions in increasing body temperature and maintains that temperature was tested by measuring the accurate changes in the temperature increasing (42°C and higher) through sterilized pig experiment.

01. Measuring blood flow of anaesthetized pigs

02. insert Thermometer in stomach, liver,abdomen

03. Measuring average temperature of eacg organs

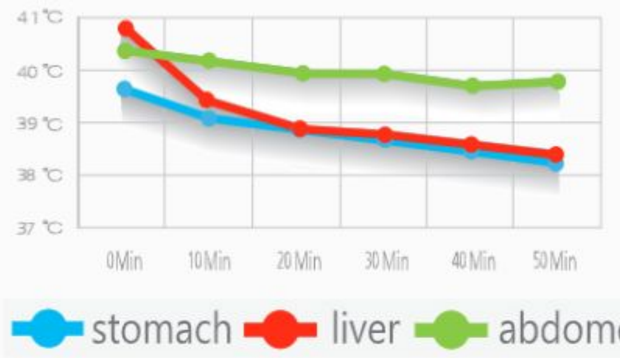


Average residual temperature of organs for 50 minutes

04. Starting REMISSION 1°C for 50 mins

05. Proving Increasing deep heat over 42°C

06. Measuring Residual heat for 50 mins



The Paper of Animal Clinical Experiment About Deep Heat

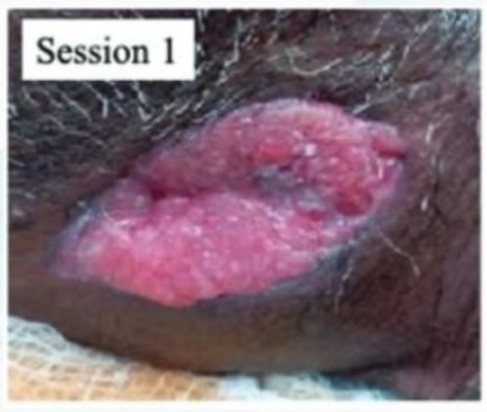
This is an animal experiment, we have generated deep heat about 42°C in organs (Stomach, Liver, Abdomen)

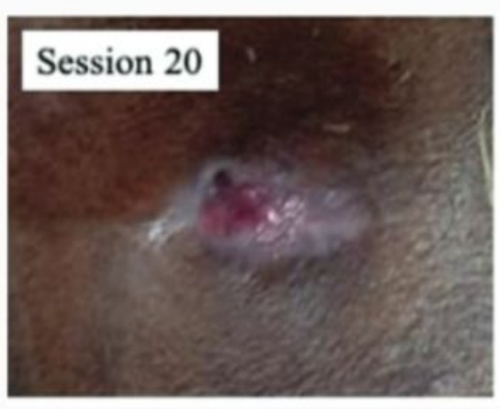
Case Report

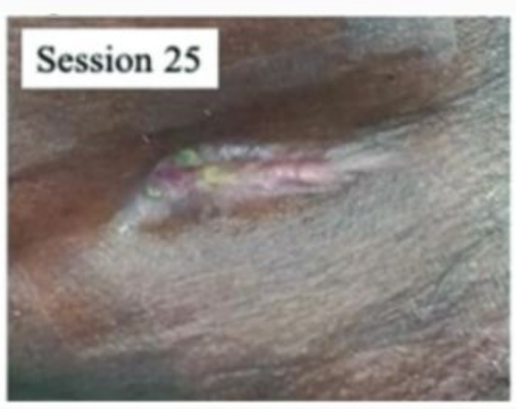
CASE NO 1

HYPERTHERMIA AUGMENTS CHEMOTHERAPY ON SUPRAGLOTTIC CARCINOMA: A CASE REPORT

A 61-year male patient reported severe chronic pain scale 10 at the right Supraglottis stage IV (T4a N3 Mx). Initial observation of swelling over the right Supraglottis right lymph node, an open wound with white discharge, a lesion (6.8 X 4.4 X 6.2 cm). The left supraglottic region appeared normal and started the first cycle of chemotherapy with inj. paclitaxel (230 mg) and carboplatin (300 mg), At the 22nd session of HPT, the pain was relieved (1/10), the tumor wound shrunk to (2x1x1.5 cm), and the swelling reduced, contrast-enhanced computed tomography result.








Hyperthermia Augments Chemotherapy on Supraglottic Carcinoma: A Case Report

Before hyperthermia and chemotherapy showed heterogeneously enhancing neck mass involving the right para-pharyngeal, right submandibular, and right parotid space with intrusion into the oropharynx, hypopharynx, epiglottis, and right supraglottis.

After hyperthermia and chemotherapy, the CECT image showed endoscopy-status posterior right glottis-edematous cryptical fold and mild narrowing in post cricoid area - scope negotiated across; the esophagus, 39 cm; stomach - erythematous mucosa; duodenum- normal.

Case Report

CASE NO 2

HYPERTHERMIA AUGMENTS NEO-ADJUVANT CHEMOTHERAPY ON BREAST CARCINOMA: A CASE REPORT

A 70-year-old female patient with of carcinoma right breast stage 3 (cT3N2Mx) complaints of a lump in the right breast 2x2 cm with right axillary lymphadenopathy 5x5 cm and nipple inversion. The patient was treated with 6 cycles of neoadjuvant chemotherapy CAF regimen and hormone therapy (Tab. Letrozole 2.5 mg once a day) based on immunohistochemistry reports (ER-Positive, PR- Positive, Her 2 neu-Negative). After thermal treatment the size was reduced.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Hyperthermia augments neoadjuvant chemotherapy on breast carcinoma – A case report

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Abstract - Background: Carcinoma breast is the dominant cancer in urban females in India due to hormonal imbalance. The patient usually presents with sensations of a painless lump in the breast axillary lymphadenopathy, skin discolouration over the breast, nipple discharge, and altered breast contour. Case report: In this study, we report a case of a 70-year-old female with complaints of a lump in the right breast and right axillary node, who was diagnosed with right breast cancer stage 3. The patient was given six cycles of neoadjuvant chemotherapy, followed by hormone therapy and hyperthermia using a remission one-degree machine. Results: The breast and axillary node tumor responded well to the treatment, and there was only minimal residual activity in the post-treatment positron emission tomography-CT scan. Conclusions: Hyperthermia treatment provides additive benefits along with chemotherapy and hormone therapy for carcinoma breast patients.

Keywords: Breast carcinoma, cancer, Hyperthermia, Neoadjuvant chemotherapy, tumor

I. Introduction

Breast cancer is the most common cancer among women worldwide (Rojas and Stuckey, 2016). Despite the advances in treatment, some women still develop recurrent or metastatic diseases associated with poor prognoses (Lobb et al., 2021; Redig and McAllister, 2013). Breast cancer arises in the lining epithelium of the ducts or lobules in the breast's glandular tissue. Initially, the cancerous growth is confined to the duct or lobule, and over time, the cancerous growth may progress and invade the surrounding breast tissue, then spread to the nearby lymph nodes or the other organs in the body. Breast cancer treatment will be effective when the disease is identified early and usually treated with a multimodality approach, such as surgical removal, chemotherapy, hormone therapy, targeted therapy, and radiation therapy. Hyperthermia has been proposed as a treatment option for these patients, as it has been shown to improve the efficacy of chemotherapy, radiation therapy, and immunotherapy (Issels et al., 2010). Hyperthermia is a therapeutic approach that involves raising the temperature in a specific area to a level that destroys cancer cells while sparing normal tissue (Issels et al., 2010). Hyperthermia has been investigated as a potential treatment option for breast cancer, alone or in combination with other treatments. Hyperthermia has been shown to induce several biological changes in cancer cells, including increased cell death, inhibition of DNA repair mechanisms, and enhanced immune response (Johnsch et al., 2012). These changes can sensitize cancer cells to other chemotherapeutic drugs and reduce the risk of recurrence or metastasis. While hyperthermia has shown promise in preclinical and clinical studies, its efficacy as a standalone treatment for breast cancer is still being evaluated (Skitzki et al., 2008). This study observed the additive effect of hyperthermia and chemotherapy in carcinoma breast patients. Hyperthermia is one procedure that can be combined with other modalities of (except surgery) oncological approaches to treatment.

II. Case Report

A 70-year-old female patient with no comorbid condition complained of swelling in the right breast for 4 months. She also complained of alteration in the skin texture over the swelling and some changes in the shape of the nipple. She further added that swelling in the right armpit disturbed her day-to-day activities.

On examination, she was found to have a lump in the right breast, upper outer quadrant measuring 2 x 2 cm, associated with nipple inversion without any ulceration or discharge. The right axillary lymphadenopathy measuring 5 x 5 was observed with a hard and fixed node. Skin over the swelling was not pinchable.

III. Investigations

Tissue biopsy and histopathological examination reported infiltrating ductal carcinoma – Grade 2 (moderately differentiated). Immunohistochemistry confirmed Estrogen receptor (ER)-positive, Progesterone receptor (PR)-positive and Her2 neu-Negative (Fig. 1).

Figure 1: Immunohistochemistry images of the right breast biopsy specimen showed positive for Estrogen (A) and Progesterone (B) receptors and negative for Her2 neu (C).

IV. Diagnosis

The patient was diagnosed with a case of carcinoma in the right breast stage 3 (cT3N2Mx)

V. Treatment

The patient was treated with 6 cycles of neoadjuvant chemotherapy (Inj. Cyclophosphamide 600 mg + Inj. Adriamycin 60 mg + Inj. 5 Fluorouracil 750 mg). The time


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interval between each cycle of chemotherapy was 21 days. The patient was planned for subjecting to a right modified radical mastectomy. However, the patient was not willing for surgery even after intensive counselling, and the negative sequelae of not undergoing surgery has been explained. Hence the patient was treated with hormone therapy and hyperthermia.

VI. Hyperthermia Treatment

The patient was treated with hormone therapy (Tab. Letrazole 2.5 mg, once a day) based on immunohistochemistry reports (ER-Positive, PR-Positive, Her2 neu-Negative as in Fig.1). A total of 22 sessions of hyperthermia were given at three sessions per week, as given in Table 1. Hyperthermia was given using a remission 1°C machine (Device Name: Remission 1°C hyperthermia, Adipol,Alfa Healthcare India Pvt. Ltd, Seoul, Republic of Korea) 3 days/ week along with hormone therapy as given in Table 1. Remission 1°C hyperthermia device, a therapeutic apparatus, generates high-frequency thermotherapy to the body tissue without stimulating sensory and motor nerves, causing no physical inconvenience or muscular contraction. Further, high-frequency electric energy is applied to the body with a Remission 1°C hyperthermia device that improves molecular movements by rotation, friction twist, or collision, generating frictional heat, thereby augmenting hormonal therapy.

VII. The Course of Treatment

During the first session, a mass in the right breast measured 2 x 2 cm. The size of the right axillary node measured 5 x 5 cm, as given in Figure 2a. The size of the breast carcinoma was reduced, and the right axillary node measured 3 x 3 cm on the fifth session, as depicted in Figure 2b. At the end of the 10th session, the right axillary node size was reduced to 3 x 2 cm (Figure 2c). On the 20th session, the right axillary node measured 2 x 1cm (Figure 2d). PET-CT taken after completing 22 sessions of hyperthermia showed mild residual active disease.

Table 1: Neoadjuvant therapy for the breast carcinoma

Examination Date					
		Diagnostic Classification of the right breast			
Age / Gender / Weight / Female		Type of the Tumor: Invasive ductal carcinoma			
Patient-1	Number of Metastasis		Stage Progression (IHC) By Immunohistochemistry		Treatment Modalities
	Regional Lymph Node	Distant Metastasis	Regional Lymph Node	Distant Metastasis	
Session (1-5)	00 (0/5)	00 (0/5)	00.00	00.00	00 C
Session (6-10)	00 (0/5)	00 (0/5)	00.00	00.00	00 C
Session (11-15)	00 (0/5)	00 (0/5)	00.00	00.00	00 C
Session (16-20)	00 (0/5)	00 (0/5)	00.00	00.00	00 C

VII. Result

The patient's tumor responded well to neoadjuvant chemotherapy. Since the patient was not willing for surgery, she has been subjected to hormone therapy and hyperthermia. The disease had a better outcome with fruitful results. However, the cause of the excellent results could not be attributed to hyperthermia alone.

Figure 2: The photograph of a 70-year-old female with breast carcinoma. During the first session, a mass was present on the right upper anterior breast, measuring 3 x 3 cm (2a), and an axillary node about the size of 5 x 5 cm. After the 5th session of hyperthermia, mass was reduced on the right upper anterior breast, axillary node about the size of 3 x 3cm (2b). After the 10th session of hyperthermia, still, the mass was noticed on the right upper anterior breast, axillary node about the size 3 x 2 cm (2c). After the 20th session of hyperthermia, the mass was reduced significantly on the right upper anterior breast and the axillary node by about 3 x 1 cm (2d).

VIII. Conclusion

In this case report, a 70-year-old female patient with stage 3 carcinoma of the right breast was treated with neoadjuvant chemotherapy, hormone therapy, and hyperthermia. The hyperthermia treatment was administered using a Remission 1°C machine and hormone therapy using letrozole. The treatment results showed a significant response in both the breast tumor and the axillary lymph nodes. The size of the breast tumor and the axillary lymph node decreased progressively with each hyperthermia session. A PET-CT scan revealed minimal residual activity in the breast and axillary region. The findings of this case report suggest that the addition of hyperthermia to the treatment regimen, consisting of neoadjuvant chemotherapy and hormone therapy, provided additive benefits in managing breast carcinoma. Hyperthermia, delivered using the remission 1°C machine, was well-tolerated by the patient and demonstrated efficacy in reducing tumor size. The observed response to hyperthermia can be attributed to its ability to induce several biological changes in cancer cells, including increased cell death, inhibition of DNA repair mechanisms, and enhanced immune response. These changes sensitize cancer cells to other therapeutic modalities, such as chemotherapy and hormone therapy, improving treatment outcomes. However, it is essential to note that this case report represents a single patient, and further research is necessary to establish the generalizability and effectiveness of hyperthermia in breast cancer treatment. Randomized controlled trials involving larger patient cohorts are needed to validate these findings and assess hyperthermia's long-term outcomes and safety profile in combination with other therapies. The present case report highlights the potential benefits of hyperthermia as an


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adjunctive therapy for breast carcinoma. When combined with neoadjuvant chemotherapy and hormone therapy, hyperthermia showed favorable results regarding tumor response. Further research and clinical trials are warranted to elucidate the precise role of hyperthermia and its optimal integration into the treatment paradigm for breast cancer patients, ultimately improving outcomes for these individuals.

Conflict of Interest

The authors have declared that no competing interests exist.

Author's Contributions

GVB, DK, and SS conceived and designed the analysis; GVB collected the data; DK, GVB, SS, and MA contributed data or analysis tools; GVB performed the analysis; MA wrote the paper.

Acknowledgments

The authors greatly acknowledge at this moment a thank note - "we would like to take this opportunity to express our sincere gratitude to all those who have contributed to its creation."

First and foremost, we would like to extend our heartfelt thanks to the doctors who graciously shared their expertise, insights, and experiences with us. Their valuable contributions have made this journal possible, and we sincerely appreciate their generosity and professionalism.

We would also like to thank the patients who participated in this study. Their willingness to share their stories and experiences has been instrumental in advancing our understanding of this vital subject, and we are immensely grateful for their participation.

Finally, we would like to thank all the others who have contributed to this journal, whether by providing technical support, proofreading the manuscript, or offering feedback and suggestions. Your contributions have been invaluable, and your generosity and dedication humble us"

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Session 01

The Size of 5X5 cm

Session 08

The Size of 3X2 cm

Session 12

The Size of 3X1 cm

Case Report

CASE NO 3

ROLE OF HYPERTHERMIA IN LOCALLY ADVANCED BREAST CANCER - A CASE REPORT


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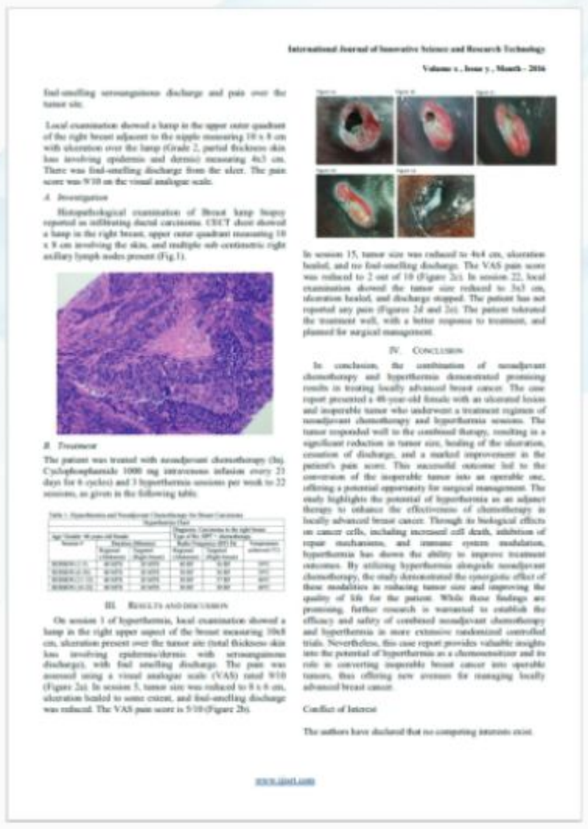
Augmenting Effect of Hyperthermia in Neoadjuvant Chemotherapy for Advanced Breast Cancer – A Case Report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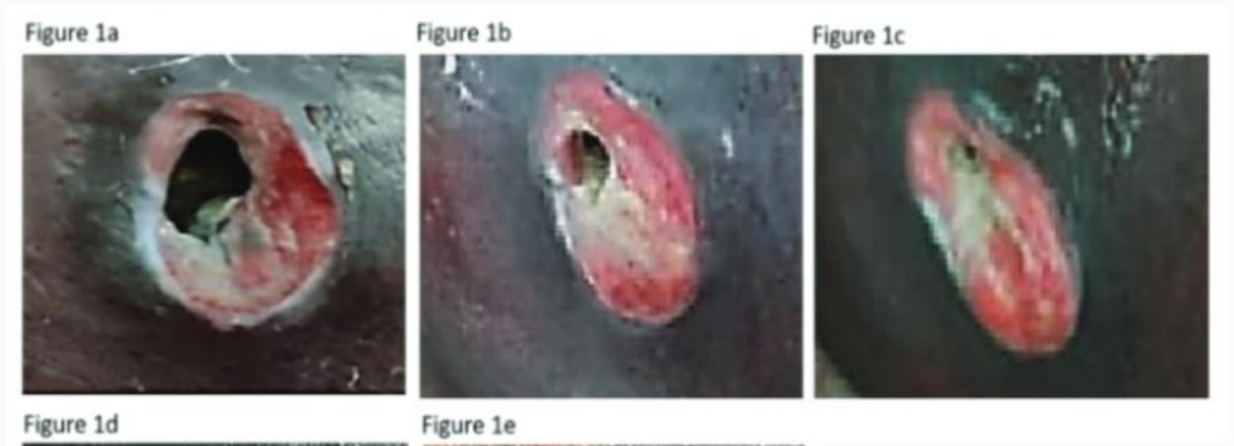


A 48-year-old female patient with T3N3Mx presented with an ulcerated lesion in the right breast adjacent to the nipple with foul-smelling serosanguinous discharge and pain was 9/10 over the tumor site. lump in the upper outer quadrant the patient was treated with neoadjuvant chemotherapy Inj. Cyclophosphamide and 3 hyperthermia sessions per week,

Session	Examination	Ulceration	Discharge	Pain Score	Image
01	Showed a lump in the right upper aspect of the breast measuring 10x8 cm	present over the tumor	Foul smelling discharge.	9/10	Fig 1a
05	Tumor size was reduced to 8 x 6 cm	Healed to some extent	Foul-smelling discharge was reduced	5/10	Fig 1b
15	Tumor size was reduced to 4x4 cm	Healed	No foul-smelling discharge	2/10	Fig 1c
22	Local examination showed the tumor size reduced to 3x3 cm	Healed	Discharge Stopped	1/10	Fig 1d,e

Case Report

CASE NO 4

A CASE REPORT RECURRED BREAST CANCER STAGE – III WITH REMISSION

A case of a 45-year-old female with Stage III (T3N3M0) INFILTRATING DUCTAL CARCINOMA (IDC) of the right breast. with a tumor size of 10 x 8 cm. The patient underwent a right toilet mastectomy has completed with 3 cycles of the CAF regimen. Cancer metastasized to the left breast A trucut biopsy to confirm the diagnosis after the thermal treatment left breast tumor reduced in size from 6 x 5 cm to 3 x 1. 4 cm and the cancer were removed.

Tumor size 6 X 5 cm

LEFT BREAST

Tumor size 3 X 1.4cm

CASE NO 5

ADVANCED BREAST CANCER STAGE III TREATED WITH REMISSION 1°C

A case of 60/ F stage iv (T4a, N1, M0) of right breast local examination pain on right breast (8/10), swelling over the lump in right upper anterior breast 5 x 5cm patient receiving 3 cycles of NACT discontinued due to lymphadenopathy in order to reduce the tumor size by preoperative chemotherapy. Result of thermal treatment lesion size of 5 x 5cm, after chemo (3 cycle + HPT) it shrinks to 3.5 to 4 cm, the cancer was removed.

Before thermal treatment
(Inoperable state)

After thermal treatment
(Removed State)

Case Report

A CASE REPORT RECURRED LIVER CANCER PATIENTS TREATED WITH REMISSION 1°C

In 2016 we have announced the cases of patient improvement.

Period: Aug 23 2016 ~ Nov 17 2016 (60 Times)
Hospital: East West Cancer Center of Dunsan Oriental Medicine Hospital, Daejeon University
Patient: Recurrence of liver cancer (51, Male)
Equipment: REMISSION 1°C

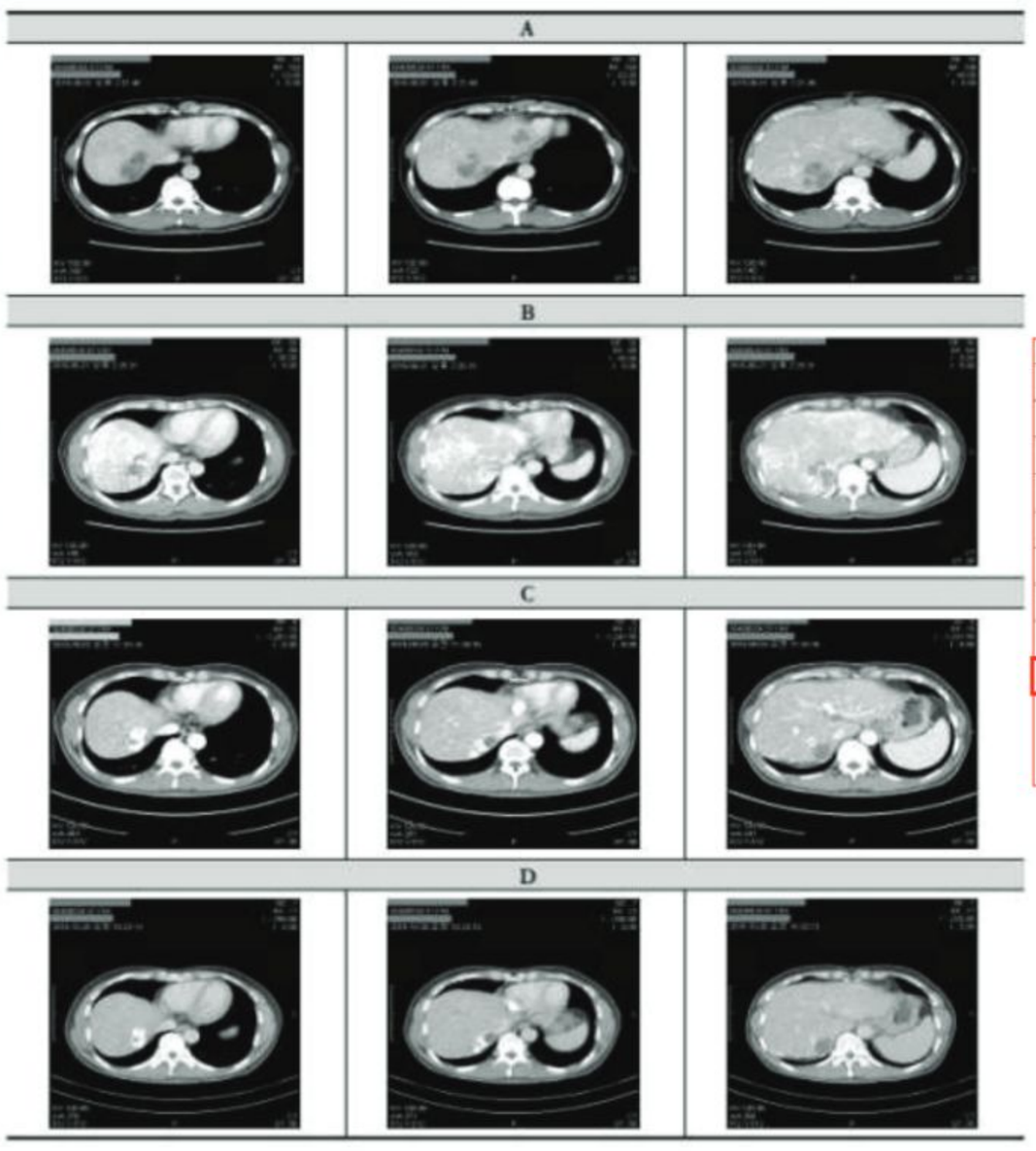


Fig 1. Comparison of Abdomen Computed Tomography

A: Recurred Hepatocellular Carcinoma. The tumor sizes were 5.5x6 cm (S5, 8) and 3x3.2 cm (S4) respectively (2016/06/01).
B: After Transarterial Chemoembolization (2016/06/21).
C: After Radio-Frequency Hyperthermia treatment (7 times). The tumor sizes were 3.7x4.0 cm (S5, 8) and 2x2.3 cm (S4) respectively (2016/09/05).
D: After Radio-Frequency Hyperthermia treatment (18 times). The tumors showed no interval changes (2016/10/28).

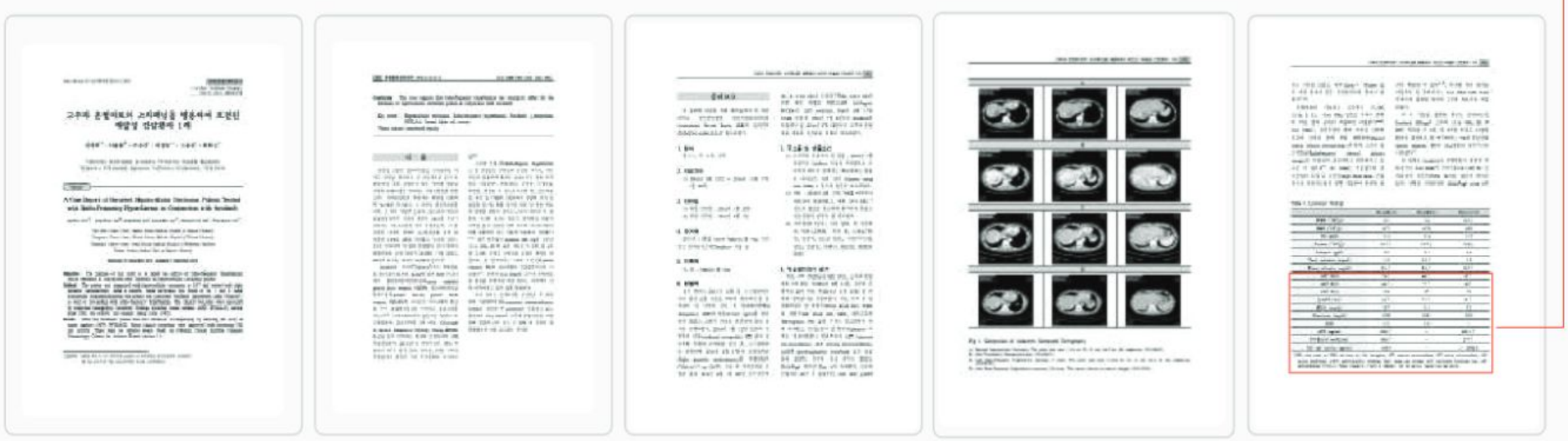
Changes in NK Cell Activity
Result after 3 Months
468.0(2016.08.19) >2000.0(2016.11.21)

AST (U/l)	76 ↑	64 ↑	67 ↑
ALT (U/l)	66 ↑	57 ↑	62 ↑
ALP (U/l)	104	87	70
γ-GTP (U/l)	94 ↑	75 ↑	81 ↑
BUN (mg/dl)	10.7	11.1	9.2
Creatinine (mg/dl)	0.90	0.85	0.92
INR	1.15	1.15	-
AFP (ng/ml)	1065 ↑	-	681.1 ↑
PIVKA-II (mAU/ml)	406 ↑	-	377 ↑
NK cell activity (pg/ml)	468.0	-	> 2000.0

WBC: white blood cell, RBC: red blood cell, Hb: hemoglobin, AST: aspartate aminotransferase, ALT: alanine aminotransferase, ALP: alkaline phosphatase, γ-GTP: gamma-glutamyl transferase, BUN: blood urea nitrogen, INR: international normalized ratio, AFP: alpha-fetoprotein, PIVKA-II: Protein Induced by Vitamin K absence-II, NK cell activity: natural killer cell activity.

High-frequency hyperthermia is not only involved in the formation of blood vessels and apoptosis due to it, but increase the therapeutic effect through immunity activation and improves the quality of life.

A Case Report Recurred Hepatocellular Carcinoma



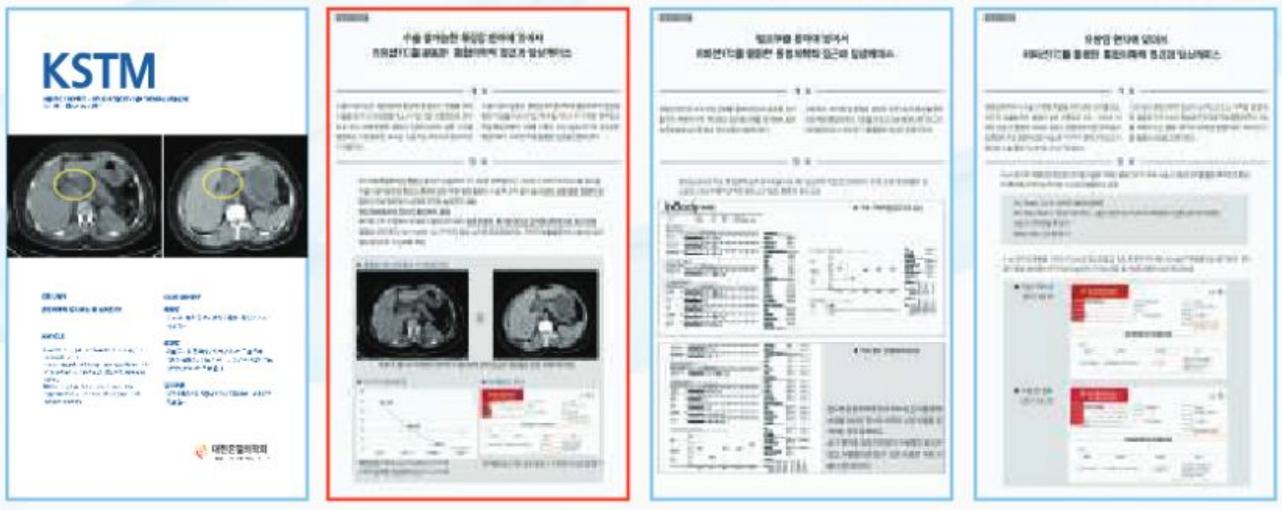
This is a paper that proved increasing of immunity and the improvement the patient by treating with REMISSION 1°C concurrently.

Case Report

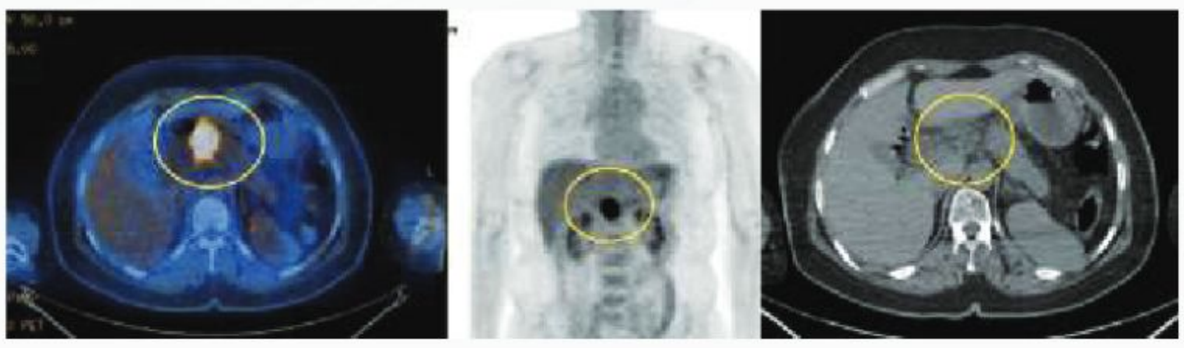
CASE NO 1

INOPERABLE PANCREATIC CANCER STAGE 3 (60 YRS, FEMALE)

KSTM
KOREAN SOCIETY FOR THERMAL MEDICINE



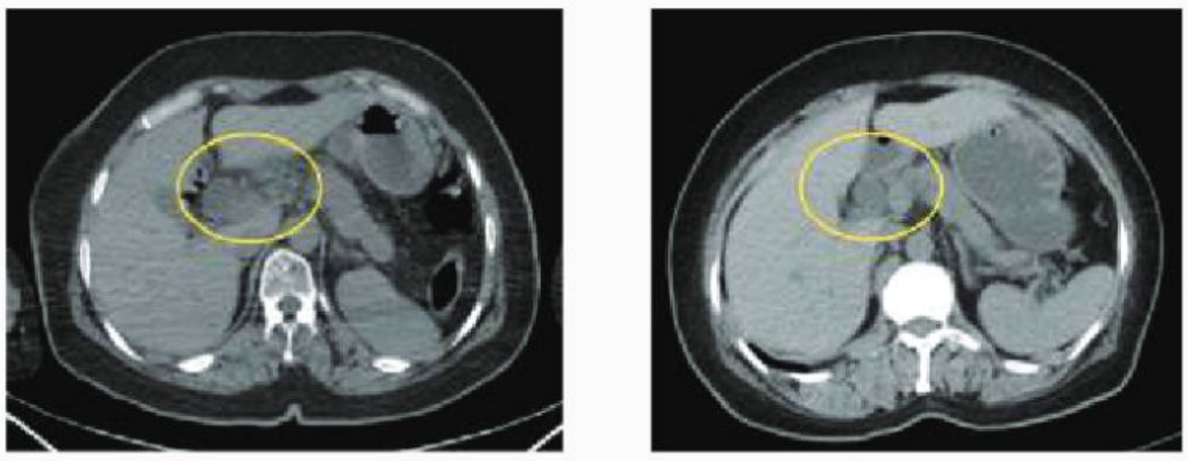
Pre-Treatment PET/CT Pancreatic Cancer

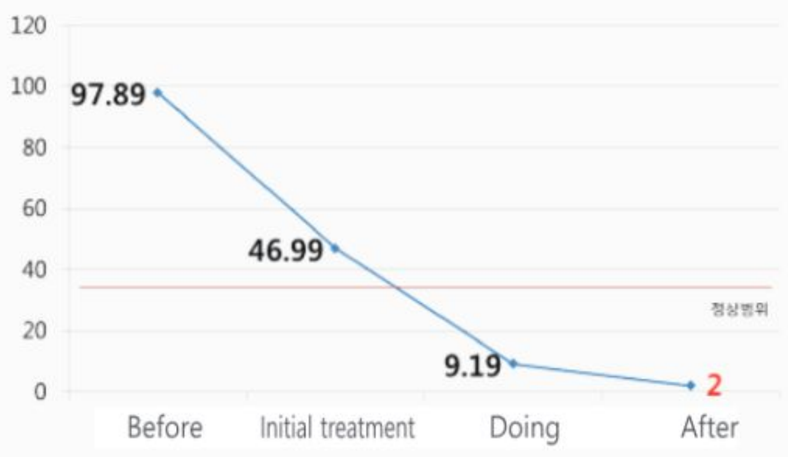


- Invasion of blood vessels by cancer
- Treatment stopped due to leukopenia and decreased
- immune function after chemotherapy

Before the rreatement, icoperable
PET/CT revealed a mass and surrounding vassels were involved.

Pre-Post-Treatment CT, Pancreatic Cancer

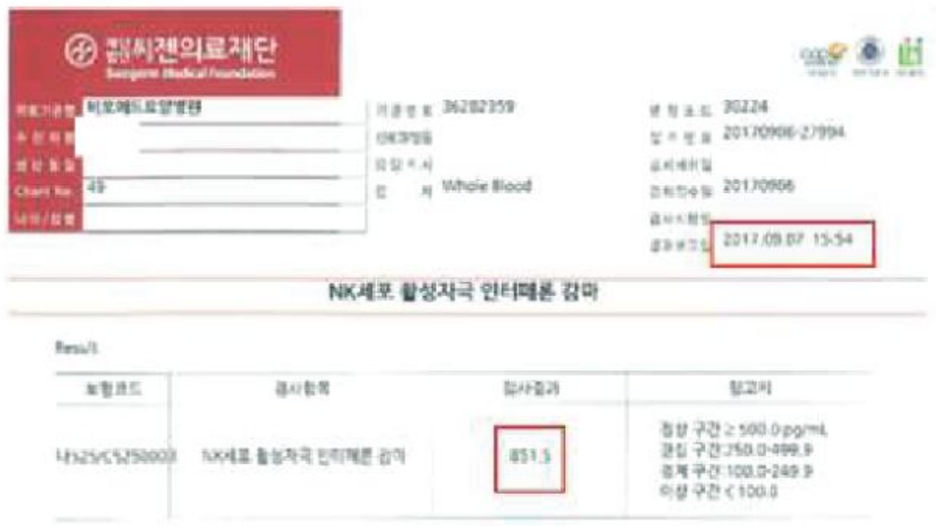




△ Tumor Marker CA 19-9

After the treatment, most of the mass was disappear and the blood vessels invaded was cleared.

- Vascular invasion
- Leukopenia after chemotherapy
- Treatment is discontinued due to impaired
- immune function -> Inoperable
-
- After hyperthermia treatment (REMISSION 1°C)
- Tumor Size 3.5 cm -> 0.6 cm X 0.5 cm X 0.2 cm reduced
- Confirmed pathologically the cancer was removed.



Immune activity increased to 851.5 above the normal level

Case Report

CASE NO 2

INOPERABLE BREAST CANCER (53 YRS, FEMALE)

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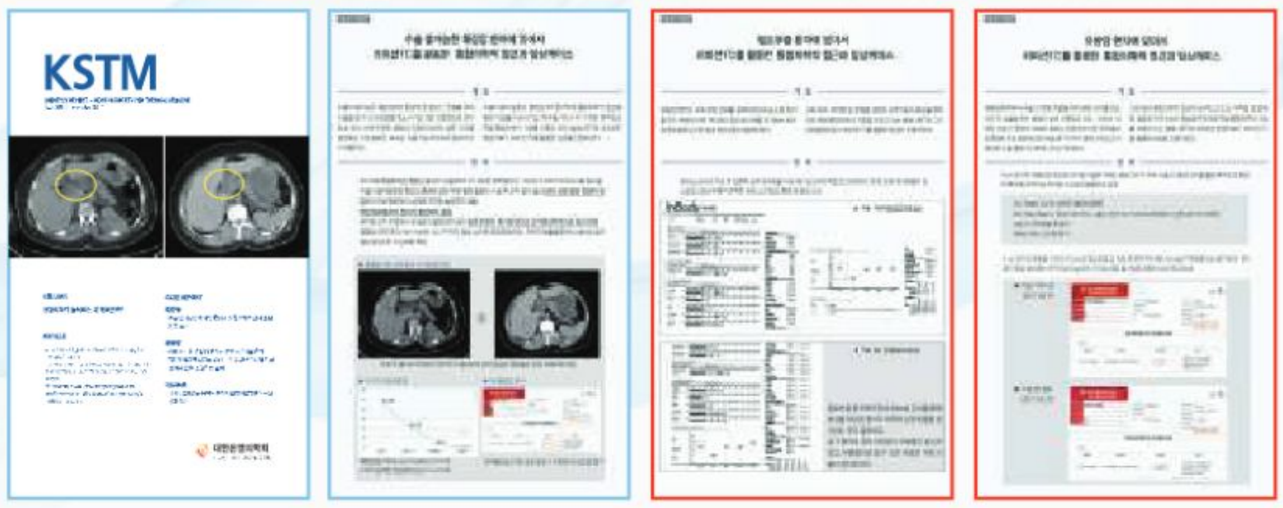
KOREAN SOCIETY FOR THERMAL MEDICINE



2.8 cm Breast Cancer
Be admitted for leukopenia in preparing chemotherapy

Dx: Breast Cancer, Lt, 2017 7 19, IDC, M/D, Impulse (+)
Ki-67: 50%, ER/PC/C -erB2: +/+/+++
Neutropenia at the time of anti cancer(+)
Tumor size: 208 cm, Diffuse Clustering Ring Clumped
Nonmass: 6.4X8.6X7.3 cm

▼

Lympatic biospy, not surgery, determines complete removal

Ki-67: 50% -> 3.87%, HER-2: +++ -> +
Involvement of blood vessels and lymph vessels
After surgery, biops results: Breast Cancer (-)
Lumphoid Mailganacies

Tumor size: 2.8 cm -> Tumor size : 0cm
Complete removal after treatment

CASE NO 3

Dx: Breast Cancer
Mass: 4cm, LN Metastatis (=+)
During admission of anticancer drugs, the treatment of anticancer drugs was abandoned due to decreased immune function and systemic failure.

▶

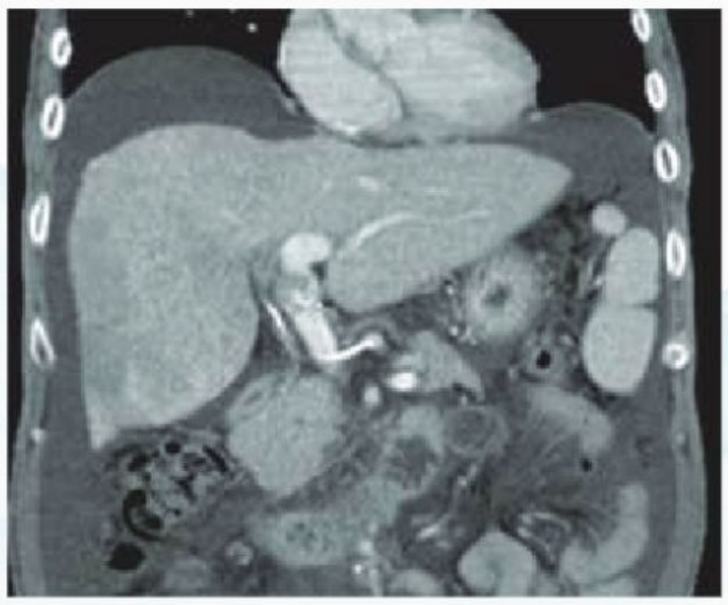
Tumor size 4cm -> 2cm
Complete recovery after surgery
After treatment, the immunity index (NK Cell Activity) increased more than 400 times to 2000 pg/mL or more.

- Before treatment (2017 08 31)
  NK Cell Activity : 4.5

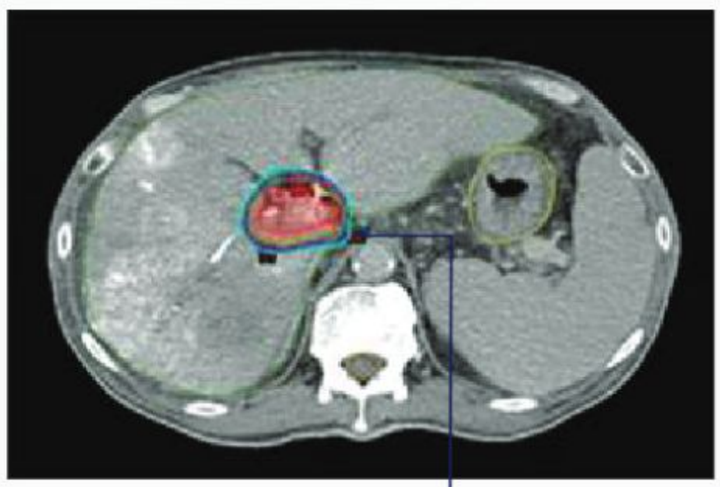
- After 3 weeks (2017 09 25)
  NK Cell Activity: Oer 2000

REMISSION 1°C Hyperthermia Effect

Patient: 000 (54/M)
DX: Hepatocelluar Ca TACE, HAIC

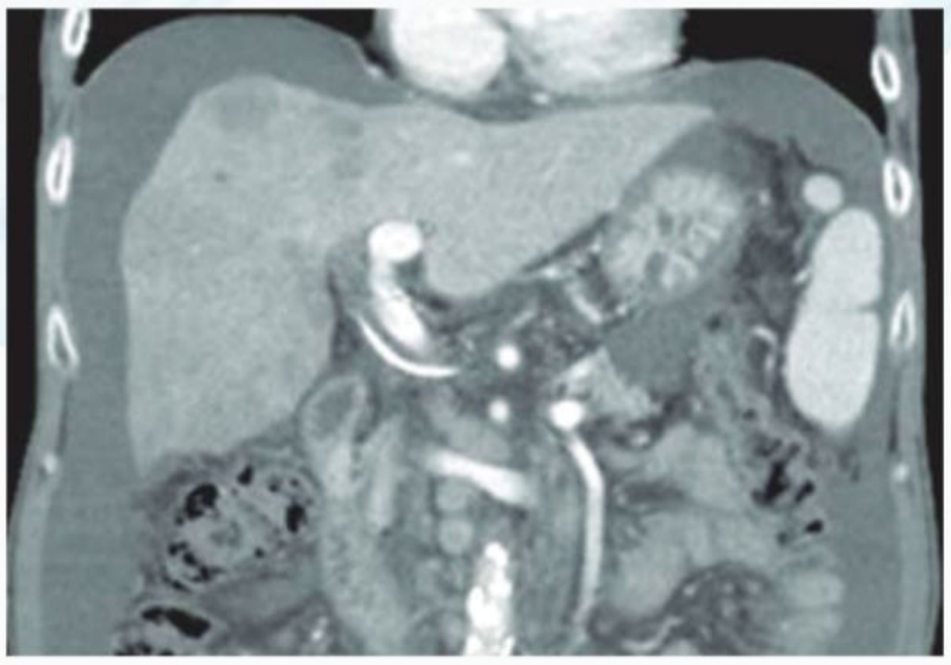


Abd CT (2019 29 Jan)
PVTT involving main PV and IVC
Portal thrombasis including heptic portal vein and inferior vena cava



IMRT for PVTT: 50Gy/20fx (2019 2 12 3.20+HT (x4) IMRT

(Liver Cancer with portal vein tumor thrombosis 54, Male)

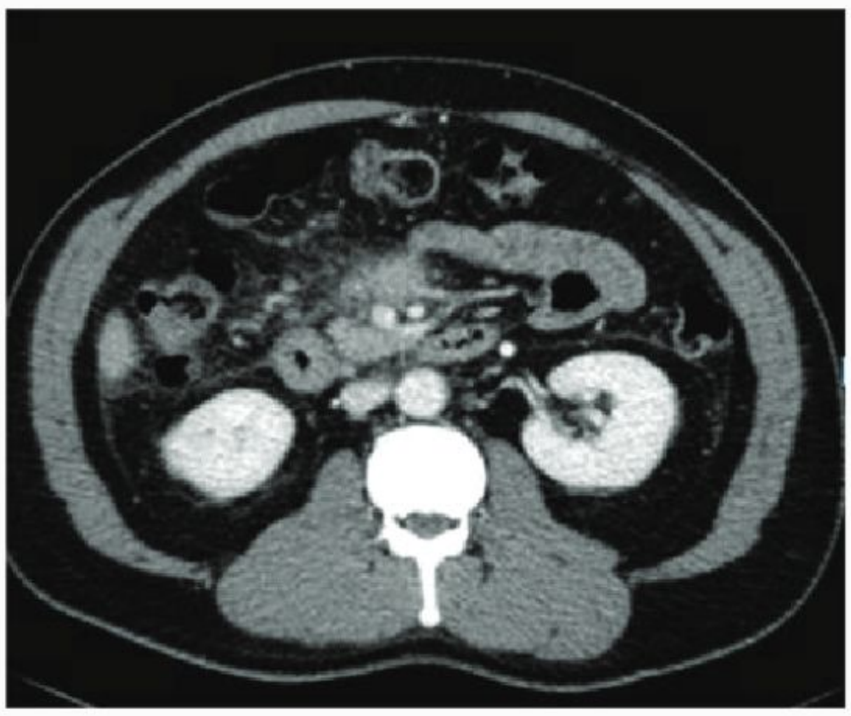


Abd CT(2019 25 Apr)
Decreased PVTT in main PV and IVC

Decreased Portal Vein Tumor Thrombus

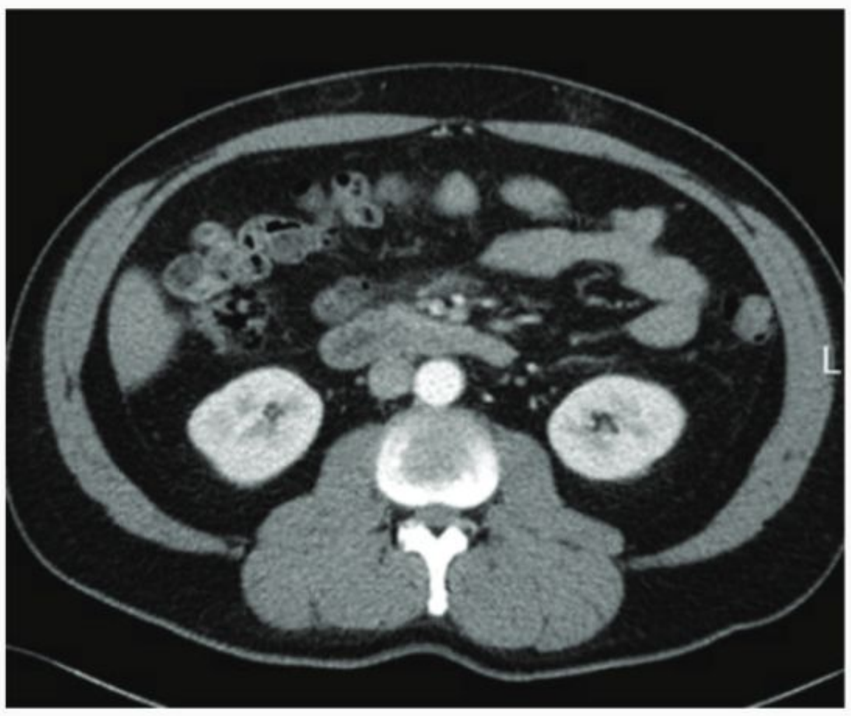
REMISSION 1°C times & Special Radiotherapy

(Gastric Cancer patient with lymph node metastasis to the lung and liver, Male)



Abd Ct (2019 22 Jan)
SFU Infusion +HT (x10)
(2019 1 24- 3.8): SFU
REMISSION 1°C times & Medication

Patient: 000 (49/M)
DX: Gastric Ca with liver, lung meta



Abd CT (2019 21 Mar)

Decreased size of metastatic LAP
(Tumor Size Decreased)

The Global Coverage

CHINA

SHANGHAI FUMI SCI & TECH CENTER

(1) Equipment Purchase Contract Signed
Clinical approval of medical devices in China

Beijing, Shanxi, Shanghai, etc.
Scheduled clinical trial at a general hospital

(2) Strategic Cooperation Discussion
- Establishment of joint venture
- Expected mass export based on clinical trial results in China

MALAYSIA

MALAYSIA KUALA LUMPUR

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Medical staff using REMISSION 1℃ :
Dr. HO GWO FUANG, FRCR(Lond), MRCP(UK), BSc(Scot), MBChB(UK)
Consultant, Specialist in CLINICAL ONCOLOGY

OTHER COUNTRIES

UZBEKISTAN

Medical Device Registration Certificate

Romania/Tunisia/
Philippines/Russia/
Egypt/USA

SINGAPORE

Preventive and
Regenerative Healthcare
Singapore Using REMISSION1℃

The Domestic Coverage

INDIA

PUDUCHERRY

MAHATMA GANDHI POSTGRADUATE INSTITUTE OF DENTAL SCIENCES

No. 4/477,1 St Cross Stree, Opp. To
Mahathma Dental College,
Kalaivaanar Nagar,
Puducherry, 605006.

BANGALORE

SRI SRI COLLEGE OF AYURVEDIC SCIENCE & RESEARCH HOSPITAL

Survey No. 189, O.B. Chordahalli,
Udayapura Post, Kanakapura Road,
South,Bengaluru, Karnataka 560082.

CHENNAI

HEALMED HEALTHCARE & WELLNESS CENTRE

Suite No.2, 3rd floor, Hameedia Shopping
Mall, No.108,109, Triplicane High Road,
Triplicane, Chennai – 600005.

CUDDALORE

ANVIKA HOSPITAL

Pondicherry Main Road, Near Alpet Check
Post, Manjakuppam, Cuddalore. 607001.

VILLUPURAM

JAYAM NALLAM HOSPTAL

No.5, Dhanalakshmi Garden, Trichy Main Rd,
Villupuram, Tamil Nadu, 605602.

PUDUCHERRY

ORIENTAL WELLNESS CENTER

International Virus Research Alliance (IVRA)

REMISSION 1°C COVID-19 TREATMENT AND IVRA ESTABLISHMENT AND EVENT SUPPORT

Global Medical Experts Meeting
Treatment Sharing By Country
Medical Technology Sharing By Country
Disease Eradication

IVRA OVERVIEW

Composition of Professional Medical Personal + Advisory Committee

Forming a dream team to share opinions with interested scholars around the world for the treatment of COVID-19.

Medical Sharing Technology

Sharing treatment methods and medical technologies around the world to enhance human immunity

Activation of Autoimmunity

Research on the activation of immunity through the activation of autoimmune cells (NK CELL) by raising the body temperature using high-frequency

Future Vision

Forming a team to research and treat the 2nd and 3rd COVID-19 that will threaten humanity in the future

Sep 2021: IVRA Establishment & International Conference on Sharing Hope for Overcoming The COVID-19 Pandemic




Dec 2021: IVRA Year~End General Meeting

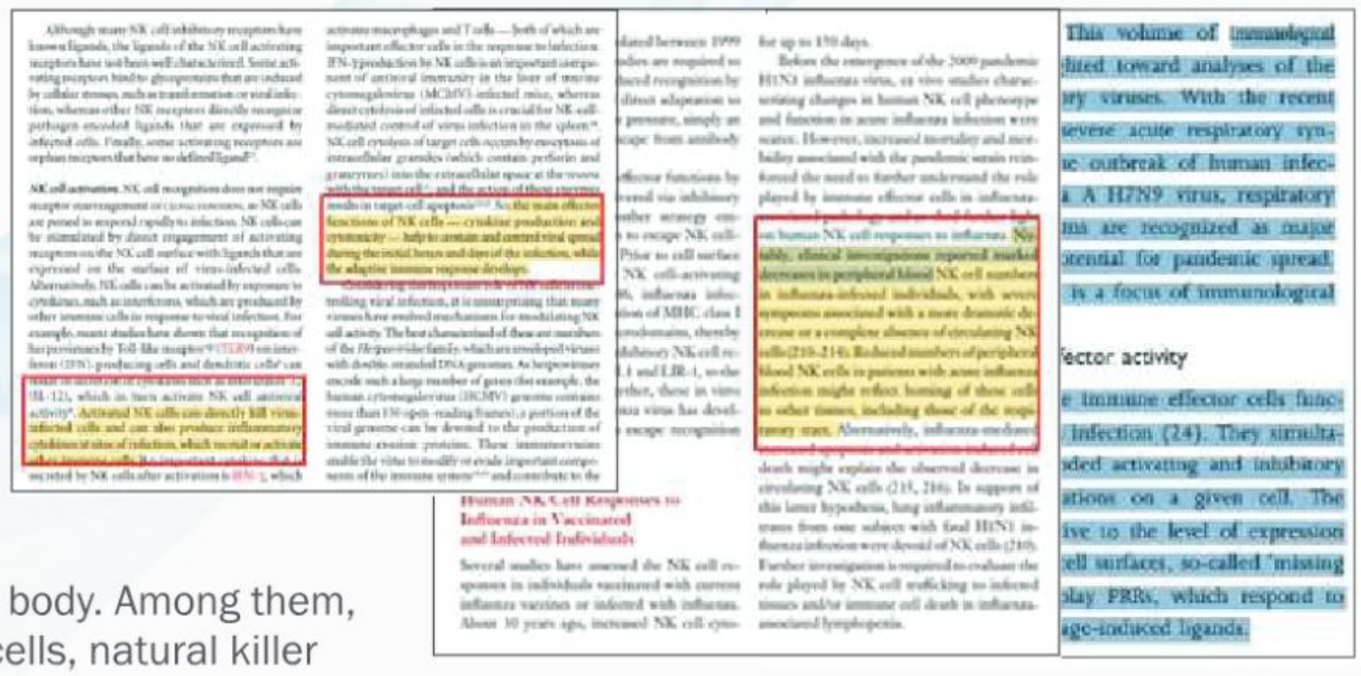

International Virus Research Alliance (IVRA)

PROGRESS OF REMISSION 1°C HYPERTHERMIA TREATMENT FOR COVID-19 PATIENTS

CHANGES IN THE HUMAN BODY WHEN BODY TEMPERATURE RISES

Many changes occur when the body temperature rises. As body temperature rises, blood flow increases, improving blood flow and increasing human immunity. Increased immunity can kill viruses that have pen etrated the human body and prevent secondary infections caused by the viruses.

Immunity Related Report



Although many NK cell inhibitory receptors have known ligands, the ligands of the NK cell activating receptors have not been well characterized. Some activating receptors bind to glycoproteins that are induced by cellular stresses, such as transformation or viral infection, whereas other NK receptors directly recognize pathogen-encoded ligands that are expressed by infected cells. Finally, some activating receptors are orphan receptors that have no defined ligand[27].

NK cell activation. NK cell recognition does not require receptor rearrangement or clonal expansion, so NK cells are poised to respond rapidly to infection. NK cells can be stimulated by direct engagement of activating receptors on the NK cell surface with ligands that are expressed on the surface of virus-infected cells. Alternatively, NK cells can be activated by exposure to cytokines, such as interferons, which are produced by other immune cells in response to viral infection. For example, recent studies have shown that recognition of herpesviruses by Toll-like receptor 9 (TLR9) on interferon (IFN)-producing cells and dendritic cells[28] can lead to the production of cytokines such as interleukin 12 (IL-12), which in turn activate NK cell antiviral activity[29]. Activated NK cells can directly kill virus-infected cells and can also produce inflammatory cytokines at sites of infection, which recruit or activate other immune cells. It is important to note that the cytokines secreted by NK cells after activation (such as IFN-γ, which activates macrophages and T cells — both of which are important effector cells in the response to infection; IFN-γ production by NK cells is an important component of antiviral immunity in the liver of murine cytomegalovirus (MCMV)-infected mice, whereas direct cytolysis of infected cells is crucial for NK cell-mediated control of virus infection in the spleen[30]. NK cell cytolysis of target cells occurs by exocytosis of intracellular granules (which contain perforin and granzymes) into the extracellular space at the synapse with the target cell[31], and the action of these enzymes results in target-cell apoptosis[32,33]. So, the main effector functions of NK cells — cytokine production and cytotoxicity — help to contain and control viral spread during the initial hours and days of the infection, while the adaptive immune response develops.

Controlling the replication of virus and controlling viral infection, it is unsurprising that many viruses have evolved mechanisms for modulating NK cell activity. The best characterized of these are members of the Herpesviridae family, which are enveloped viruses with double-stranded DNA genomes. As herpesviruses encode such a large number of genes (for example, the human cytomegalovirus (HCMV) genome contains more than 150 open-reading frames), a portion of the viral genome can be devoted to the production of immune evasion proteins. These immunevasins enable the virus to modify or evade important components of the immune system[34,35] and contribute to the

Human NK Cell Responses to Influenza in Vaccinated and Infected Individuals

Several studies have assessed the NK cell responses in individuals vaccinated with current influenza vaccines or infected with influenza. About 10 years ago, increased NK cell cytotoxicity was observed between 1999 and 2001 in healthy individuals who were vaccinated with trivalent inactivated influenza vaccine (TIV) and who did not require prior exposure to influenza virus for up to 150 days.

Before the emergence of the 2009 pandemic H1N1 influenza virus, ex vivo studies characterizing changes in human NK cell phenotype and function in acute influenza infection were scarce. However, increased mortality and morbidity associated with the pandemic strain reinforced the need to further understand the role played by immune effector cells in influenza-virus pathogenesis and clearance. Recent studies have focused on human NK cell responses to influenza. Notably, clinical investigations reported marked decreases in peripheral blood NK cell numbers in influenza-infected individuals, with severe symptoms associated with a more dramatic decrease or a complete absence of circulating NK cells[210–214]. Reduced numbers of peripheral blood NK cells in patients with acute influenza infection might reflect homing of these cells to other tissues, including those of the respiratory tract. Alternatively, influenza-mediated death might explain the observed decrease in circulating NK cells (215, 216). In support of this latter hypothesis, lung inflammatory infiltrates from one subject with fatal H1N1 influenza infection were devoid of NK cells (216). Further investigation is required to evaluate the role played by NK cell trafficking to infected tissues and/or immune cell death in influenza-associated lymphopenia.

This volume of immunological
dited toward analyses of the
ory viruses. With the recent
severe acute respiratory syn-
e outbreak of human infec-
a A H7N9 virus, respiratory
ns are recognized as major
otential for pandemic spread
n a focus of immunological

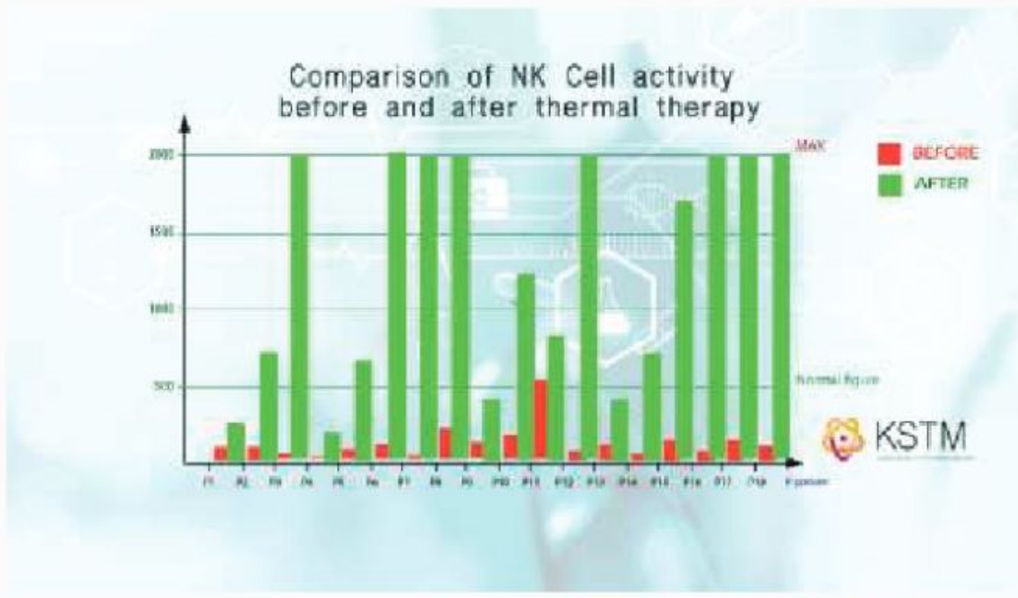
fector activity

e immune effector cells func-
infection (24). They simulta-
ded activating and inhibitory
ations on a given cell. The
ive to the level of expression
ell surfaces, so-called 'missing
play PRRs, which respond to
age-induced ligands.

There are many autoimmune cells in our body. Among them, the best immune cells are NK cells. NK cells, natural killer cells, are important cells in charge of innate immunity and are representative autoimmune cells that attack virus-infected cells or tumor cells.

REMISSION 1°C IMMUNOTHERAPY EFFECT

In the case of a normal person, NK activity is activated dozens of times even with only two or three treatments, so it is possible to treat cancer by suppressing the proliferation of cancer cells as well as viral treatment. Currently, it is delivered to Seoul St. Mary's Hospital and about 100 other hospitals, and is used to treat pain patients and cancer patients. It is also a safe and proven medical device that can increase the level of neutrophils in white blood cells that influence immunity



Sources: KSTM President Dr. Lhi-Bong Choi's Case Report of " Hyperthermia and Immune Response " in REMISSION Special Seminar

Thesis in comparison of NK Cells activity between before & after treatment from Korea Society of Thermal Medicine

Ehiruh	Diwhu	Ehiruh	Diwhu
718	A5333	99	A5333
7;1:	A5333	7918	A5333
71<	A5333	45;	A5333
577	A5333	98	A5333

아디포랩스, LG 트윈스 구단과 업무협약 체결

리믹션1℃ 활용으로 선수들의 경기력 향상과 건강 관리 도움

REMISSION 1°C STABILITY VERIFICATION

REMISSION 1°C to be used by athletes of the professional baseball team LG Twins to recover immunity and increase physical strength.

REMISSION 1°C is a device that uses 0.46 Mhz High Frequency and has been used as a pain relief and obesity treatment device for nearly 20 year, and it is a safe device that has been used in more than 100 hospitals so far and has no serious side effects.

International Virus Research Alliance (IVRA)

REMISSION 1°C IMMUNOTHERAPY EFFECT TO COVID-19 INFECTED PATIENT

Season Medical Centre
In Chungnam, Korea

REMISSION 1°C donnation
for COVID-19 immunotherapy

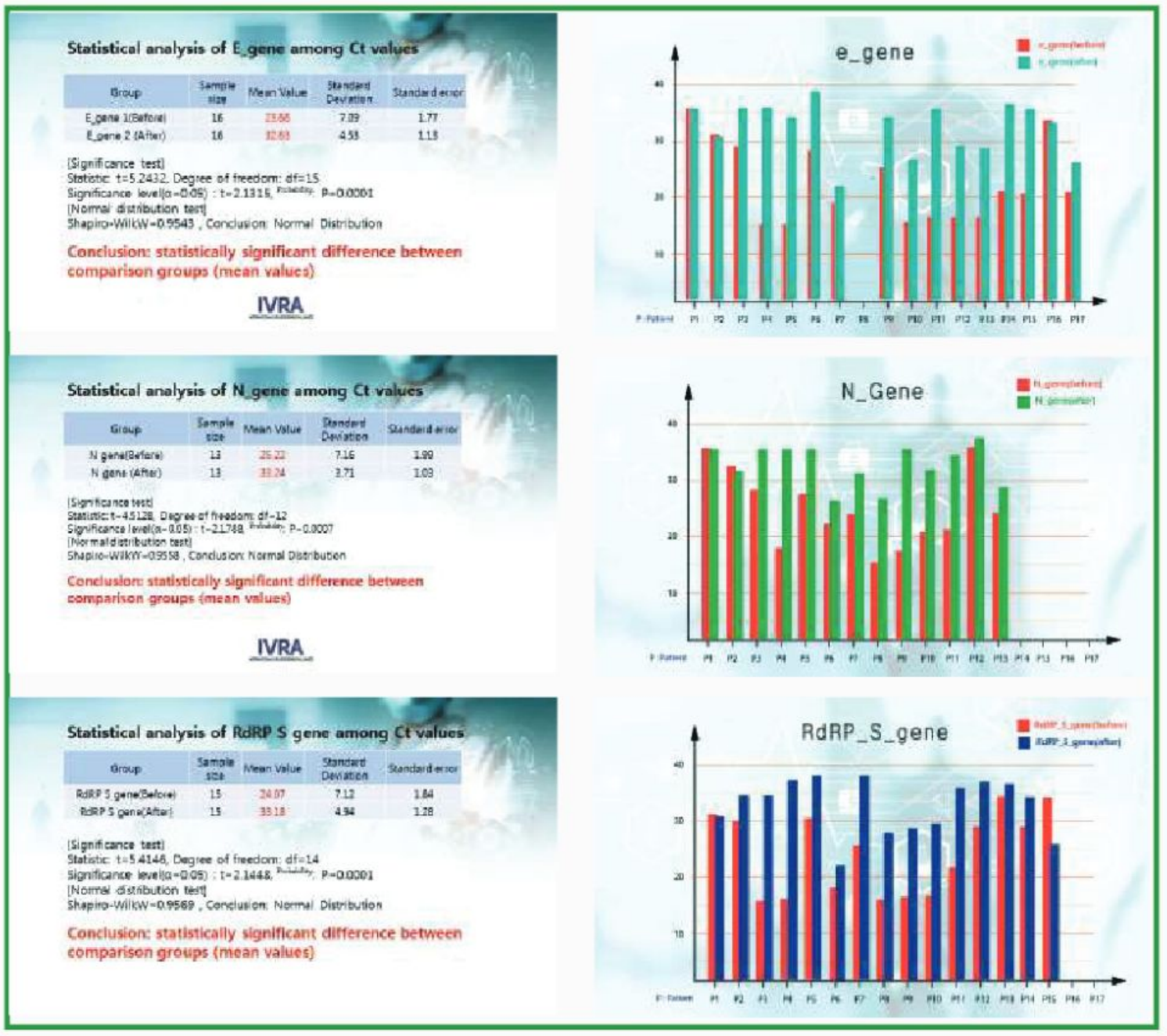
COVID-19 patients waiting
for REMISSION 1°C Treatment

Started REMISSION 1°C treatment for COVID-19 patients

1. In past 3 months, high-frequency hypethermia treatment was performed on 26 patients with COVID-19 at Season Medical Center in Chungcheongnam-do, and there were no side effects or worse cases.

2. Discovery of an important fact in the treatment of COVID-19 patients during the treatment period: The answer is in the PCR value that checks the degree of infection of COVID-19 patients.

PCR TEST



PCR TEST RESULT AFTER REMISSION 1°C

In the PCR Test of patients who received treatment , tow or more of each value of E_gene, RdRp_S_gene, and N_gene showed an increase of 30 or more in the test.

Confirmed that the application of high-frequency hyperthermia to COVID-19 could produce good results.

RESULT

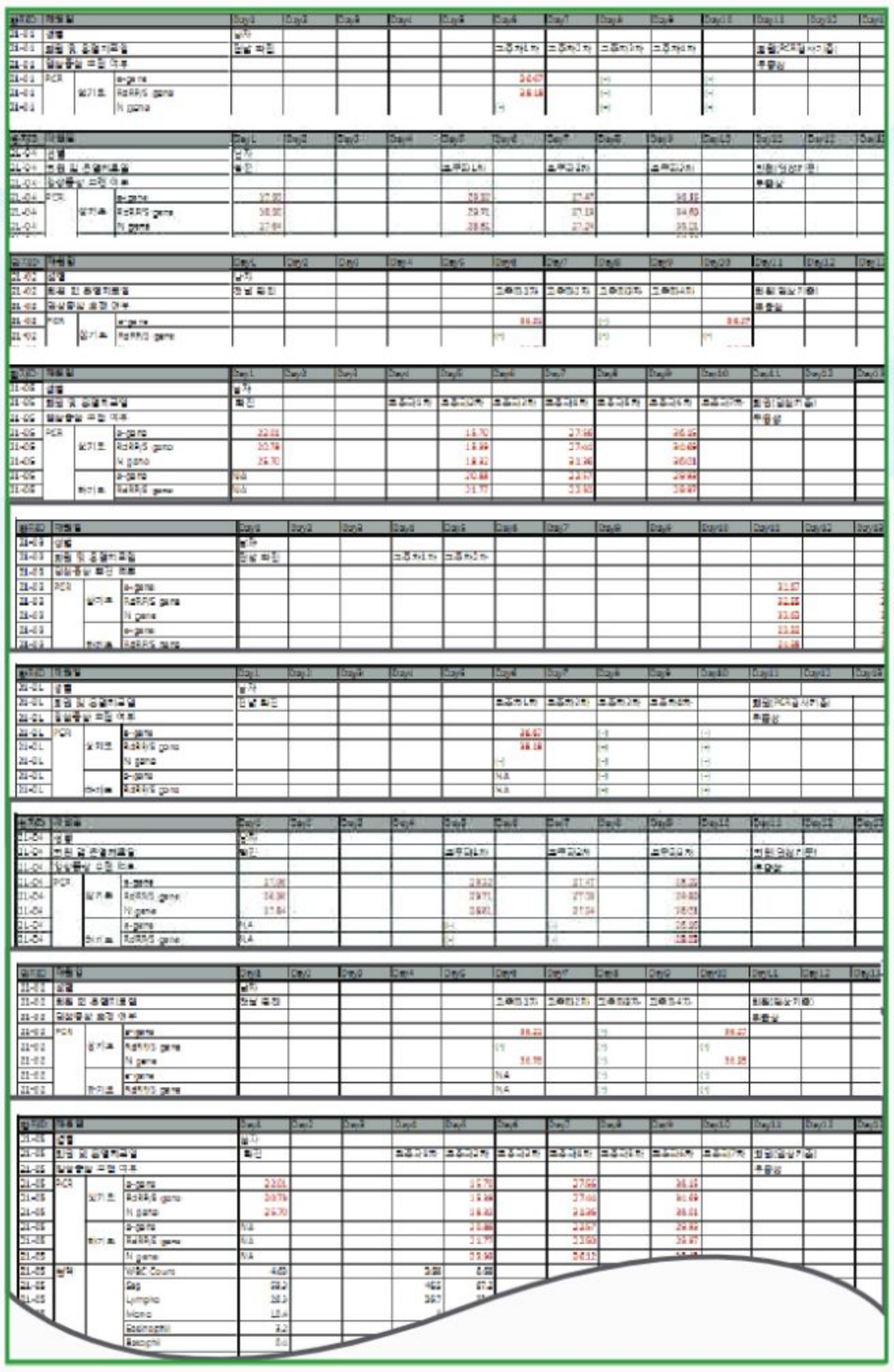
E_gene, RdRp_S_gene, and N_gene all used for the test showed good responses. Confirmed that good results can be obtained by applying high-frequency hyperthermia to COVID-19 treatment in order to eliminate the contagiousness of mild patients and asymptomatic positive patients in the pan demic situation and to treat COVID-19 early.

CONCLUSION

If two or more CT values (E_gene, RdRp_S_gene, N_gene) are 30 or more, infectivity is low.
It is expected that the desired result can be obtained if high-frequency hyperthermia treatment is used in the early stage.
In order to shorten the treatment period, hyperthermia treatment and research should be conducted imultaneously and expanded.

International Virus Research Alliance (IVRA)

COVID--19 INFECTED PATIENT & REMISSION 1°C RESULT OF HYPERTHERMIA



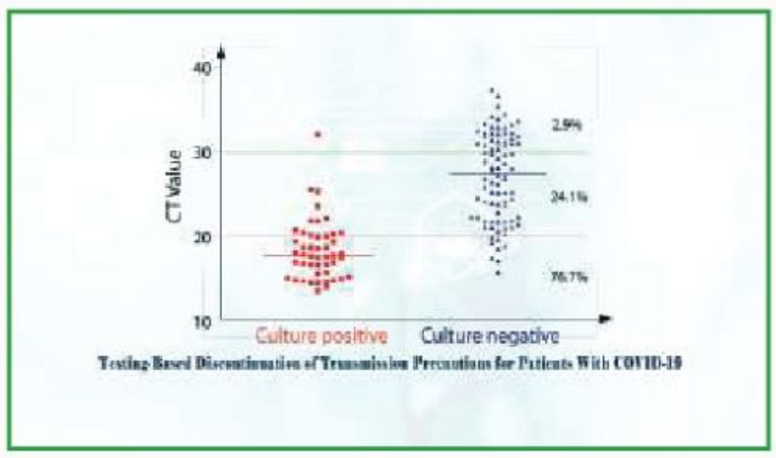
Clinical results of REMISSION 1°C TREATMENT IN COVID-19 PATIENTTS

코로나 환자 퇴원 기준과 PCR 테스트 CT값 (5월 의료원 코로나 환자 퇴원 기록)

환자 NO.	최종PCR CT값	퇴원일
환자1	35.36	11일
환자2	36.79	12일
환자3	24.25	11일
환자4	27.59	11일
환자5	20.3	12일
환자6	19.15	12일
환자7	25.71	11일
환자8	38.6	11일
환자9	33.88	11일
환자10	26.43	11일
환자11	33.25	11일
환자12	33.22	11일
환자13	37.58	11일
환자14	31.37	15일
환자15	20.25	15일
환자16	23.90	15일
환자17	37.75	11일
환자18	36.77	11일
환자19	25.07	16일
환자20	29.58	12일
환자21	28.72	12일
환자22	38.24	11일
환자23	35.98	12일
환자24	30.29	11일
환자25	38.02	13일
환자26	28.18	13일
환자27	33.57	14일
환자28	29.51	14일
환자29	34.38	15일
환자30	36.89	13일
환자31	37.11	11일
환자32	23.81	11일
환자33	33.67	11일
환자34	33.85	15일
환자35	36.15	12일
환자36	31.71	12일
환자37	26.28	13일
환자38	36.15	12일
환자39	31.71	12일
환자40	26.28	13일
평균	31.35	12일

COVID-19 patient discharge criteria & PCR test CT value (Record of COVID-19 patient discharge from medical center in May 2021)

All 40 were positive who did not reach the negative standard. But all of them were discharged from the hospital and are leading normal lives.



CT Values of negative and positive resultes were compared to 124 SARS-COV-2-negative patients and a subset of patients with mixed negative and positive results for recovery of virus via cell culture. As a result, subsequent positive tests in patients who had previously tested negative produced a CT value of 29.5 or higher. (Figure 1).

[Source: Among the presentations of Yoo Seung-mo, chairman of IVRA at Yesan Myeongji Hospital in Chungnam at the IVRA International Academic Conference.]

CONCLUSION OF REMISSION 1°C TREATMENT

Quarantine patients are able to be released from quarantine and return to their daily lives if there is no symptom of infection even if the PCR test result is lower than 25 to 30.

Since May 2021, 20 patients had been treated with the high-frequency hyperthermia medical device and checked value rises up to 30 or more in patients who have been treated twice, which is proved to be helpful in treating patients infected with the virus.

RE MISSION 1°C

HYPERTHERMIA

High-frequency heater

WE GIVE YOU A MIRACLE OF 1°C

- We hope to bring “Healthy Life”, Human’s Biggest desire with REMISSION 1°C, the High-Frequency hyperthermia equipment.
- Our equipment can treat cancer by generating strong deep heat by 0.46 MHz frequency. This increases organ temperature deep inside the body
- If the human temperature is DECREASED by 1°C, 12% of metabolism and 30% of immunity are DECREASED. Once the body temperature is INCREASED by 1°C, Our immunity is INCREASED by 3-5 times. Increasing of mere 1°C can prevent more diseases.
- REMISSION 1°C is the first advanced cancer treatment equipment which takes high-frequency into the body at 460000 times per second. By the molecular movements it can generate heat to tumourcells, significantly enhance the NK cell activity, resulting in the necrosis of the tumour cells.
- REMISSION 1°C TREATMENT PROGRAM – TIME :
  60~90 minutes -> 60~120 minutes session.
  - Frequency of Treatment: 2-5 Times/Week (according to program)
  - Time and number may vary depending on the patient’s condition

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