

Exenteration Surgery



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Qu: What is exenteration?

Exenteration refers to the surgical removal of the eyeball and the surrounding tissues, these including the eyelids (the extent depending on disease), and the muscles, nerves and fatty tissue adjacent to the eye.

Qu: When is an exenteration necessary?

An exenteration is major surgery, resulting in removal of the eye. Rarely required, it is usually undertaken to remove a tumour which involves the eyelids or structures around the eye, and which needs removal to prevent local extension and / or systemic spread via the blood stream. Rarely, it is also performed to remove pervasive but benign orbital disease, for which no other treatment is successful in controlling orbital pain or other symptoms.

An exenteration is only performed when the other surgical options (in which the eyeball is left intact with the hope of retaining vision) have a lower chance of completely removing the tumour. Less extensive surgery can certainly save the eye, but can leave behind micro-deposits of tumour, and therefore compromise the overall outlook (prognosis) for life. Thus, exenteration surgery is advised because other forms of surgery are thought to compromise tumour clearance.

Qu: What are the alternative options?

In certain cases, a tumour (such as a melanoma, or sebaceous carcinoma) appears to involve only the eyelids, or the surface of the eye. In these cases, it is often asked why a more limited surgical approach is not considered, and in certain situations, where an aggressive tumour appears to be very localised, or in more elderly or frail individuals, it may indeed be reasonable to opt for local tumour excision.

However, in order to be sure as possible of clearing all residual tumour cells, a margin of apparently healthy tissue also needs to be removed. This may involve removing other vital structures around the eye (such as the lacrimal gland, or the surface over the white of the eye), and without such structures the eye itself cannot maintain health and vision. For this reason, if a local (limited) excision is thought to compromise full clearance of tumour, in addition to risking the health of the eye itself, an exenteration is considered to be better.

All of these difficult issues are always fully discussed with the patient and his or her family, and all opinions are taken into consideration. Furthermore, these difficult clinical scenarios are also discussed in an oncology setting amongst other doctors to consider all other possible treatments. Other systemic tests and investigations are performed to exclude disease elsewhere. With certain tumours (such as melanoma),

specialised investigations of the lymph nodes in the neck are frequently performed under general anaesthetic to exclude lymphatic spread. If there is evidence for such spread, these lymph nodes are removed, before subsequent exenteration.

Qu: Who else can I talk to about this surgery?

Your consultant is always available to discuss any queries as they arise. In addition, patients are put in contact with one of our skilled and experienced nurse counsellors whose role is specifically to help patients to cope with the wider psychological aspects of this surgery.

Qu: What does surgery involve?

All patients are assessed first by the nursing staff and anaesthetist in the preoperative assessment department. Before surgery, the surgeon will describe the risks and benefits once again, and ask you to sign the consent form (required before undergoing all operations).

Exenteration, which takes between 2 to 3 hours, is performed under general anaesthesia. The eyeball, muscles and fatty tissue surrounding the eye, and part of the eyelids, are all removed. Usually enough eyelid skin remains to allow the residual eyelids to be stitched together, and a firm dressing is placed over the socket for a week. Regular postoperative analgesia is prescribed, and most patients are able to go home the following day. On review in clinic a week later, the dressing and superficial skin stitches are removed.

Qu: What are side effects and risks of surgery?

In the first few weeks, side effects of surgery include bruising, bleeding, swelling (oedema) and infection. Long-term problems include discharge and socket irritation or thinning of the socket lining, with spontaneous connections (fistulae) forming with the adjacent air spaces (sinuses). In many cases, the nerve supplying sensation in the skin between the upper eyelid and the top of the head is also removed, and this results in complete lack of sensation in this area. Movement of the eyebrow is *not* affected, however.

Qu: What should I do after surgery?

Patients are advised to clean the skin surrounding the incision using with cool, boiled water; the rest of the face can be washed normally. Because the socket lies alongside the air sinuses, patients should not blow their nose and limit forceful sneezing for 2 weeks after surgery. This will reduce the risk of air entry into the socket and secondary infection. Finally, bruising and swelling tend to settle more quickly by sleeping with the head elevated on extra pillows or two for two weeks.

Qu: What happens after surgery?

Full recovery takes many months. With healing, the socket will look more hollowed, and the surrounding skin will feel tighter. In order to improve the aesthetic appearance, an ocular prosthesis, created from silicone and mirroring the fellow eye, is created. This is either fixed to a pair of glasses, or can be attached to the socket using specialised magnetic implants. These prostheses are carefully crafted by a specialist and typically result in a very acceptable aesthetic appearance.

All patients need regular clinical review – for up to 5 years - and may in addition may require adjunctive local radiotherapy (once the socket has settled) and / or chemotherapy. This is thought to ‘mop up’ any residual tumour cells should they be present, and is organised by an oncologist with experience in the field. In other regards, patients typically carry on living a normal life, making adjustments and using visual ‘depth clues’ to undertake day to day chores, to continue sports, etc.

Qu: Am I allowed to drive after exenteration surgery?

For private car or motorcycle drivers, if vision is normal in the other eye and there are no other medical conditions, the DVLA does not need to be informed:

From the DVLA website:

“Monocularly and driving: Monocularly is a condition that you may need to tell the Driver and Vehicle Licensing Agency (DVLA) about. Car or motorcycle driving licence holders: If you are a car or motorcycle driving licence holder - you will not need to tell DVLA about your medical condition.”

If you have any doubt about your fitness to drive, please contact the DVLA, using the following link:

http://www.direct.gov.uk/en/Motoring/DriverLicensing/MedicalRulesForDrivers/MedicalA-Z/DG_185682