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Review

Implication of Quantum Molecular Resonance Devices in Surgical Applications

Hasan ACAR[a]

[a] Girne American University, Faculty of Medical, General Surgery Department, TRNC

ORCID[a]: 0000-0001-6435-8720

Corresponding Author e-mail: hzacar@gmail.com

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ABSTRACT: Today, studies in the field of quantum physics have provided the explanation of many unknown points about the source of vital energy of living organisms. Accordingly, quantum molecular resonance devices have been developed for surgical applications for the treatment of many diseases, especially cancer diseases.

In our study, important current studies on these devices used in surgery were compiled and the results were evaluated.

According to the results we obtained, quantum molecular resonance devices used in surgical applications have a significant effect on prolonging the life span of human beings and increasing the quality of life.

KEYWORDS: Surgical applications, quantum, molecular resonance.

1. INTRODUCTION

The peregrination of the medical world that started in macroorganisms, tissues, cells, molecular medicine, nano medicine, has shrunk to the quantum world in the microcosm today, and quantum energy has been used more frequently in the diagnosis and treatment of diseases.

In an article by Martin Riegler published in European Surgery, the importance of quantum physics in surgery was mentioned, and it was stated that "life is a quantum genetic-based self-reproducing cytohumoral information orchestration, while dead matter does not have quantum genetics". It has been emphasized that diseases arise in humans, humans are in the universe, the universe is under the influence of space-time and gravitational force, and therefore quantum physics and surgery are directly related. In the quantum world, fields consist of particles and waves as small as 10^{-66} cm2.It has been reported that these waves and particles (planct quanta) used in diagnosis and treatment form the basis of the technology of machines such as magnetic resonance imaging (MRI), computerized tomography (CT), positron emission tomography (PET-CT), quantum magnetic resonance (QMR) devices. One of the most interesting phenomena in the quantum world is the observation that physicists are unable to obtain information about particles smaller than 10^{-33}. This is because the energy applied during the measurement increases the mini spacetime to form a mini black hole. In this case, no additional information can be get out from the system. This is because the light entering the mini black hole cannot escape from the black hole. Because black holes are very dense masses that increase gravity and curve spacetime. In the quantum world of humans, these mini black holes are thought to be effective in quantum genetics and have a role in the development of pathological events such as cancer and inflammation [1].

In a study by Wang et al., it was reported that devices such as bipolar cautery, monopolar cautery, ultrasonic energy-based devices, and LigaSure should be used with care in thyroid surgery, and that nerve recurrence should not be approached more than 2 mm, otherwise nerve damage may occur [2]. In this respect, QMR devices have advantages over traditional methods. In a study conducted by Tseng et al. on the safety of QMR bipolar scissors and unipolar unit in 8 pig models that underwent intraoperative neuromonitoring on 16 nerve recurrences, they reported that adverse EMG changes did not occur in both activation and cooling stages, and that these devices could be used safely in thyroidectomy surgeries [3]. In a study by Ricciarduello et al., they reported that they had excellent results in 281 allergic and nonallergic inferior turbinate hypertrophy patients who were treated with QMR, especially in nonallergic patients [4].

Devices with QMR technology are being used more and more effectively in cancer treatment. In an experimental study by Thöni et al., it was shown that quantum-based nuclear magnetic resonance therapy increased the expression of HIF-1 α, decreased hypoxia permanently by inducing glycolysis in mammalian cells, and prevented the increase in mitochondrial respiration after

acute hypoxia, thus reported that it can be used for the treatment of diseases such as ischemia [5]. In a clinical study by Kumar et al., 51 cancer patients in the terminal stage were treated with the CYTOTRON QMR device for 1 hour a day for 28 days, the patients' quality of life, overall survival and tumor stability were recorded using RECIST v1.1, and the patients were followed for 12 months. According to the results obtained in the study, an improvement in Karnofsky Performance Scala and Quality of Life score was found in 71% of the patients, and a statistically significant increase in overall survival was found [6]. The QMR coagulation device was successfully used by Yazama et al. for bleeding control in tumor resection in a case of glomus tympanicum [7]. The theranostic liposome integrated with quantum dots, superparamagnetic iron oxide, and cilengitide were successfully used to target the tumor in a glioma patient who underwent surgical resection under magnetic targeting by Xu et al. [8]. In a study by Blank et al., it was emphasized that there is a quantum leap in photobiomodulation in new generation beam-based treatments in cancer and some other complex diseases, and they reported that it can be used successfully as a cost effective especially in elderly and sensitive populations [9]. In a study by Jeong et al., it was reported that the patient was successfully treated with a QMR device and an insulated monopolar radiofrequency device in a case of injection-induced refractory filler granuloma [10].

In an experimental study by Bang et al., in an animal model, it was stated that conventional laparoscopic bipolar cautery devices cause excessive tissue damage and produce more smoke because they operate at high energy frequencies. compared to their devices; It has been reported that it is more effective, produces less smoke and causes tissue damage [11]. In a study conducted by Trivlia et al. on the effects of QMR electrotherapy in mixed-type dry eye patients, it was shown that objective and subjective ocular parameters were statistically significantly improved with QMR electrotherapy in these cases [12]. QMR technology has opened a new era in the treatment of pain in medicine.

In a study conducted by Fraccavieri et al., the effects of QMR technology on wound healing and relief of pain in 11 patients with chronic painful wounds on their extremities were examined, and this method was shown to have a statistically significant positive effect [13]. In a study by Canos-Verdecho et al., coablative radiofrequency therapy with QMR and microdiscectomy with grasper forceps were performed in 28 patients with pain due to lumbar radiculopathy. At the end of a 6-month follow-up period, this treatment method was shown to be very effective [14].

In a study by Demirhan et al., the results of microsurgery performed with QMR in 12 patients with vocal cord polyps were evaluated. It has been shown that this technology is statistically significantly more effective in voice handicap index, laryngeal stroboscopy speed, acoustic voice analysis and perceptual voice evaluation performed 1 and 3 months after the operation [15].

3. CONCLUSION

The scientific and technological developments that have emerged at incredible speeds in the field of medicine in recent years have reached completely different dimensions, reaching as far as the Quantum world.

QMR devices have been one of the best examples of this, and it can be said with certainty that the life expectancy and quality of human beings will increase significantly.

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