

Efficacy of Rotational Field Quantum Nuclear Magnetic Resonance (RFQMR) in the treatment of End Stage Terminal Cancer Patients

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ABSTRACT

Introduction

It was established that trans membrane potential (TMP) is one of the known cellular signaling pathways. TMP pathways also regulate synthesis of various proteins at the appropriate time in the living cells. Many illnesses – like cancer, heart disease, degenerative disorders like cartilage loss and different kind of inflammation – are also linked to disturbances in the protein transcription process (*Cone CD. et. al., Variations of Transmembrane Potential as a basic mechanism of mitosis control: Oncology: 1970; 24:438-470*). It was thought in 1995 that if an appropriate method could be developed to alter the TMP in a controlled manner, most of these disorders that are protein linked could be tackled.

The Method

Generically known as Rotational Field Quantum Nuclear Magnetic Resonance (RFQMR) is a technology that is made to deliver highly complex quantum instantaneous Nuclear Magnetic Resonance beams in the sub-radio and radio frequency, with a near field delivery using specialized antenna (K- μ Ferrite type; Near Field; gain; 10dB), that when appropriately controlled can alter the TMP to the specific requirement like stimulation of HSP 70/90 group of protein synthesis in cartilage regeneration or P53 and its silent partner P73 protein in case of Neoplastic Disorders. The delivered instantaneous mode magnetic and RF modulation is highly cell and site specific (based on proton density, permittivity, depth of penetration), to modulate the cell membrane potential *in vivo*, such that specific protein required for tissue regeneration or degeneration is initiated.

For the study, 46 volunteer patients who were terminally ill with only a few weeks or months to live, as certified by their treating oncologists were recruited. Their physical and psychological condition was extremely poor. They had lost all hope and most of them were experiencing severe pain. After about 3-7 exposures their pain disappeared. They started eating better and became more cheerful. Their general quality of life improved. Those that needed to be brought in wheelchairs or needed a supporting hand now walked in for the treatment unaided. Some of them have gone back to work. In fact some have even volunteered to do nightshifts in their job. On three monthly follow-up CT and MRI scans it was found that the tumors had stopped progression.

Sample:

46 patients were included in the study between January 2006 to February 2008.

All tumor types were histopathologically confirmed

All patients were treated already by surgery and / or chemotherapy and / or radiation or had no options for any known treatment. Only patients who had no other alternative cure available anymore were admitted to participate in the trial.

All patients did initiate the RFQMR treatment. 39 patients did complete the treatment. 6 patients attended the treatment partially or a few days only.

The cancers represented were: (1) Lung carcinoma, (1) Brain glioma, (2) Brain carcinoma metastasis, (1) Multiple brain carcinoma, (8) Breast carcinoma metastasis, (2) Prostate carcinoma metastasis, (2) Colon carcinoma metastasis, (1) Ethmoidal sinus carcinoma, (3) Brain GBM, (2) Kidney carcinoma metastasis, (1) Liver carcinoma metastasis, (1) Hepatocellular carcinoma, (5) Lung carcinoma metastasis, (1) Medulloblastoma, (4) Ovarian carcinoma metastasis, (1) Appendix carcinoma metastasis, (7) Pancreatic carcinoma metastasis, (3) Pancreatic carcinoma,

Results:

	patients 2006		patients 2007		patients, total group	
	#	%	#	%	#	%
full treatment	12	86	28	88	40	87
partial treatment	2	14	4	13	6	13
Total	14	100	32	100	46	100
	full treatment 2006		full treatment 2007		full treatment, total	
	#	%	#	%	#	%
Alive	6	50	15	54	21	53
passed away	6	50	13	46	19	48
Total	12	100	28	100	40	100
<u>objective analyses</u>						
(patients alive)	6	100	15	100	21	100
tumor disappeared (MRI)	2	33	2	13	4	19
tumor markers improved*	2	33	3	20	5	24
tumor stablelised	1	17	5	33	6	29
no data	1	17	5	33	6	29
<u>subjective analyses</u>						
(patients alive)	6	100	15	100	21	100
much less pain	5	83	12	80	17	81
feels much better	5	83	12	80	17	81
Stronger	5	83	10	67	15	71

better appetite	5	71	12	80	17	81
can walk again**	2	100	2	13	4	19
no data	1	14	2	13	3	14
(patients passed away)	6	100	13	100	19	100
felt better	3	50	3	23	6	32
had less pain	3	50	8	62	11	58
no data	3	50	3	23	6	32

* tumor markers improved out of the group with tumor markers registered: 2006 (4), 2007 (5)

** can walk again, measured out of the group with known immobility: 2006 (2), 2007 (2)

Conclusion

In conclusion the volunteers were indeed patients for whom there was no further known treatment available. On top of that, the majority of the patients had been informed by their treating oncologist that they had a very limited future life expectancy, often as short as 1 – 3 months.

Future life expectancy in medical terms is hard to predict, especially for most cancer patients. Still, considering the fact that the patients involved were very ill indeed, an extraordinary high percentage of the treated patients are still alive. Remarkable in this aspect are the GBM patients treated. GBM is a very lethal tumor, with normally death within three to six months after diagnoses. 60% of the GBM patients are still alive even after two years.

We also noted some of the tumors became stable (non-proliferative). This may be the phase before apoptosis becomes clear. Further basic research and follow up would be necessary.

Almost all patients reported an improvement of well being after completion of the treatment. Patients reported less pain, more energy, more appetite, improved strength.

No adverse effects were reported to the IEC/IRB.

Apparently the RFQMR has a therapeutic effect in end stage terminal cancer patients. It is convincingly effective in palliative treatment. As a new form of treatment, it appears to have the possibilities where known forms of treatment to date, has failed or has nothing more to offer. The numbers of stable or even totally regressed tumors are remarkable. Use of Radio frequency in the treatment of metastatic tumors like hepatocellular carcinoma is not new, but our team has developed a new delivery system using specialized near field antennae that can focus and deliver modulated radio frequency under high instantaneous magnetic field non-invasively. There seems to be a better result on primary cancers compared to metastatic ones. Further development will probably increase the effectiveness and efficacy of this new treatment modality.