Gliomas Brain Tumor

It has Gliomas tumor , is a growth of cells that starts in the brain or spinal cord. The cells in a Gliomas look similar to healthy brain cells called glial cells. Glial cells surround nerve cells and help them function.

The type of Gliomas you have helps your health care team understand how serious your condition is and what treatments might work best. In general, Gliomas treatment options include surgery, radiation therapy, chemotherapy and others.

Gliomas Brain Tumor Treatment

Gliomas treatment usually begins with surgery. But surgery isn't always an option. For example, if the Gliomas grows into important parts of the brain, it might be too risky to remove all of the Gliomas. Other treatments, such as radiation therapy and chemotherapy, might be recommended as the first treatment.

Which treatments are best for you will depend on your particular situation. Your health care team considers the type of Gliomas, its size and where it's located in the brain. Your treatment plan also depends on your health and your preferences.

Gliomas Brain Tumor Treatments to control symptoms

If your Gliomas is causing symptoms, you might need medicine to make you more comfortable. Which medications you need depends on your situation. Options might include:

- Medicine to control seizures.
- Steroid medicines to reduce brain swelling.
- Medicine to improves alertness if you have severe fatigue.
- Medicine to help with thinking and memory problems.

Gliomas Brain Tumor Surgery

Gliomas treatment usually starts with an operation to remove the Gliomas. Surgery might be the only treatment needed if all of the Gliomas is removed.

Sometimes the Gliomas can't be removed completely. The surgeon may remove as much of the Gliomas as is possible. This procedure is sometimes

called a subtotal resection. It might be needed if the Gliomas can't easily be separated from the healthy brain tissue. It can also happen if the Gliomas is in a sensitive part of the brain. Even removing a portion of the tumor may help reduce your symptoms.

Surgery to remove a Gliomas carries risks. These include infection and bleeding. Other risks may depend on the part of your brain in which your tumor is located. For instance, surgery on a tumor near nerves that connect to your eyes may carry a risk of vision loss.

Gliomas Brain Tumor Radiation therapy

Radiation uses beams of powerful energy to kill tumor cells. The energy can come from X-rays, protons or other sources.

For Gliomas treatment, radiation therapy is often used after surgery. The radiation kills any Gliomas cells that might remain after surgery. Radiation is often combined with chemotherapy.

Radiation therapy might be the first Gliomas treatment if surgery isn't an option.

During radiation therapy, you lie on a table while a machine aims energy beams at specific points on your head. The beams are carefully programmed to deliver precise amounts of radiation to the Gliomas. A common schedule for radiation therapy is having treatments five days a week for a few weeks.

Side effects of radiation therapy depend on the type and dose of radiation you receive. Common side effects that happen during or soon after radiation include fatigue, scalp irritation and hair loss.

Gliomas Brain Tumor Chemotherapy

Chemotherapy uses drugs to kill tumor cells. Chemotherapy medicines are most often taken in pill form or injected into a vein. In certain situations, the chemotherapy can be applied directly to the Gliomas cells.

Chemotherapy is usually used in combination with radiation therapy to treat Gliomas.

Side effects of chemotherapy depend on the type and dose of medicines you receive. Common side effects include nausea and vomiting, hair loss, fever and feeling very tired. Some side effects may be managed with medication.

Gliomas Brain Tumor treating fields therapy

Tumor treating fields therapy is a treatment that uses electrical energy to hurt the Gliomas cells. The treatment makes it hard for the cells to make new Gliomas cells.

Tumor treating fields therapy is used to treat an aggressive type of Gliomas called glioblastoma. This treatment is often done at the same time as chemotherapy.

During this treatment, sticky pads are attached to the scalp. You might need to shave your head so the pads can stick. Wires connect the pads to a portable device. The device generates an electrical field that hurts the Gliomas cells.

Side effects of tumor treating fields therapy include skin irritation where the pads are applied to the scalp.

Gliomas Brain Tumor Targeted therapy

Targeted therapy treatments focus on specific chemicals present within cancer cells. By blocking these chemicals, targeted therapy treatments can cause cancer cells to die.

Your Gliomas cells may be tested to see if targeted therapy might help you. For slow-growing Gliomas, targeted therapy is sometimes used after surgery if the Gliomas can't be removed completely. For other Gliomas, targeted therapy might be an option if other treatments haven't worked.

Side effects depend on the medicine used and the dose given.

Meningioma Brain Tumor:

It has meningioma brain tumor. A meningioma is a tumor that grows from the membranes that surround the brain and spinal cord, called the meninges. A meningioma is not a brain tumor, but it may press on the nearby brain, nerves and vessels. Meningioma is the most common type of tumor that forms in the head.

Meningioma Brain Tumor Treatment

Treatment for a meningioma depends on many factors, including:

- The size of the meningioma and where it is.
- The rate of growth of the tumor.
- Your age and overall health.
- Your goals for treatment.

Meningioma Brain Tumor : Wait-and-see approach

Not everyone with a meningioma needs treatment right away. A small, slow-growing meningioma that isn't causing symptoms may not need treatment.

If the plan is for you not to have treatment for a meningioma, you'll likely have brain scans at times to assess your meningioma and look for signs that it's growing.

If your healthcare provider finds that the meningioma is growing and needs to be treated, you have several treatment choices.

Meningioma Brain Tumor : Surgery

If the meningioma causes symptoms or shows signs that it's growing, your healthcare professional may suggest surgery.

Surgeons work to remove the entire meningioma. But because a meningioma may be near fragile structures in the brain or spinal cord, it isn't always

possible to remove the entire tumor. Then, surgeons remove as much of the meningioma as they can.

The type of treatment, if any, you need after surgery depends on several factors.

If no visible tumor remains, then no further treatment may be needed. But you will have follow-up scans from time to time.

If the tumor is benign and only a small piece remains, then your healthcare professional may suggest follow-up scans only. Some small leftover tumors may be treated with a form of radiation treatment called stereotactic radiosurgery.

If the tumor is irregular or cancer, you'll likely need radiation.

Surgery may pose risks including infection and bleeding. The risks of your surgery will depend on where your meningioma is. For instance, surgery to remove a meningioma from around the optic nerve can lead to vision loss. Ask your surgeon about the risks of your surgery.

Meningioma Brain Tumor : Radiation therapy

If the entire meningioma can't be removed surgically, your healthcare professional may suggest radiation therapy after or instead of surgery.

The goal of radiation therapy is to destroy any meningioma cells that are left and reduce the chance that the meningioma may come back. Radiation therapy uses a large machine to aim high-powered energy beams at the tumor cells.

Advances in radiation therapy increase the dose of radiation to the meningioma while giving less radiation to healthy tissue. Radiation therapy types for meningiomas include:

Stereotactic radiosurgery (SRS). This type of radiation treatment aims several beams of powerful radiation at a precise point. Despite its name, radiosurgery doesn't involve scalpels or cuts. Radiosurgery most often is done in an outpatient setting in a few hours. Radiosurgery may be a choice for people with meningiomas that can't be removed with conventional surgery or for meningiomas that come back despite treatment.

Fractionated stereotactic radiotherapy (SRT). This type gives radiation in small fractions over time, such as one treatment a day for 30 days. This approach may be used for tumors too large for radiosurgery or those in an area where radiosurgery is too strong, such as near the optic nerve.

Intensity-modulated radiation therapy (IMRT). This uses computer software to lower the intensity of radiation to the meningioma site. This may be used for meningiomas that are near sensitive brain structures or those with a complex shape.

Proton beam radiation. This uses radioactive protons aimed right at the tumor. This type lessens damage to the tissue around the tumor.

Meningioma Brain Tumor : Medicines

Meningoima has Medicine therapy, also called chemotherapy, rarely is used to treat meningiomas. But it may be used when the meningioma doesn't respond to surgery and radiation.

There isn't a widely used chemotherapy approach to the treatment of meningiomas. But researchers are studying other targeted approaches.

Pituitary Brain Tumor:

It has Pituitary tumors , are unusual growths that develop in the pituitary gland. This gland is an organ about the size of a pea. It's located behind the nose at the base of the brain. Some of these tumors cause the pituitary gland to make too much of certain hormones that control important body functions. Others can cause the pituitary gland to make too little of those hormones.

Pituitary tumors can be treated in several ways. The tumor may be removed with surgery. Or its growth may be controlled with medications or radiation therapy. Sometimes, hormone levels are managed with medicine. Your health care provider may suggest a combination of these treatments. In some cases, observation — also called a ''wait-and-see'' approach — may be the right choice.

Pituitary Brain Tumor Treatment

Many pituitary adenomas don't need treatment. They are not cancer, so if they don't cause symptoms, simply watching them over time may be a good approach. If treatment is needed, the specific treatment depends on the tumor type, size, location and growth over time. If a tumor is causing too much or too little of certain hormones in the body, that also affects the treatment. Your age and overall health play a role in treatment planning too.

The goal of Pituitary Brain Tumor treatment is to:

- Return hormone levels to a healthy range.
- Avoid more damage to the pituitary gland and restore its regular function.
- Reverse symptoms caused by tumor pressure or prevent them from getting worse.

If a pituitary adenoma needs treatment, it may include surgery to remove the tumor. Medication or radiation therapy also might be used to treat a pituitary adenoma. Treatment involves a team of medical experts. The team may include a:

- Brain surgeon, also called a neurosurgeon.
- Nose and sinus surgeon, also called an ENT surgeon.
- Hormone disorder specialist, also called an endocrinologist.
- Radiation therapy specialist, also called a radiation oncologist.

Pituitary Brain Tumor Surgery

Surgery to treat a pituitary tumor involves removing the tumor. This is sometimes called a tumor resection. A surgeon may suggest surgery if a pituitary adenoma:

- Presses on the optic nerves and limits eyesight.
- Causes other symptoms, such as headache or facial pain.
- Lowers hormone levels in the body due to pressure on the pituitary gland.
- Causes the body to make too much of some hormones.

Results after surgery typically depend on the adenoma type, its size and location, and whether the tumor has grown into tissues around it.

Surgeries to remove a pituitary tumor include endoscopic transnasal transsphenoidal surgery and craniotomy.

Pituitary Brain Tumor Transcranial surgery

This surgery also is called a craniotomy. It's used less often than endoscopic transnasal transsphenoidal surgery for pituitary tumors. This surgery makes it easier to reach and remove large macroadenomas or pituitary tumors that have spread to nearby nerves or brain tissue. It also makes it easier for the surgeon to see the extent of the tumor, as well as the parts of the brain around it. During transcranial surgery, the surgeon removes the tumor through the upper part of the skull through a cut in the scalp.

Endoscopic transnasal transsphenoidal surgery and transcranial surgery are generally safe procedures. Complications are uncommon. But as with any surgery, there are risks. Complications after pituitary tumor surgery can include:

- Bleeding.
- Infection.
- Reaction to the medicine that puts you in a sleep-like state during surgery This sleep-like state is called anesthesia.
- Temporary headache and nasal congestion.
- Brain injury.
- Double vision or loss of vision.
- Damage to the pituitary gland.

Pituitary Brain Tumor Radiation therapy

Radiation therapy uses high-energy sources of radiation to treat pituitary tumors. Radiation therapy can be used after surgery. Or it can be used alone if surgery isn't an option.

Radiation therapy can be helpful if a pituitary tumor:

- Isn't completely removed with surgery.
- Comes back after surgery.
- Causes symptoms that medications don't relieve.

The goal of radiation therapy for pituitary adenomas is to control adenoma growth or to stop the adenoma from making hormones.

Methods of radiation therapy that can be used to treat pituitary tumors include:

- **Stereotactic radiosurgery**. Often delivered as a single high dose, this type of radiation therapy precisely focuses radiation beams on the tumor. Although the word "surgery" is in its name, no cut into the skin is needed. It delivers radiation beams the size and shape of the tumor into the tumor with the aid of brain-imaging techniques. This requires attaching a head frame to the skull. The frame is removed right after treatment. Little radiation comes in contact with healthy tissue near the tumor. That lowers the risk of damage to the healthy tissue.
- **External beam radiation**. This method also is called fractionated radiation therapy. It delivers radiation in small amounts over time. A series of treatments usually is done five times a week for 4 to 6 weeks.
- **Intensity modulated radiation therapy**. This type of radiation therapy, also called IMRT, uses a computer that allows the beams to be shaped to surround the tumor from many angles. The strength of the beams can be limited. That lowers the risk of side effects on healthy tissue.
- **Proton beam therapy**. Another radiation option, proton beam therapy uses positively charged ions, called protons, to target tumors. Proton beams stop after releasing their energy within the tumor. This means the beams can be controlled to target a pituitary adenoma with less risk of side effects in healthy tissue. This type of radiation therapy requires special equipment. It isn't widely available.

Potential side effects and complications of radiation therapy for pituitary adenomas can include:

- Damage to the pituitary gland that limits its ability to make hormones.
- Damage to healthy tissue near the pituitary gland.
- Vision changes due to damage to the optic nerves.
- Damage to other nerves close to the pituitary gland.
- Slightly increased risk of developing a brain tumor.

A radiation oncologist evaluates your condition and talks with you about the benefits and risks of radiation therapy for your situation. It usually takes months to years to see the maximum benefit of radiation therapy for pituitary adenomas. Side effects and complications from radiation therapy usually don't show up right away either. It is important to have regular long-term follow-up care to detect any hormone problems that may happen due to radiation therapy.

Pituitary Brain Tumor Medications

Treatment with medications can be useful for the management of pituitary adenomas. They can help lower the amount of hormones the body makes due to a tumor.

Healthy Brain

It has healthy brain

Healthy Habits for Brainpower:

Exercise Regularly: Physical exercise isn't just good for your body; it's crucial for brain health too. Aim for at least 150 minutes of moderate-intensity exercise or 75 minutes of vigorous exercise per week.

Balanced Diet: Nourish your brain with a healthy diet rich in fruits, vegetables, whole grains, and lean protein. Omega-3 fatty acids, found in fatty fish, nuts, and seeds, are particularly beneficial for brain function.

Quality Sleep: Getting enough sleep (7-8 hours per night) is essential for memory consolidation, learning, and overall cognitive function.

Pneumonia

Pneumonia is an infection that inflames the air sacs in one or both lungs. The air sacs may fill with fluid or pus (purulent material), causing cough with phlegm or pus, fever, chills, and difficulty breathing. A variety of organisms, including bacteria, viruses and fungi, can cause pneumonia.

Pneumonia can range in seriousness from mild to life-threatening. It is most serious for infants and young children, people older than age 65, and people with health problems or weakened immune systems.

Pneumonia Treatment

Treatment for pneumonia involves curing the infection and preventing complications. People who have community-acquired pneumonia usually can be treated at home with medication. Although most symptoms ease in a few days or weeks, the feeling of tiredness can persist for a month or more.

Specific treatments depend on the type and severity of your pneumonia, your age and your overall health. The options include:

- **Antibiotics**. These medicines are used to treat bacterial pneumonia. It may take time to identify the type of bacteria causing your pneumonia and to choose the best antibiotic to treat it. If your symptoms don't improve, your doctor may recommend a different antibiotic.
- **Cough medicine**. This medicine may be used to calm your cough so that you can rest. Because coughing helps loosen and move fluid from your lungs, it's a good idea not to eliminate your cough completely. In addition, you should know that very few studies have looked at whether over-the-counter cough medicines lessen coughing caused by pneumonia. If you want to try a cough suppressant, use the lowest dose that helps you rest.
- **Fever reducers/pain relievers**. You may take these as needed for fever and discomfort. These include drugs such as aspirin, ibuprofen (Advil, Motrin IB, others) and acetaminophen (Tylenol, others).

Pneumonia Hospitalization

You may need to be hospitalized if:

- You are older than age 65
- You are confused about time, people or places
- Your kidney function has declined
- Your systolic blood pressure is below 90 millimeters of mercury (mm Hg) or your diastolic blood pressure is 60 mm Hg or below
- Your breathing is rapid (30 breaths or more a minute)
- You need breathing assistance
- Your temperature is below normal
- Your heart rate is below 50 or above 100

You may be admitted to the intensive care unit if you need to be placed on a breathing machine (ventilator) or if your symptoms are severe.

Children may be hospitalized if:

- They are younger than age 2 months
- They are lethargic or excessively sleepy
- They have trouble breathing
- They have low blood oxygen levels
- They appear dehydrated

Healthy Chest

Building a Strong Foundation:

Exercise Regularly: Aim for at least 150 minutes of moderate-intensity exercise or 75 minutes of vigorous exercise weekly. This strengthens your chest muscles, core, and improves lung function. Focus on exercises like push-ups, planks, rows, and chest presses. Don't forget stretching for flexibility and good posture.

Maintain a Healthy Weight: Excess weight can strain your chest muscles and limit lung capacity. Focus on a balanced diet with fruits, vegetables, and whole grains for healthy weight management.

Hydration is Key: Drink plenty of water throughout the day to keep your body and chest muscles functioning optimally.

Benign Lung Cancer

Benign Cancer are usually asymptomatic, but when they cause symptoms they may include a cough, respiratory infections due to airway obstruction, or coughing up blood. The diagnosis usually includes imaging studies such as a CT scan, but further testing or a lung biopsy may be needed to make the diagnosis and rule out other conditions. Most benign Cancer do not require treatment, but surgery to remove a Cancer may be needed in some cases.

Benign Lung Cancer Importance

While most benign Cancer are harmless, a major concern with benign Cancer is differentiating these from malignant (cancerous) Cancer. The survival rate for lung cancer is highest when caught and treated in the early stages.

Benign Lung Cancer Treatment

The treatment of a benign Cancer will depend primarily on whether the Cancer is causing symptoms and the particular type of Cancer that is present. When a benign Cancer is small, the entire Cancer may be removed during a biopsy procedure.

When a benign Cancer must be removed surgically, there are now minimally invasive procedures that allow for a much faster recovery. The procedure known as video-assisted thoracoscopic surgery involves making a few incision in the chest wall in order to gain access to the lungs. Special instruments are then used to remove an area of the lungs. This method can be used to remove even an entire lobe of the lungs, but is not possible with Cancer in all regions of the lungs.

Malignant Lung Cancer

Lung cancer is a type of cancer that begins in the lungs. Your lungs are two spongy organs in your chest that take in oxygen when you inhale and release carbon dioxide when you exhale.

Lung cancer is the leading cause of cancer deaths worldwide.

People who smoke have the greatest risk of lung cancer, though lung cancer can also occur in people who have never smoked. The risk of lung cancer increases with the length of time and number of cigarettes you've smoked. If you quit smoking, even after smoking for many years, you can significantly reduce your chances of developing lung cancer.

Malignant Lung Cancer Treatment

You and your doctor choose a cancer treatment plan based on a number of factors, such as your overall health, the type and stage of your cancer, and your preferences.

In some cases, you may choose not to undergo treatment. For instance, you may feel that the side effects of treatment will outweigh the potential benefits. When that's the case, your doctor may suggest comfort care to treat only the symptoms the cancer is causing, such as pain or shortness of breath.

Malignant Lung Cancer Surgery

During surgery, your surgeon works to remove the lung cancer and a margin of healthy tissue. Procedures to remove lung cancer include:

- **Wedge resection** to remove a small section of lung that contains the Cancer along with a margin of healthy tissue
- **Segmental resection** to remove a larger portion of lung, but not an entire lobe
- **Lobectomy** to remove the entire lobe of one lung
- **Pneumonectomy** to remove an entire lung

If you undergo surgery, your surgeon may also remove lymph nodes from your chest in order to check them for signs of cancer.

Surgery may be an option if your cancer is confined to the lungs. If you have a larger lung cancer, your doctor may recommend chemotherapy or radiation therapy before surgery in order to shrink the cancer. If there's a risk that cancer cells were left behind after surgery or that your cancer may recur, your doctor may recommend chemotherapy or radiation therapy after surgery.

Malignant Lung Cancer **Radiation therapy**

Radiation therapy uses high-powered energy beams from sources such as X-rays and protons to kill cancer cells. During radiation therapy, you lie on a table while a machine moves around you, directing radiation to precise points on your body.

For people with locally advanced lung cancer, radiation may be used before surgery or after surgery. It's often combined with chemotherapy treatments. If surgery isn't an option, combined chemotherapy and radiation therapy may be your primary treatment.

For advanced lung cancers and those that have spread to other areas of the body, radiation therapy may help relieve symptoms, such as pain.

Malignant Lung Cancer **Chemotherapy**

Chemotherapy uses drugs to kill cancer cells. One or more chemotherapy drugs may be given through a vein in your arm (intravenously) or taken orally. A combination of drugs usually is given in a series of treatments over a period of weeks or months, with breaks in between so that you can recover.

Chemotherapy is often used after surgery to kill any cancer cells that may remain. It can be used alone or combined with radiation therapy. Chemotherapy may also be used before surgery to shrink cancers and make them easier to remove.

In people with advanced lung cancer, chemotherapy can be used to relieve pain and other symptoms.

Malignant Lung Cancer **Stereotactic body radiotherapy**

Stereotactic body radiotherapy, also known as radiosurgery, is an intense radiation treatment that aims many beams of radiation from many angles at the cancer. Stereotactic body radiotherapy treatment is typically completed in one or a few treatments.

Stereotactic body radiotherapy may be an option for people with small lung cancers who can't undergo surgery. It may also be used to treat lung cancer that spreads to other parts of the body, including the brain.

Malignant Lung Cancer **Targeted drug therapy**

Targeted drug treatments focus on specific abnormalities present within cancer cells. By blocking these abnormalities, targeted drug treatments can cause cancer cells to die.

Many targeted therapy drugs are used to treat lung cancer, though most are reserved for people with advanced or recurrent cancer.
Some targeted therapies only work in people whose cancer cells have certain genetic mutations. Your cancer cells may be tested in a laboratory to see if these drugs might help you.

Malignant Lung Cancer **Immunotherapy**

Immunotherapy uses your immune system to fight cancer. Your body's disease-fighting immune system may not attack your cancer because the cancer cells produce proteins that help them hide from the immune system cells. Immunotherapy works by interfering with that process.

Immunotherapy treatments are generally reserved for people with locally advanced lung cancers and cancers that have spread to other parts of the body.

Healthy Lung

You have a healthy lung.

Imagine healthy lungs like a pair of pink balloons! They fill with air easily, allowing you to take deep, refreshing breaths. The air sacs inside the balloons (alveoli) are nice and elastic, efficiently transferring oxygen into your bloodstream.

Here are some tips to keep your lungs healthy and reduce your risk of lung cancer:

- Don't smoke or quit if you do
- Avoid secondhand smoke
- Test your home for radon
- Become an air advocate
- Eat a healthy diet
- Exercise regularly

By following these tips, you can take steps towards keeping your lungs healthy and strong!