ORBITAL EXENTERATION

This information aims to help you understand the operation, what is involved and some common complications that may occur. It may help answer some of your questions and help you think of other questions that you may want to ask your cancer care team; it is not intended to replace advice or discussion between you and your cancer care team.

AN OVERVIEW TO ORBITAL EXENTERATION

- An orbital exenteration is the removal of all of the tissue inside the eye socket.
    - This includes the eyeball, muscles, tear (lacrimal) gland, the eyelids, and the optic nerve.
- This operation may also involve the removal of skin and bone around the eye.

WHY IS AN ORBITAL EXENTERATION NEEDED

- An orbital exenteration is done when a large cancer is located in the eye socket, in the skin around the eye, the sinuses or in the roof of the mouth.
- If the cancer has spread into the eye socket from the sinuses or roof of the mouth, orbital exenteration is often done together with other operations such as the removal of the upper jawbone (maxillectomy), or removal of cancer from the nose or sinus cavities (craniofacial resection). Further information on maxillectomy and craniofacial resection is available on the Beyond Five website.
- To reduce the chance of any cancer cells being left behind, the cancer and an area of normal tissue surrounding it will be removed. This is different to removal of only the eyeball and it will not be possible to use a glass eye, but it may be possible to have a prosthesis made to replace all of the tissue removed.
- Tissue removed from the operation will be examined in detail by a specialist pathologist, under a microscope to look for cancer cells and decide whether the cancer and whether additional treatment, such as radiation therapy is needed.

BEYOND FIVE
The Face of Head & Neck Cancer

HOW TO PREPARE FOR THE OPERATION

Before the operation:

- You will need to fast (have nothing to eat or drink) for 6 hours before your operation (unless advised differently by your surgeon) because the orbital exenteration is performed under a general anaesthetic (you will be asleep and will not remember what happens during the operation).
- Your surgeon will explain the details of your operation. Be sure to bring up any questions or concerns, and share your needs and wishes with your cancer care team **(see box)**.
- You should speak to your doctor about how to manage aspects of your lifestyle, such as smoking, drinking alcohol and chronic conditions (e.g. diabetes and obesity) that may increase the risk of complications.
    - If you take blood thinning medication for a heart condition or blood clots (such as Warfarin, Plavix, Aspirin or Pradaxa), make sure your surgeon is aware. Some of these medications need to be stopped more than a week before the operation. Sometimes a short-acting blood thinner (such as Clexane) is used before and after the surgery.
- It is important to prepare for losing vision in the eye that is being removed and that your appearance will change.
    - It may be helpful to speak to a psychologist to learn how to cope with these changes.
    - Having only one eye mean that your ability to perceive distances (depth perception) will be impaired. This may affect your ability to drive and perform manual work, particularly if you operate machinery or tools.
    - You should have an eye test by an optometrist to check what your vision is like in your good eye, and correct any reversible problems with glasses. The optometrist can also advise you regarding how to care for your good eye after the surgery.
    - It may be helpful to speak to a maxillofacial prosthetist before the surgery, who can explain how the tissue can be replaced with synthetic material.

Possible questions that you may want to ask your cancer care team

- Will I be able to wear a glass eye, eye patch or a prosthesis?
- Will the area be reconstructed?
- Will this affect my ability to work or drive?
- What will I look like?
- Can I wear my glasses?
- What do I do if there is a problem with my other (good) eye?
- If I have a prosthesis, where will it be made and how do I look after it?

Additional questions are listed at the end of this factsheet.

  - It may also help to make contact with other patients who have had this operation and your cancer care team can assist with making these contacts.

- Talk to your surgeon and cancer care team about any likely side effects to expect following the operation. You may find it useful to talk to a dietitian, speech pathologist or specialist head and neck nurse about these issues.

Visit the Beyond Five website for further information on the health professionals who may be part of your cancer care team

WHAT TO EXPECT DURING THE OPERATION

- During an orbital exenteration, the surgeon will remove all of the tissue inside the affected eye socket.
- After this is complete, the eye socket may be left to heal with dressings, lined with muscle and a skin graft or reconstructed using a flap repair. Further information on these reconstructive procedures is available on the website.
- In addition, other surgery such as removal of the upper jawbone (maxillectomy), or removal of cancer from the nose or sinus cavities (craniofacial resection) may be done. If this is the case, a tube may be inserted into the windpipe (tracheostomy) to help with breathing, and a feeding tube may also be inserted for feeding.
- Sometimes the lymph nodes in the parotid (salivary gland near the front of the ear) or neck may also need to be removed; this is called a parotidectomy and neck dissection. This is usually done if the cancer has spread to the lymph nodes or if a flap repair is required. Further information on neck dissection is available on the website.

WHAT TO EXPECT AFTER THE OPERATION

- After the operation, you will be closely monitored in hospital during your recovery.

- You may have 1 or 2 surgical drains coming from the cut in your neck to allow blood or lymphatic fluid to escape and prevent swelling. These will usually be removed before you go home but it may be possible to go home with the drains if you are ready.
- Depending on the type of reconstruction, your eye socket may have dressings. The eye socket and any reconstructions will be carefully looked after. If you have had a flap repair, this is usually monitored closely every hour for the first couple of days.
- You will have a drip in your arm to give you fluid until you are able to drink and to provide medications (pain relief, antibiotics and to stop nausea).
- You may have a feeding tube to help you stay well nourished.
- The drips and tubes will be removed as soon as they are no longer needed and before you go home.
- Your anaesthetist and surgical team will give you medicine to help control any pain and nausea after the operation.
- The time you spend in hospital will depend on the extent of your surgery and reconstruction, and on your recovery. You may stay in hospital for around 1–2 weeks.

THE POSSIBLE RISKS OF ORBITAL EXENTERATION

All operations carry some risks such as blood clots, wound infections, bleeding, chest infection, adverse reactions to anaesthetic, and other complications. These risks will be explained by your cancer specialist and anaesthetist.

Your doctor will explain details of the operation, general risks and side effects of the operation, they may recommend:

- stopping blood thinners (e.g. aspirin) before surgery to reduce the risk of bleeding
- a blood thinner (called heparin) may be injected before and after surgery to reduce the risk of blood clots
- antibiotics to reduce to risk of wound infection
- early mobilisation to reduce the risk of blood clots and chest infection
- special stockings to reduce the risk of blood clots.

Orbital exenteration may have addition risks:

- **Cerebrospinal fluid leak:** Or leakage of clear or straw coloured fluid from the nose may occur. This is because the eye is quite close to the brain and sometimes if the bone around the eye is removed the clear fluid around the brain (called cerebrospinal fluid (CSF)) can leak out. CSF leaks may cause headaches and occasionally serious infections (meningitis). If this happens you may need to have the hole repaired.
- **Flap failure:** If a flap repair is performed, the blood supply to the flap needs to be monitored closely. If there are signs of a blockage in the blood supply, you will need to return to the operating rooms to un-block the blood vessels. Sometimes this is not possible and the flap will need to be replaced.

SIDE-EFFECTS AND MANAGING SIDE EFFECTS

Orbital exenteration may lead to several side effects but you may not experience all of these. Speak with your doctor if you have any questions or concerns about treatment side effects.

- **Loss of vision and changes in appearance**: Orbital exenteration results in loss of vision from the eye that was treated, and changes in your appearance. Your surgeon and treating

team will advise you what you may expect and on any reconstruction planned. You may seek support from your cancer care team, and from your family and friends. It can also help to contact other patients to hear how they have coped and adjusted.

- **Nausea**: General anaesthetic may cause nausea. This will settle down soon after surgery and can be treated with medications.
- **Pain**: Orbital exenteration is not usually a very painful operation, but you will have some discomfort. Your anaesthetist will give you pain medicine during the operation to keep you comfortable when you wake up, and you may continue on pain medicines to ensure pain is under control. Ensure you take pain relief medications as prescribed by your doctor and speak to you cancer care team if the pain is not under control, gets worse of if the medication causes any side effects. You may want to download further information about pain management, which is available on the Beyond Five website.
- **Swelling**: After surgery, there will be swelling in the facial tissue which will gradually reduce over a few weeks.

For information on the side effects of any other procedures you may have, such as maxillectomy or craniofacial resection. See the information sheets for these procedures on the Beyond Five website.

OTHER TREATMENT(S)

- Additional treatment(s) depend on the nature and extent of the cancer
- Head and neck cancers often require treatment with more than one form of therapy to reduce the risk of the cancer recurring. Many patients need radiation therapy after the operation, and sometimes, may also require chemotherapy.
- Your cancer care team will be able to discuss the likelihood of needing further treatment before your operation, but they will not be certain until the pathology report is available. This usually takes about two weeks.

BEFORE GOING HOME

- Any particular instructions for wound care (including the eye socket) or medications will be provided to you before you go home. You may want to download further information about wound care on the Beyond Five website.
- It is very important to care for the other eye. If there is any pain or inflammation in the good eye, see your doctor or surgeon and if there are any doubts, referral to an ophthalmologist may be advisable. It is also important to make sure that any skin cancers near the good eye are treated when they are small.
- Your doctor may prescribe pain medications to help relieve pain following the operation. Ensure you take the pain relief medications as prescribed by your doctor and speak to your cancer care team if the pain is not under control, gets worse or if the medication causes any side effects. You may want to download further information about pain management, which is available on the Beyond Five website.
- You will be assessed by the team involved in your care before you go home and follow-up will be arranged with your surgeon and GP.
- Follow-up may also be arranged with allied health professionals that may assist you with psychosocial and supportive care.
- Your recovery at home may vary and you should allow time for your body to recover and heal. Regular follow-up helps to assess your progress.

BEYOND FIVE
The Face of Head & Neck Cancer

FOLLOW-UP CARE

- After your operation, you will continue to have regular follow-up visits with your specialist doctor and cancer care team. Most patients with head and neck cancer will be monitored for five years after surgery, sometimes more.
- Other referrals will be arranged as needed with other health professionals to assist you with any difficulties. This may include:
    - A maxillofacial prosthetist
    - An optometrist
    - A psychologist
    - Radiation oncologist
    - Medical oncologist
    - Speech pathologist
    - Dietitian
- Any additional reconstruction, cosmetic procedures or treatments that you may need are planned after discharge. This enables time for you to recover from the initial operation, get results of the pathology that examined the tissue removed at the operation, and make the arrangements for any additional treatment or next steps. If a prosthetic eye is suitable, this is made a few months after the operation.
- The course of recovery will depend on the operation(s) you have had, and additional reconstruction or any further treatment.

For further information about the operation for cancer and what to expect, you can also refer to Understanding Surgery: a guide for people with cancer, their families and friends.

QUESTIONS TO ASK YOUR DOCTOR:

- What type of cancer do I have? Where is it located?
- What are the risk factors for this disease?
- What lifestyle changes (diet, exercise) do you recommend I make?
- What are the chances that the surgery will cure the cancer?
- What will happen if I don't have the surgery?
- How much will the surgery cost? Will my health insurance cover it?
- What are the possible side effects of treatment? How can they be prevented or controlled?
- When will I get the pathology results?
- What follow-up tests will I need?
- Who are the health professionals that I need to see as part of my follow-up care?

You may want to write specific questions here to ask your doctor or cancer care team

Last updated: 18 October 2016