Brain Tumour Awareness Month

What is a brain tumour?
A brain tumour is an abnormal growth of cells within the brain or surrounding tissues. These cells can be either cancerous (malignant) or non-cancerous (benign). Brain tumours can originate from different types of cells within the brain, such as glial cells, which support nerve cells, or from other cells that make up the brain and its lining.
Brain tumours can cause a wide range of symptoms, depending on their size, location, and rate of growth. Some common symptoms include headache, nausea, vomiting, confusion, seizure, weakness or numbness in the arms or legs, and changes in speech, vision, or hearing.
Diagnosis of a brain tumour typically involves a combination of medical imaging tests, such as a CT scan or MRI, and a biopsy, in which a small sample of tissue is removed for examination. Treatment options for brain tumours can include surgery, radiation therapy, chemotherapy, and other experimental treatments, depending on the type, size, and location of the tumour, as well as the individual's overall health.
Brain tumours can be life-threatening, but many people with brain tumours are able to lead active, productive lives with appropriate treatment and support. It is important to seek prompt medical attention if you experience

any symptoms that suggest a brain tumour, such as persistent headache, vomiting, or changes in speech, vision, or hearing.

United Kingdom Brain Tumour statistics:

* 16,000 people every year are diagnosed with a brain tumour in the United Kingdom. Too many people are being faced with the devastating diagnosis each year – every two hours, someone is diagnosed with a brain tumour in England.
* Only 12% of brain tumour patients survive beyond five years of their diagnosis, whereas over 70% of breast cancer and over 40% of leukaemia patients survive beyond five years.
* Brain tumours are the chief cause of cancer deaths in children and young people - in 2015, the number of children dying from cancer was 194, with brain tumours taking 67 young lives and leukaemia 46.
* Brain tumours continue to kill more children and adults under the age of 40 than any other cancer.
* Additionally, brain tumours are more common in men than in women.
* Brain tumour patients lose £14,783 per year, more than double the £6,840 for all cancers.
* Brain tumour patients and their families face a £11,081 net loss of income
* Brain tumour patients face additional costs of £3,702 per year
* Brain tumour patients are on average £14,783 worse off per year, whereas for all cancers the average cost is £6,840 per year
* Added to this, patients are required to surrender their driving licence, leading to a loss of independence. This is all while facing a terrifying uncertainty about what the future holds.
* Brain tumours are the most common tumours that develop in children of any age. Aaron 420 children are diagnosed each year in the UK.
*

Treatment for brain tumours depends on several factors, including the type and location of the tumour, as well as the patient's overall health. Options can include surgery, radiation therapy, chemotherapy, and targeted therapy. The success of treatment depends on a variety of factors, including the type of tumour and how advanced it is at the time of diagnosis.
If you or a loved one has been diagnosed with a brain tumour, it's important to speak with a doctor to understand the specific treatment options and what to expect.

What are the different types of brain tumours?
Brain tumours can be classified into two main categories: primary and secondary (metastatic) brain tumours.
Primary brain tumours originate in the brain and can be either benign (not cancerous) or malignant (cancerous). The following are some of the most common types of primary brain tumours:

- Gliomas: This is the most common type of primary brain tumour and includes astrocytomas, oligodendrogliomas, and ependymomas.
- Meningiomas: These are tumours that arise from the tissues that surround the brain and spinal cord.
- Schwannomas: These are tumours that originate from the cells that make up the protective covering of nerves.
- Pituitary tumours: These are tumours that develop in the pituitary gland, which is located at the base of the brain.

Secondary (metastatic) brain tumours are cancers that have spread to the brain from another part of the body, such as the lungs, breast, or skin. These tumours are much more common than primary brain tumours and are typically more aggressive.

It's important to note that the type of brain tumour can have a significant impact on prognosis and treatment options. It's important to speak with a doctor to understand the specific type of brain tumour and the recommended treatment options.

What are the symptoms of having a brain tumour?

Brain tumours can cause a variety of symptoms, and the specific symptoms can depend on the size and location of the tumour. However, some of the most common early signs of a brain tumour can include:

- Headaches: Persistent headaches that are often worse in the morning and improve throughout the day can be a sign of a brain tumour.
- Seizures: Unusual changes in behaviour or movements, such as convulsions or tremors, can be a sign of a brain tumour.
- Nausea and vomiting: These symptoms can be caused by increased pressure in the brain, which can be a sign of a brain tumour.
- Fatigue: Feeling unusually tired or sluggish can be a sign of a brain tumour, especially if it occurs along with other symptoms.
- Changes in vision or hearing: Brain tumours can cause changes in vision, such as double vision or blurred vision, as well as changes in hearing, such as ringing in the ears or difficulty hearing.
- Speech or coordination problems: Brain tumours can affect speech, causing slurred speech or difficulty speaking, as well as affect coordination, causing clumsiness or unsteadiness.
- Personality or mood changes: Brain tumours can cause changes in personality or mood, such as increased irritability, depression, or anxiety.

It's important to note that these symptoms can also be caused by other conditions, so it's important to speak with a doctor if you're experiencing any unusual symptoms. An early diagnosis can be key in helping to manage the impact of a brain tumour.

If you suspect that you may have a brain tumour, it is important to seek medical attention as soon as possible. Some symptoms that may indicate a brain tumour include:

- Persistent headaches
- Nausea and vomiting
- Blurred vision or double vision
- Seizures
- Weakness or numbness in the arms or legs
- Changes in speech, hearing, or memory
- Personality or mood changes
- Difficulty with coordination or balance

If you are experiencing any of these symptoms, you should schedule an appointment with your doctor as soon as possible. They may refer you to a neurologist or neurosurgeon for further testing, which may include a brain scan (such as a CT scan or MRI) to look for any signs of a brain tumour. Early detection and treatment of a brain tumour is important for the best possible outcome. If a brain tumour is found, a team of specialists will work together to determine the best course of treatment, which may include surgery, radiation therapy, chemotherapy, or a combination of treatments.

What types of alternative treatments are suitable for brain tumours?

While conventional treatments such as surgery, radiation therapy, and chemotherapy are the primary methods for treating brain tumours, some people may also explore complementary or alternative therapies. It's important to note that these alternative therapies should not replace conventional treatments but can be used in conjunction with them to help manage symptoms and improve quality of life.

Here are some alternative therapies that have been used for brain tumours:

- Acupuncture: This traditional Chinese therapy involves the insertion of thin needles into specific points on the body to promote healing and relieve symptoms such as pain, fatigue, and nausea.
- Hyperbaric Oxygen Therapy: HBOT involves breathing 100% (pure) oxygen while in a special space called a hyperbaric chamber. The air pressure inside is raised to a level that is higher than normal air pressure. The increased air pressure in the chamber helps the lungs collect more oxygen, thus creating a surplus of oxygen within the blood plasma to convert into cellular energy and assist with the body’s regeneration and repair.
- Massage therapy: Massage can help relieve stress, improve sleep, and manage symptoms such as headaches and fatigue.
- Meditation and relaxation techniques: Mind-body therapies such as meditation, yoga, and deep breathing can help reduce stress and improve overall well-being.

- Dietary changes: Some people with brain tumours may explore special diets, such as the ketogenic diet, in an attempt to support their health and well-being.
- Supplements and herbs: Some people with brain tumours take dietary supplements and herbs, such as omega-3 fatty acids, vitamin E, and ginkgo biloba, to help manage symptoms and improve quality of life.

It's important to note that alternative therapies can interact with conventional treatments and can have side effects, so it's important to speak with a doctor before starting any new therapy. A doctor can help you determine what alternative therapies, if any, may be safe and appropriate for your specific situation.

Hyperbaric Oxygen Therapy suppresses Cancer growth:
Low levels within tumour cells (tumour hypoxia) is a major signal for these cancer cells to produce more blood vessels (angiogenesis) and rapidly glow**.** Not only does that make them much more aggressive, but it also makes them much more resistant to both chemotherapy and radiation therapy. This is truly a dangerous combination and why there has been so much attention in the medical field (and with oncologists) to reduce tumour hypoxia.

Hyperbaric Oxygen Therapy (HBOT) is one of the most effective, and most practical, ways to alleviate tumour hypoxia. The results are extremely promising and researchers concluded 'HBOT significantly suppressed tumour growth in both the triple positive and negative tumours."

Despite the fact that behaviour and prognosis of the triple positive and negative subtypes of cancer are different, the HBOT had a similar suppressive effect on tumour growth, indicating that they share a common oxygen dependant anti-tumour mechanism. Furthermore, HBOT significantly reduced the number and area of metazoic lesions in the triple negative model."

We have come a long way in our understanding of tumour growth, in relation to HBOT. Since HBOT stimulates angiogenesis (new blood vessel growth), the long standing concern was that this mechanism may stimulate the growth of new cancer cells through the same mechanism.

Over the past 2 decades, not only has this hypothesis clearly been refuted, but solid evidence as demonstrated in many studies, are making us shift our attention towards utilising HBOT with many current cancer treatment programmes.

Read research here: https://pubmed.ncbi.nlm.nih.gov/28832662/

Risks and causes of brain tumours are not fully understood, but there are several factors that have been associated with an increased risk of developing a brain tumour.

1. Age: The risk of developing a brain tumour increases with age. Most brain tumours occur in people over the age of 55.
2. Gender: Brain tumours are more common in men than in women.
3. Family history: A family history of brain tumours may increase a person's risk of developing one.
4. Exposure to radiation: Exposure to ionising radiation, such as that used in X-rays or radiation therapy, may increase the risk of developing a brain tumour.
5. Being overweight or obese increases the risk of some cancer types, including a type of brain tumour called meningioma. About 2 out of 100 brain tumours (2%) diagnosed in the UK every year are caused by being overweight or obese.
6. Certain genetic conditions: People with certain genetic conditions, such as neurofibromatosis or Li-Fraumeni syndrome, have an increased risk of developing a brain tumour.
7. Chemical exposure: Exposure to certain chemicals, such as benzene, has been linked to an increased risk of developing a brain tumour.
8. Cell phone use: Some studies have suggested a link between heavy cell phone use and an increased risk of brain tumours, but this has not been definitively proven.

It is important to note that many people with these risk factors never develop a brain tumour, and conversely, some people with no known risk factors can still develop one. The causes of brain tumours are complex and not fully understood, and more research is needed to determine the exact causes and risk factors.

Alcohol & brain tumours:

There is evidence to suggest that heavy alcohol consumption may be a risk factor for brain tumours. Long-term and heavy alcohol consumption has been linked to an increased risk of several types of cancer, including brain tumours. Alcohol can cause damage to the DNA in cells, which can lead to mutations and the development of cancer. Alcohol also decreases the body's ability to absorb important nutrients, such as vitamins and minerals, which are important for maintaining a healthy immune system and preventing the development of cancer.

It is important to limit alcohol consumption, as well as to maintain a healthy lifestyle, to reduce the risk of developing a brain tumour or any other type of cancer. If you are concerned about your alcohol consumption or the potential risks associated with alcohol, it is a good idea to speak with your healthcare provider.

Smoking & brain tumours:
Smoking has been linked to an increased risk of developing several types of cancer, including brain tumours. The toxic chemicals in tobacco smoke, such as tar and carbon monoxide, can cause damage to the DNA in cells and increase the risk of mutations and the development of cancer.
In addition, smoking reduces the amount of oxygen that reaches the brain and increases the risk of oxidative stress, which can also contribute to the development of brain tumours.
Quitting smoking can significantly reduce the risk of developing brain tumours and many other types of cancer. If you smoke, it is never too late to quit and start reaping the benefits of a healthier lifestyle. If you need help quitting, there are many resources available, such as nicotine replacement therapy, counselling, and support groups.

Exercise is scientifically proven to not only inhibit cancer growth by up to 50% but is also important for your mental health by combating depression, stress, insomnia & anxiety. It improves the immune system and builds self esteem.

1. Improved physical function: Exercise can help cancer patients maintain and improve their physical function, which can be impacted by cancer treatments such as chemotherapy and radiation therapy.
2. Better quality of life: Exercise has been linked to improved mood, increased energy levels, and better overall quality of life for cancer patients.
3. Decreased fatigue: Cancer treatments can cause fatigue, but exercise has been shown to help reduce fatigue and increase energy levels in cancer patients.
4. Improved immune function: Exercise has been linked to improved immune function, which is important for cancer patients who may be undergoing treatments that can suppress their immune system.
5. Reduced anxiety and depression: Exercise has been shown to have a positive impact on mental health, and can help reduce symptoms of anxiety and depression in cancer patients.
6. Better sleep: Exercise has been linked to improved sleep quality and duration, which is important for cancer patients who may be experiencing sleep disturbances as a result of their treatment.
7. Reduced side effects of treatment: Exercise has been shown to help reduce some of the side effects of cancer treatments, such as nausea, vomiting, and peripheral neuropathy.

It's important for cancer patients to work with their healthcare team to develop an appropriate exercise plan that takes into account their individual needs and health status. This may include modifications to their exercise program to accommodate for any physical limitations, as well as precautions to avoid overexertion or injury.

Here are ten facts about brain tumours:

1. Brain tumours are a collection of abnormal cells that grow in or around the brain.
2. There are two main types of brain tumours: primary brain tumours, which originate in the brain, and secondary brain tumours, which spread from elsewhere in the body to the brain.
3. Brain tumours can be benign (non-cancerous) or malignant (cancerous).
4. The exact causes of brain tumours are not yet known, but certain factors, such as exposure to radiation, family history, and certain genetic disorders, may increase the risk of developing a brain tumour.
5. The most common symptoms of a brain tumour include headaches, seizures, changes in vision or hearing, and changes in personality or mood.
6. Brain tumours are diagnosed using imaging tests, such as MRI or CT scans, and a biopsy may be needed to confirm the diagnosis and determine the type of tumour.
7. Treatment options for brain tumours can include surgery, radiation therapy, chemotherapy, and targeted therapy.
8. The prognosis and treatment options for a brain tumour depend on several factors, such as the type and location of the tumour, as well as the person's age and overall health.
9. In some cases, brain tumours can be removed or controlled with treatment, but in other cases, they may grow back or spread.
10. Research is ongoing to improve our understanding of brain tumours and to develop more effective treatments and therapies.

It's important to remember that every case is unique and it's important to speak with a doctor for a personalised evaluation and treatment plan.

What is the survival rate for brain tumours?

The survival rate for brain tumours depends on several factors, including the type and stage of the tumour, the person's age and overall health, and the treatment received.

Here are some general survival rate estimates for brain tumours:

- Benign brain tumours: The survival rate for people with benign brain tumours is generally very good, with the majority of patients surviving for many years after diagnosis.
- Malignant brain tumours: The survival rate for people with malignant brain tumours, such as glioblastomas, is lower, with a five-year survival rate of approximately 10-15%.
- Low-grade gliomas: The five-year survival rate for people with low-grade gliomas, a type of brain tumour, is approximately 70-80%.

- High-grade gliomas: The five-year survival rate for people with high-grade gliomas, a more aggressive form of brain tumour, is typically lower, ranging from 30-40%.

It's important to remember that these are only general estimates and the actual survival rate for an individual can be influenced by a variety of factors. It's always best to speak with a doctor for a personalised evaluation and prognosis.

Here are some general statistics about brain tumours worldwide:

1. Brain tumours are a relatively rare type of cancer, accounting for approximately 2% of all cancers.
2. Brain tumours are the leading cause of cancer-related death in children under the age of 20.
3. In adults, brain tumours are more common in people over the age of 60.
4. The incidence of brain tumours varies greatly depending on geographic location, with some countries having higher rates of brain tumours than others.
5. The average age at diagnosis for a brain tumour is 55 years.
6. Men are slightly more likely to develop a brain tumour than women.
7. The most common types of brain tumours in adults are gliomas, meningiomas, and pituitary tumours.
8. The most common types of brain tumours in children are astrocytomas, medulloblastomas, and ependymomas.
9. The survival rate for brain tumours varies depending on the type and stage of the tumour, as well as the person's age and overall health.
10. Advances in technology and treatment options have improved the prognosis for many people with brain tumours, but much more research is needed to further improve outcomes and increase survival rates.

It's important to note that these are only general statistics and the incidence and prognosis of brain tumours can vary greatly depending on a number of factors. It's always best to speak with a doctor for a personalised evaluation and prognosis.

There are many ways to make a positive impact in the world of brain tumours, including:

1. Supporting research: Donating to organisations that support brain tumour research can help advance our understanding of this disease and lead to the development of new treatments.
2. Raising awareness: Participating in events or sharing information about brain tumours on social media can help raise awareness about the disease and the needs of those affected by it.

3. Advocating for change: Joining advocacy organisations or reaching out to elected officials to advocate for increased funding for brain tumour research and better access to care can help drive change.
4. Supporting those affected by brain tumours: Volunteering or donating to organisations that provide support and resources to those affected by brain tumours can help improve the lives of those impacted by this disease.
5. Promoting early detection: Encouraging people to be aware of the signs and symptoms of brain tumours and to seek medical attention if they suspect they may have a problem can lead to earlier diagnosis and better outcomes.
6. Staying informed: Staying informed about the latest developments in brain tumour research and treatment can help you make informed decisions about your own care or the care of a loved one.
7. Participating in clinical trials: Participating in clinical trials can help advance the development of new treatments for brain tumours and improve outcomes for future patients.

By taking these steps and working together, we can make a positive impact in the world of brain tumours and help improve outcomes for those affected by this disease.

What other types of treatments are offered (apart from Chemotherapy & Radiotherapy?)

In addition to chemotherapy and radiotherapy, there are several other treatments that may be used to treat brain tumours, including:

1. Surgery: Depending on the location and type of tumour, surgical removal may be the first line of treatment. In some cases, complete removal is not possible, and the goal of surgery may be to reduce the size of the tumour and relieve symptoms.
2. Immunotherapy: This type of treatment uses the body's immune system to fight the cancer. For brain tumours, immunotherapy may be delivered directly into the brain through a technique known as convection-enhanced delivery.
3. Targeted therapy: This type of treatment focuses on specific molecules or proteins that are involved in the growth and spread of the tumour. Targeted therapies may be used in combination with chemotherapy or as a standalone treatment.
4. Stereotactic radiosurgery: This is a type of radiation therapy that uses highly focused beams of radiation to treat tumours in specific locations. Stereotactic radiosurgery is often used for small, deep-seated brain tumours that are difficult to reach with traditional surgery.
5. Proton therapy: This is a type of radiation therapy that uses protons rather than X-rays to deliver high-energy radiation to the tumour. Proton

therapy may have some advantages over traditional X-ray radiation therapy, such as reduced risk of damage to surrounding healthy tissue.
6. Optune therapy: This is a type of treatment that uses low-intensity electrical fields to slow or stop the growth of brain tumour cells. The electrical fields are delivered through electrodes placed on the scalp, and the treatment is typically used in combination with chemotherapy.
7. Gene therapy: This is a type of treatment that uses genes to treat or prevent disease. For brain tumours, gene therapy may involve introducing genes that can help the immune system fight the cancer or genes that can help suppress the growth of the tumour.

It is important to note that not all of these treatments are appropriate or effective for every type of brain tumour, and the best course of treatment will depend on many factors, including the location, size, and type of the tumour, as well as the overall health of the patient.

What is immunotherapy?

Immunotherapy is a type of medical treatment that helps the body's immune system fight disease, such as cancer. It works by either boosting the body's natural immune response or by introducing artificial components, such as immune cells or antibodies, to help the body target and destroy diseased cells.

There are several different types of immunotherapy, including:

1. Monoclonal antibodies: Artificial proteins that mimic the immune system's natural antibodies and can help target and destroy cancer cells.
2. DCVax-L is a personalised vaccine made from each patient’s own **dendritic cells** – a type of cell that helps the **immune system** recognise and attack cancer cells.
3. Checkpoint inhibitors: Drugs that help remove the "brakes" that cancer cells can use to evade the immune system.
4. Cytokine therapy: Drugs that help stimulate the immune system to attack cancer cells.
5. Cancer vaccines: Drugs that help train the immune system to recognize and attack specific cancer cells.
6. Adoptive cell therapy: A type of immunotherapy that involves removing immune cells from the body, modifying them in the laboratory to better target cancer cells, and then infusing them back into the patient.

Immunotherapy has shown promise in the treatment of several types of cancer, including melanoma, lung cancer, kidney cancer, and some types of brain tumours. However, it is not a cure for all cancers and not all patients respond to immunotherapy. Additionally, like all medical treatments, immunotherapy can have side effects, and it is important to discuss the risks and benefits with a healthcare provider.

What is Targeted therapy?

Targeted therapy is a type of cancer treatment that targets specific molecules or proteins within cancer cells that are involved in the growth, progression, and spread of the disease. Unlike traditional chemotherapy, which attacks all rapidly dividing cells in the body, targeted therapy is designed to specifically target the cancer cells, which can reduce side effects and increase the effectiveness of treatment.

There are several types of targeted therapy, including:

1. Small molecule inhibitors: Drugs that target specific enzymes or proteins within the cancer cell and block their activity.
2. Monoclonal antibodies: Artificial proteins that mimic the immune system's natural antibodies and can help target and destroy cancer cells.
3. Tyrosine kinase inhibitors: Drugs that target specific enzymes, called tyrosine kinases, involved in the growth and progression of certain types of cancer.
4. Hormone therapy: Drugs that target hormones involved in the growth and progression of certain types of cancer, such as breast and prostate cancer.
5. Immune checkpoint inhibitors: Drugs that help remove the "brakes" that cancer cells can use to evade the immune system.

Targeted therapy can be used alone or in combination with other treatments, such as chemotherapy, radiation therapy, or immunotherapy. It has shown promise in the treatment of several types of cancer, including lung cancer, breast cancer, and some types of brain tumours. However, it is not a cure for all cancers, and not all patients respond to targeted therapy. Additionally, like all medical treatments, targeted therapy can have side effects, and it is important to discuss the risks and benefits with a healthcare provider.

What is Optune Therapy?

Optune is a type of non-invasive brain tumour treatment that uses low-intensity, alternating electric fields (known as Tumour Treating Fields or TTFields) to slow or stop the growth of cancer cells. The therapy involves the use of a wearable device that delivers TTFields directly to the skin over the location of the brain tumour.

Optune therapy is approved for use in combination with chemotherapy for the treatment of newly diagnosed and recurrent glioblastoma (a type of brain tumour) in adult patients. The therapy works by using low-intensity, alternating electric fields to interfere with the division of cancer cells, slowing or stopping their growth.

Research has shown that Optune therapy can improve overall survival rates for patients with glioblastoma, and it is considered a safe and well-tolerated treatment option. However, it is important to note that Optune therapy is not a cure for brain tumours and that it may not be suitable or effective for all patients. Additionally, like all medical treatments, it can have side effects, and it is important to discuss the risks and benefits with a healthcare provider.

What is Gene therapy?
Gene therapy is a type of medical treatment that involves the introduction of new or modified genes into the body to treat or cure a disease. In the case of brain tumours, gene therapy involves altering the genetic material within the cancer cells to prevent their growth or to make them more vulnerable to other treatments.
Gene therapy can be delivered to the brain in a variety of ways, including directly into the tumour, through the bloodstream, or by using a virus to deliver the therapeutic genes. Some gene therapy approaches for brain tumours are still in the experimental stage, while others have been approved for use in clinical trials or in limited settings.
Gene therapy has shown promise as a way to treat brain tumours, particularly those that are resistant to other treatments, and it has the potential to offer new hope for patients with difficult-to-treat brain tumours. However, it is still a developing field, and much more research is needed to understand its full potential and to determine which patients will benefit most from this type of treatment.

How can someone diagnosed fundraise for alternative therapies?
If someone has been diagnosed with a brain tumour, they may consider several options to raise funds to cover the costs of medical treatment and other expenses. Some of these options include:

1. Crowdfunding: Websites like GoFundMe and YouCaring allow individuals to create a fundraising campaign and share their story with friends, family, and the wider community. People can then make donations to support the individual.
2. Benefit events: Organising a benefit event, such as a charity walk or a fundraiser, can help to raise awareness about brain tumours and raise funds for medical treatment and other expenses.
3. Corporate sponsorships: Many corporations offer matching gift programs or corporate sponsorships for individuals who are facing medical challenges. Contacting local businesses or organisations to see if they would be willing to sponsor a fundraising event or contribute to a crowdfunding campaign could be a good place to start.
4. Community support: Reach out to local organisations, such as churches or social clubs, to see if they would be willing to contribute to a fundraising campaign or organise a benefit event.
5. Government assistance: Some countries have government programs that provide financial assistance for individuals with medical conditions. Check with the local government to see if there are any programs that might be of help.

It is important to remember that raising funds is not the only important aspect of coping with a brain tumour. Seeking support from family, friends, and the community can be just as important, and seeking the help of a professional counsellor may be beneficial.

If a family member has been diagnosed with a brain tumour, there are many ways that other family members can provide support:

1. Be a source of emotional support: Being there for the person, listening to their concerns, and offering encouragement can help them to feel less alone and more supported during this difficult time.
2. Help with practical tasks: Offering to run errands, help with household chores, or take care of children can ease some of the day-to-day stress and allow the person to focus on their health.
3. Offer financial support: If the person is struggling with medical bills or other expenses related to their diagnosis, consider offering financial assistance.
4. Learn about the condition: Educating oneself about the person's diagnosis, treatment options, and the medical system can help the person feel more informed and in control of their care.
5. Be an advocate: Accompanying the person to doctor's appointments, helping to coordinate care with other family members, and advocating for their needs can help to ensure they receive the best possible care.
6. Take care of yourself: Supporting someone with a serious illness can be emotionally and physically draining, so it is important to take care of oneself and seek support when needed.
7. Be there for the long haul: Supporting someone with a brain tumour is a long-term commitment, so it is important to be there for them through both the good times and the bad.

Remember, everyone responds differently to a diagnosis of a brain tumour and everyone needs different types of support. It is important to be flexible, open, and understanding and to respect the person's needs and preferences.

A diagnosis of a brain tumour can be a frightening and overwhelming experience, and it is common for people to experience anxiety as a result. Here are some ways to help cope with anxiety when diagnosed with a brain tumour:

1. Talk to someone: Sharing your thoughts and feelings with a trusted friend, family member, or mental health professional can help to relieve anxiety and provide a sense of comfort.
2. Practice relaxation techniques: Techniques such as deep breathing, meditation, and yoga can help to calm the mind and reduce anxiety.
3. Get moving: Physical activity, such as walking, jogging, or cycling, can help to reduce stress and improve mental well-being.
4. Seek out support groups: Talking with others who are going through similar experiences can provide a sense of community, comfort, and support.

5. Limit exposure to negative news: Try to avoid reading or watching news stories that may increase anxiety and focus on positive and uplifting sources of information.
6. Engage in enjoyable activities: Doing things that bring joy, such as reading, listening to music, or spending time with loved ones, can help to reduce stress and improve mood.
7. Get enough sleep: Lack of sleep can increase anxiety, so it is important to establish a regular sleep routine and prioritise getting enough rest.
8. Consider therapy: Cognitive-behavioural therapy (CBT) or other forms of talk therapy can help people to manage anxiety and improve overall mental well-being.

It is important to remember that everyone's experience with anxiety is unique, and what works for one person may not work for another. It is important to find what works best for you and to be patient with yourself as you work through this challenging time.

How the ketogenic diet is effective for brain tumours:

The ketogenic diet (KD), a high-fat, low-carbohydrate diet, has been proposed as a potential treatment for brain tumours. The idea behind using the KD for brain tumours is that it may help to lower the body's glucose levels and shift the body into a metabolic state known as ketosis, which may reduce the availability of glucose to cancer cells and potentially slow the growth of brain tumours.

However, while some early studies in animals and small human trials have shown promising results, there is limited evidence to support the use of the KD as a standalone treatment for brain tumours. More research is needed to determine the safety and efficacy of the KD for brain tumours, and it is important to note that the KD should not be used as a replacement for conventional treatments such as surgery, radiation therapy, and chemotherapy.

It is important to talk to your doctor before starting the KD or making any significant changes to your diet. Your doctor can help to determine if the KD is safe and appropriate for your individual situation and can also help to ensure that you are getting adequate nutrients and meeting your individual calorie needs.

In conclusion, while the KD may have potential benefits for people with brain tumours, more research is needed to fully understand its effects and to determine its safety and efficacy as a treatment option.

Here are some creative fundraising events with a brain tumour awareness theme:

1. Brain Tumour Awareness Walk: Organise a walk to raise awareness and funds for brain tumour research. Participants can sign up online and invite friends and family to support them.

2. Head Shave Challenge: Encourage friends and family members to shave their heads in support of brain tumour awareness and raise funds through pledges and donations.
3. Virtual 5K Run: Host a virtual 5K run where participants can run or walk on their own and track their progress. Offer prizes for the fastest finishers and collect donations from participants and sponsors.
4. Brain Tumour Awareness Art Show: Organise an art show featuring local artists and donate a portion of the sales to brain tumour research.
5. Brain Tumour Awareness Concert: Host a concert featuring local musicians and bands and collect donations at the door.
6. Brain Tumour Awareness 'NO SUGAR' Bake Sale: Organise a bake sale with friends and family and donate the proceeds to brain tumour research.
7. Brain Tumour Awareness Car Wash: Host a car wash and collect donations from participants.
8. Brain Tumour Awareness Trivia Night: Organise a trivia night and invite teams to compete. Collect entry fees and donations from participants and sponsors.
9. Brain Tumour Awareness Yoga Class: Host a yoga class and collect donations from participants.
10. Brain Tumour Awareness Auction: Organise an auction and donate a portion of the proceeds to brain tumour research.

These events can be held in-person or virtually, depending on the current health and safety guidelines. The key is to get creative and have fun while raising awareness and funds for brain tumour research.

Hydration is important for brain tumour patients for several reasons:

1. Reduces swelling: Brain tumours can cause swelling, which can put pressure on the brain and lead to increased symptoms. Drinking plenty of fluids can help reduce swelling and relieve symptoms.
2. Improves circulation: Good hydration helps improve circulation, which can be important for brain tumour patients receiving treatments such as radiation therapy or chemotherapy. These treatments can cause side effects such as fatigue and weakness, and good hydration can help the body better cope with these effects.
3. Supports healthy brain function: The brain is primarily composed of water, and adequate hydration is important for maintaining healthy brain function. Symptoms such as headache, confusion, and fatigue can be related to dehydration.
4. Supports overall health: Hydration is important for overall health and well-being, and this is especially true for people with brain tumours, who may be at increased risk for infections or other health problems due to their treatment or illness.

It is important for brain tumour patients to discuss their hydration needs with their healthcare team, as some treatments or medications may affect the body's ability to absorb fluids or cause other side effects that can impact

hydration. Drinking plenty of water and other fluids, eating water-rich foods, and avoiding dehydrating beverages such as caffeine or alcohol can help ensure adequate hydration.

Brain tumours & mental health:
A diagnosis of a brain tumour can be a difficult and stressful experience, and it is important to take care of your mental health during this time. Here are some ways that can help you cope with a brain tumour diagnosis and maintain your mental well-being:

1. Seek support from loved ones: Surround yourself with people who care about you and who you can turn to for support. This could include family, friends, or a support group for people affected by brain tumours.
2. Talk about your feelings: It is important to express your thoughts and feelings about the diagnosis and to share your concerns with those closest to you.
3. Stay informed: Stay informed about your diagnosis, treatment options, and the latest research. This can help you feel more in control and less anxious.
4. Practice self-care: Take care of yourself by eating well, staying physically active, and getting enough rest.
5. Consider counselling: Talking with a mental health professional can be helpful in managing stress, anxiety, and depression.
6. Practice stress management techniques: Techniques like mindfulness meditation, deep breathing, and yoga can help reduce stress and promote relaxation.
7. Stay positive: Try to maintain a positive outlook and focus on the things that are most important to you, like spending time with loved ones, doing things you enjoy, and pursuing your goals.

It is important to remember that everyone copes differently with a brain tumour diagnosis, and what works for one person may not work for another. The key is to find what works best for you and to reach out for help when you need it.

Sleep is important for everyone, but it is especially important for individuals diagnosed with a brain tumour. Here are some reasons why:

1. Restores energy: Sleep helps restore energy levels, which can be depleted during the day. This can be especially important for those undergoing treatment for a brain tumour, as treatments can be physically and emotionally draining.
2. Promotes healing: Sleep is an important time for the body to heal and repair itself. During sleep, the body produces cytokines, which are natural substances that help fight infection and inflammation.

3. Improves mental health: Sleep helps improve mood and cognitive function, which can be affected by the stress of a brain tumour diagnosis.
4. Enhances immune system: Sleep is also important for maintaining a healthy immune system, which can be especially important for those undergoing treatment for a brain tumour.
5. Reduces stress: Sleep helps reduce stress and anxiety levels, which can be elevated during a brain tumour diagnosis.

It is recommended that individuals diagnosed with a brain tumour aim for 7-8 hours of sleep each night. This may require making changes to sleep habits, such as creating a sleep-conducive environment and avoiding stimulating activities before bedtime. If you are having trouble sleeping, talk to your doctor or a sleep specialist for advice.

Suggested Social Media Posts

Here are potential social media posts for Brain Tumour Awareness Month:

Did you know that this month is Brain Tumour Awareness Month? Let's spread awareness and support those affected by this devastating disease. Brain tumours can have a profound impact on individuals and their loved ones, and early detection is key. Help us raise awareness and encourage others to learn the warning signs and get regular check-ups. Together, we can make a difference. #BrainTumourAwarenessMonth #NeverGiveUp #Hope #aheadofthegamefoundation

Did you know that brain tumours are the leading cause of cancer-related death in children? This Brain Tumour Awareness Month, let's spread awareness and support research for better treatments. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Early detection is key when it comes to brain tumours. This month, let's raise awareness about the signs and symptoms to look out for. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Join us in showing support for those affected by brain tumours. This Brain Tumour Awareness Month, let's stand together and make a difference. Why not host an upcoming fundraising event to help those diagnosed with a brain tumour? #BrainTumourAwarenessMonth #aheadofthegamefoundation

Did you know that there is currently no funding for Cancer rehabilitation on the NHS, which is why charities such as Ahead Of The Game Foundation are essential pre and post treatment. All participants on their fully funded Health

& Wellbeing programme receive tailored support during their journey, alongside other courses to support their mental wellbeing too. Why not visit their website for more information www.aheadofthegamefoundation.com #BrainTumourAwarenessMonth #aheadofthegamefoundation

Exercise is scientifically proven to not only inhibit cancer growth by up to 50% but is also important for your mental health by combating depression, stress, insomnia & anxiety. It also improves the immune system and builds self esteem. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Did you know that Hyperbaric Oxygen Therapy could suppress tumour growth within those diagnosed with a brain tumour? Low levels within tumour cells (tumour hypoxia) is a major signal for these cancer cells to produce more blood vessels (angiogenesis) and rapidly glow. Not only does that make them much more aggressive, but it also makes them much more resistant to both chemotherapy and radiation therapy. Hyperbaric Oxygen Therapy (HBOT) is one of the most effective, and most practical, ways to alleviate tumour hypoxia. The results are extremely promising and researchers concluded 'HBOT significantly suppressed tumour growth in both the triple positive and negative tumours. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Brain tumours don't discriminate - they can affect anyone, at any age. This Brain Tumour Awareness Month, let's spread awareness and work together to find a cure. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Many people affected by brain tumours need support, both physically and emotionally. This month, let's support organisations that provide resources and support for those affected by brain tumours. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Brain tumours can have a devastating impact on families. This Brain Tumour Awareness Month, lets raise awareness about the importance of support for those affected by this disease. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Advances in technology and treatment options are improving outcomes for those affected by brain tumours. This month, let's support organisations working to make a difference. #BrainTumourAwarenessMonth #aheadofthegamefoundation

Brain tumours can be a complex and frightening diagnosis, but there is hope. This Brain Tumour Awareness Month, let's raise awareness about the latest developments and treatments available. #BrainTumourAwarenessMonth #aheadofthegamefoundation

It takes a community to make a difference in the world of brain tumours. This Brain Tumour Awareness Month, let's work together to raise awareness and support those affected by this disease. #BrainTumourAwarenessMonth #aheadofthegamefoundation