**WHAT IS UVEAL MELANOMA?**

Uveal Melanoma (UM) is a cancer that arises in the uvea. The uvea is a pigmented layer of the eye which includes the choroid, the ciliary body and the iris.

**Diagram:**
- **Choroid:** blood filled layer of pigmented tissue under the retina.
- **Ciliary Body:** muscular ring, which adjusts the focus of the lens and pumps fluid into the eye to maintain the shape of the eyeball.
- **Iris:** controls the amount of light that enters the eye.
- **Lens:** focuses light behind the iris onto the retina.
- **Cornea:** transparent “window” at the front of the eye.
- **Sclera:** leathery white “bag” which holds the eye together.
- **Conjunctiva:** transparent “skin” covering the eye and lining the inside of the eyelids.
- **Optic Nerve:** transmits visual information from the retina to the brain.

**UM IN NUMBERS**

5-6 adults per million are diagnosed with UM each year.

**UM can affect anyone.**

But it is more common in people:
- between 50 and 70 years old
- that are white, slightly more in men
- with blue or green eyes
- with moles inside the eye (uveal nevi, congenital ocular melanosis or melanocytoma)
- in rare cases, UM is associated with the BAP1 predisposition syndrome, where familiar transmission can occur

**Possible signs and symptoms:**
- seeing flashes of light
- blurred or distorted vision
- changes in the appearance of the eye
- irritation and pain (rare)

**UM can grow and spread to distant organs to form new tumours called metastases. The liver is a common place but the lungs, bone, skin and more rarely the brain can also be involved.**

Up to 50% of UM patients develop metastases from the time of initial diagnosis to several decades later.

**TREATMENT OF THE CANCER IN THE EYE**

Treatment choice is based on:
- how much the patient’s sight is affected
- size and location of the tumour
- pathology reports
- general health of the patient

**Treatment options:**
- more rarely, laser treatment (photodynamic therapy or others)
- local resection
- radiotherapy (brachytherapy or proton beam therapy)
- enucleation (eye removal)
- rarely, exenteration (eye and adjacent tissue removal)

**Diagnosis**

If UM is suspected, patients should be referred to an eye cancer specialist, known as “ocular oncologist”.

It is important to have regular eye exams.

Most people show no symptoms at all, and detection happens only on routine eye examination, using eye drops to dilate the pupil. Diagnosis is confirmed with tests, such as ultrasounds, angiograms and biopsies. Disease outside the eye region develops almost exclusively in patients whose tumour in the eye shows specific changes in genetic material (loss of a chromosome 3, and other factors).

Ask your ophthalmologist or ocular oncologist how a biopsy may influence your care – both from a treatment and follow-up perspective.

**UM IN NUMBERS**

If the tumour is small and not involving the optic nerve:
- radiotherapy
- local resection

If the tumour is large:
- enucleation (eye removal)
- rarely, exenteration (eye and adjacent tissue removal)

**UM CURE 2020**

Stay up to date and find out more @ umcure2020.org
Patients can contribute significantly to the understanding of uveal melanoma and the development of appropriate research models to find new therapies.

**HOW?**

- By donating part of their biopsy or surgical samples to reference centres’ biobanks. Research using these samples can lead to new clinical trials dedicated to metastatic UM patients.

- By working with patient organisations, such as MPNE (and associated national networks), who partner and have a direct input into research projects and how new clinical trials are designed.

Patients should discuss with their specialist what tests would be best for them to detect any metastases in other parts of the body, how frequently these should be done and for how long. This surveillance protocol should be adjusted according to the risk of metastatic disease, which may be estimated by considering clinical findings as well as pathology and genetic results.

For checking the liver, MRI (Magnetic Resonance Imaging) is currently thought to be the optimal choice in many countries.

More about clinical trials at: umcure2020.org/trials

**FINDING REFERENCE CENTRES AND ONGOING CLINICAL TRIALS**

If metastases are suspected, a multidisciplinary approach in a reference centre specialised in uveal melanoma should be sought.

Depending on the features and location of metastases, the patient may be a candidate for targeted therapy, surgery, immunotherapy, radiotherapy and/or liver-directed therapies (chemosaturation, chemoembolization, radioembolization).

In patients with only one or few localized metastases in the liver, surgical resection of the affected areas can be considered.

More about clinical trials at: umcure2020.org/trials

**UM CURE 2020 reference centres are:**

- Institut Curie: umcure2020.org/curie
- Liverpool Ocular Oncology Centre: umcure2020.org/looc and umcure2020.org/loorg
- Universiteit Leiden: umcure2020.org/lumc
- Jagiellonian University: umcure2020.org/jagiellonian

Discuss with your oncologist if you are eligible for an ongoing clinical trial.