

A holistic approach to malignant glioma: Case report

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ABSTRACT Malignant glioma in the central nervous system has an unlucky status for short prognoses and practically complete recurrence. Unfortunately, therapy and administration of malignant gliomas are problematic and somewhat unpromising in the extended period. The subject of this study is the presentation of a 53-year-old woman with malignant glioma that demonstrates the efficacy of the Remember Regeneration Therapy Method (RTM) in controlling of burden disease after its progression, and the aim is to present achievement in complete tumour regression.

KEYWORDS Malign glioma, RTM, Holistic Medicine

Introduction

Malignant brain tumours have some of the unfortunate predictions, responses to treatment, and considerable burden by neurologic specific symptomology. Tumours of the central nervous system consisting of mature neural and glial cells are called mixed neuroglial tumours [1]. The most common category of brain tumours is glioma which frequently looks primarily in the neuroglia in the central nervous system. They grow regularly and mostly do not spread-out to the bordering tissue of the brain. By applying the main curative treatments, the patients would have insignificant persistence rates. Despite the accomplished advances in conservative glioma remedy, it is verified that an appropriate medication for glioma is not simply accessible [2]. Gliomas are primary tumours originating from neuroglial origin, accounting for approximately 30% of all brain and central nervous system (CNS) tumours and 80% of all malignant brain tumours [3]. Gliomas are the most common primary intracranial tumours in adults [4]. New diagnostic methods have revealed that almost 50% of gliomas are glioblastomas. Besides, 80% of glioblastomas are reported to be de novo primary GBMs [4,5].

The current preferred treatment for glioblastoma is surgical resection, followed by radiation therapy and chemotherapy with temozolomide (TMZ) [6]. Nevertheless, none of these treatments

has been effective in curative glioblastoma due to the existence of the blood-brain barrier, and the offensive environment of brain-tumour cells [7].

According to the American Brain Tumor Association (ABTA), glioblastomas are malignant Class IV tumours in which a large proportion of tumour cells multiply and divide at any given time [8].

The Remember Regeneration Therapy Method (RTM) is a holistic method in diagnostic and treatment procedure with phytotherapy and numerous complementary and traditional medical approaches (such as acupuncture, cupping therapy, hirudotherapy, ozone therapy, etc.) over a long period (approximately 25 years). The usefulness of RTM has been considered by both clinical experience and observation (nearly 130,000 individuals suffering from several disorders) [9].

Here, we aim to present the efficacy of the RTM in controlling a case of a malign neuroglioma with the achievement of complete tumour regression after its progression.

Case report

In September 2017, a 53-year-old woman referred to our clinic with complaints of vertigo, numbness in head, hands and tongue, defect of vision, stress, limitation of movement (inability of their own needs), difficulty in walking since the past 2 years. She had not any infectious diseases or illnesses in her recent history. She was conscious and cooperated in her physical examination, and there was no seizure attack in history. The patient also had no history of hypertension, diabetes mellitus, coronary artery disease, smoking and alcohol abuse. Family history of brain tumour was not identified. The patient did not take any secondary prevention measures for cerebrovascular disease. She did not have any history of other medical conditions, familial genetic conditions, food or drug allergies, or tuberculosis. At

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admission, neurological examination of the patient was normal except impaired sensory findings. She had numbness in the head, numbness in the hands and tongue, generalized loss of muscular power in her legs, more prominent on her left side, and visual impairment. She was referred for further investigation by the brain surgery department. According to the patients' brain magnetic resonance imaging (MRI) scan (April 2017); several small ischemic gliosis lesions in bilateral parenchyma, hyperintense signal at 41x22x23 mm lobule irregular contoured T2A and in fluid-attenuated inversion recovery (FLAIR), hypointense signal in T1A frequency, cerebellar peduncular and brainstem on the left were monitored (Figure 1). Then, a brain biopsy was performed and "malignant glioneural tumour" WHO D3 was diagnosed in cerebellum biopsy (August 2017). Pathology comment was: stereotaxic biopsies have a tumour consisting of small round cells and mitotic activity. The tumour showed significant neuronal and glial cell or neuroglia differentiation. There was no finding in immune histochemical analysis in favour of metastasis or lymphoma. In September 2017, Cranial CT report showed that pons had a mass lesion extending to fourth ventricle level in the left half and the left cerebellar hemisphere in malignant character. After this diagnosis; In September 2017, two cycles of radiotherapy were initiated, and chemotherapy was not applied. When she applied to RTM in October 2017, the RTM protocol included the RTM phytotherapy products, ozone therapy (14 times in 11 months) and cupping therapy (2 times). After five month-application of the RTM protocol (April 2018), the patient showed on her physical examination that her dizziness was lost, numbness in the head area, hands and tongue were decreased, visual impairment and stress were decreased much more, the previous walking difficulty was decreased. She could walk without help. Additionally, the follow-up brain MRI report showed that sequel hemorrhagic changes in the left cerebellar hemisphere extending to the left middle peduncle and pons were reduced significantly in mass compared to the primary MRI report of July 2017. Approximately 11 months (September 2018) after the RTM protocol, brain MRI report confirmed that findings were stable compared to previous MRI findings (March 2018) that sequel hemorrhagic changes were seen in the left cerebellar extending to the left middle peduncle and left half of the pons (Figure 2). After a 1 year long follow up, the patient is currently doing well at home with the support of multidisciplinary outpatient follow-up for malignant glioma. The patient's situation was found to be healthier and more acceptable.

Discussion

Molecular genetic analysis plays an essential role in therapy planning in gliomas, one of the most common brain tumours in adults. Unfortunately, glioblastoma treatment is suggested to be no more than palliative [10]. Glioma, the most frequent type of brain tumours, grow gradually do not extended to adjacent tissue of the brain. With curative treatments, the patients would have slight survival rates. Despite the accomplished developments in conventional glioma therapy, it demonstrated that appropriate therapy for glioma is not certainly accessible [2].

Here, we report a malign neuroglia tumour in cerebellopontine location confirmed by MRI scan showing significant neuronal and glial cell or neuroglia differentiation in the pathological examination. She was subjected two times to chemotherapy. And then the patient received the RTM therapy for 11 months in order to diminish brain tumour and regulate chronic inflam-

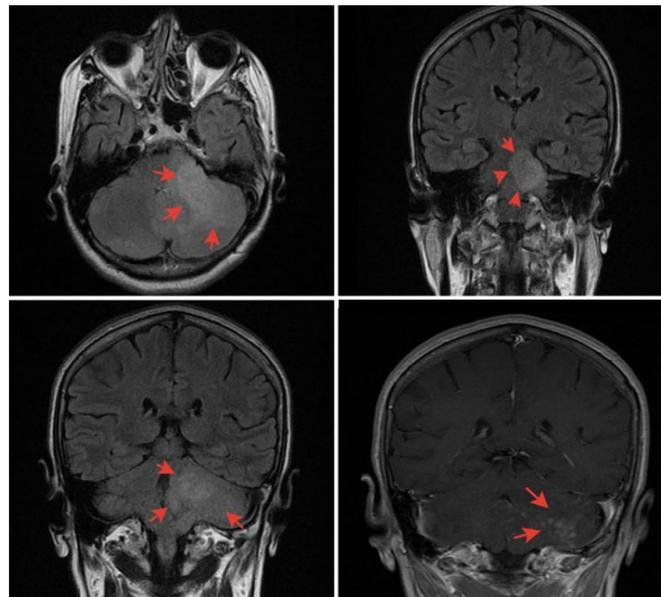


Figure 1: T2 Flair images show a mass that narrows the fourth ventricle with the effect of diffuse oedema involving the left segment of the pons, the cerebellar peduncle and the left cerebellar hemisphere (Axial, sagittal, coronal T2 Flair and the coronal section with contrast at the bottom right). The cerebellar contrast is noticeable at the bottom right.

mation. The clinical symptoms and radiological findings even disappeared after five months. The control scans from March 2018 and scans from September 2018 showed a significant decrease in the tumour size, accompanied by hemorrhagic sequels of the left brain hemisphere. The patient was discharged without complications after the RTM protocol. The 1-year follow-up revealed that the patient recovered well with no evidence of recurrence.

A more integrative therapy was used in a 33-year-old woman with astrocytoma instead of conventional treatment. After 24-month phytotherapy, it was observed that there was no tumour, both clinically and radiologically [11]. In a case of a female, 18-years-old, a patient suffering from metastasized neuroblastoma, which responded insufficiently to chemotherapy, a significant increase in physical and subjective well-being (a significant improvement in the quality of life) could be completed after the establishment of phytotherapy (mistletoe therapy) [12]. Additionally, a recent study also demonstrated a significant influence of mistletoe therapy on the endurance of cancer patients [13]. In a review of numerous clinical studies, 21 prospective randomised trials that involved the administration of oncological mistletoe therapy satisfied the severe criteria established by Cochrane [14].

The RTM, which is directed one of these pathological appliances, is epigenetic modifications [9]. The epigenetic adjustments may perform a significant character in many diseases including cancer, and a sum of bioactive dietary components making the content of phytotherapy situated in the center of RTM display valuable properties due to epigenetic alterations [15,16,9]. The significance of epigenetics has become more noticeable with the growing credit of the part of precise epigenetic appliances in cancer which confirms association genetics and epigenetics [17]. In the upcoming, the purpose of methylation in DNA repair and genome stability is predictable to be in epige-

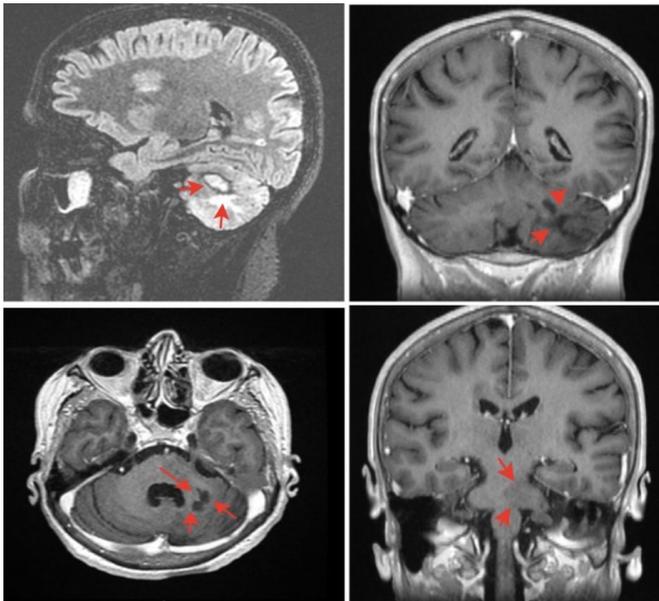


Figure 2: Two years later, the control contrast-enhanced cranial MRI examination showed that oedema effect of the lesion and pressure of the fourth ventricle disappeared, the lesion in the puncture regressed and the mass effect in the cerebellum disappeared, and it became gliotic chronic change, invasion stopped and regressed.

netics. Therefore, the features of such roads are thought to shed light on the pathogenesis of illnesses of methylation arrangements and new helpful representatives in cancer cells [18].

The surveillance of this patient emphasizes the significance of the RTM protocol like mistletoe therapy [12] as supportive management in oncology, which is principally planned to reestablish well-being and action during and following conventional therapy.

The RTM strategy in managements has dedicated fundamentally on an original holistic method, which established on relations between performs such as DNA methylation and histone modification, etc. For this determination, different remedy arrangements consist of several holistic medicine approaches such as acupuncture, ozone therapy, hirudotherapy as well as phytotherapy. Moreover, these combinations in illness or individual since each illness belongs to different pathological mechanism and severity [9]. In the RTM Model, the administration strategy is established on the recovery of health by fundamentally improving the weakening arrangements. Future training should observe how mutations in genes that have modified epigenetics contribute to the phenotype in diseases [9]. However, the exact efficacy of this therapy is still largely unknown and more studies are needed.

Conclusion

In therapy management of glioma, profits/jeopardies of numerous conventional remedies such as surgery, chemotherapy, and radiation therapy, and complementary therapies should be evaluated in all respects [2]. Moreover, we consider that the RTM protocol is useful for treating malignant glioma and reducing the risk of local recurrence, as our patient was free from disease at the 1-year follow-up.

In conclusion, brain tumour-induced cerebral damage is long-

lasting progress. The RTM protocol can provide a healing process of patient and can be used as a useful approach for the screening of therapy efficacy.

Disclosure Statement

There were no financial support or relationships between the authors and any organization or professional bodies that could pose any conflict of interests.

Competing Interests

Written informed consent obtained from the patient for publication of this case report and any accompanying images.

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