Definition:
Retinal detachment occurs when the retina becomes separated from its underlying support tissue called the choroid, resulting in visual impairment depending on the affected region. It’s often caused by a tear and/or a hole in the retina causing an accumulation of liquid under the retina.

If the detachment is not repaired, visual impairment will progress towards blindness and becomes irreversible.

1- Retina
The light-sensitive part of the eye allowing us to see, consisting in layers of nervous tissue that transforms light into electrical signals which are sent to the brain through the optic nerve.

2- Vitreous humour
Clear gel filling the interior of the eye, between the lens and the retina.

3- Choroid
Situated between the retina and the sclera, it’s the vascular layer of the eye.

Scleral Buckling Surgery
A silicone band is sewed to the sclera, under the eye muscles around the eye, to reposition the retina against the choroid. The goal is to avoid a total or definitive loss of vision.

The silicone band remains permanent, and is not apparent.

Cryotherapy (freezing the retina) or laser surgery will be used to seal the tear or hole in the retina.
Vitrectomy
Consists in the removal of the vitreous humour and replacing it by an equivalent liquid, gas or air, in order to reattach the retina. The gas or air works by creating a pressure on the tear of the retina, therefore restoring normal eye pressure.

How to prepare for the surgery:

Plan your discharge and return home
- Have a family member or a friend to stay with you for the day of the surgery, until the morning after the surgery, to help you and take you to your first post-op appointment with the doctor.
- Plan your meals ahead. We suggested you prepare ahead your meals for the next 2 weeks.
- Make sure you have everything you need for 2 weeks from the grocery store and the pharmacy. Make sure you have acetaminophen (Tylenol) available if needed for pain control.
- Clean the house so you don’t have to worry about it when you come back home.
- Check with your local CLSC to learn what services they offer that might help you.
- Check with your doctor and nurse if you will need to rent special equipment, like pillows or other positioning devices.

What you need to do before your surgery
- Ask your pharmacist for an updated list of all your medication and bring it with you the day of the surgery.

You need to notify validation in case of:
- A new diagnosis of diabetes;
- Change in medication and start of Insulin to treat known diabetes;
- Start of anticoagulation medication (blood thinner) and/or any change in your current medication or dosing of anticoagulants medication;
- Any recent hospitalization;
- Any change in your health status;
- If you are unable to come to the hospital for your surgery.

To reach the validation office: 418 682-7511 ext. 4705. Explain the reason for your call.
To fax documents to the validation office: 418 682-7937
REMEMBER

Discontinue your anticoagulant (name) _________________________________ on ________________________

Date of the surgery: ______________________

Notes:_______________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Guidelines for diet:
- The day before the surgery, eat normally.
- As of midnight, do not eat any solid food, milk, cereal, or any other food. You can drink water only, as much as you want, up to 3 hours before the surgery.

The morning of the surgery:
- Do not wear any piercings or jewellery (ring, earrings, necklace, etc.).
- Do not wear perfume.
- Remove all nail polish.
- Do not take your diabetes medication (oral hypoglycemiant, Insulin).
- Take your other medication with a little bit of water (hypertension and heart medication).
- BRING WITH YOU all the medication you usually take during the day, INCLUDING your Insulin and your inhalers.
- You must come to the hospital accompanied by somebody; that person must remain on site in order to not delay your discharge.

Post-operative guidelines:
- Start the drops after the first doctor visit, the next morning after the surgery.
- Your next doctor's appointment will be the next morning after the surgery.
- Always bring your drops with you to your doctor’s appointment.
- Drops will be prescribed to you to promote healing post surgery.

ATTENTION
If you have to apply more than 1 drop in your eye, always wait 5 minutes in between each drop application.

As per your prescription:
Apply first:
Atropine OR Homatropine OR Cyclogyl: Drops that dilate the pupil. Used to rest the eye.

Apply second:
Vigamox OR Ocuflax: An antibiotic used for the healing of the eye surface.
Apply third: Nevanac OR Ketorolac: An anti-inflammatory that will be used for 3-4 weeks, with a weaning schedule of doses.

OR

Maxidex OR Prednisolone: Also an anti-inflammatory that will be used for 3-4 weeks.

If an ointment is prescribed, always apply last.

Erythromycin ointment: It’s an antibiotic that will be used for the healing of the eye’s surface.

The doctor will give you a prescription for your treatment.

GAS OR AIR INJECTION

You had gas or air injection during the surgery: Why?
To apply pressure to the retina to promote healing.

IMPORTANT NOTICE
For the next 4-14 days, it is very important to respect the positioning prescription ordered by your doctor; it will allow the gas or the air injected to cause maximal pressure on the healing retina.

You won’t be able to see from the operated eye for the first few days after the surgery due to the presence of the gas in the eye.

- As the gas will be absorbed, you will notice a bubble edge in your vision, similar to the bubble in a carpenter’s level. Do not worry, it’s normal.
- The bubble might split in many smaller bubbles before disappearing completely.
- If you have gas in your eye, avoid air travel and being in places of high elevation of more than 2000 feet (ex.: Parc des Laurentides, Parc des Grands Jardins).

Why?
- At high altitude, the gas will expand and cause an increase in eye pressure and subsequently pain.
- You must wait to have your doctor’s authorisation before flying or travelling through these 2 parks (Parc des Laurentides, Parc des Grands Jardins).

Duration of gas or air in the eye

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>5 days</td>
</tr>
<tr>
<td>SF6</td>
<td>14 days</td>
</tr>
<tr>
<td>C3F8</td>
<td>7 weeks</td>
</tr>
</tbody>
</table>
Positioning:
Scleral buckle and vitrectomy with gas or air injection
You must respect the schedule ordered by your physician for positioning in order to maximise the success of the intervention.

Record the doctor’s prescription for positioning in the following table:

<table>
<thead>
<tr>
<th></th>
<th>During the day</th>
<th>In the evening</th>
<th>Length of time</th>
</tr>
</thead>
<tbody>
<tr>
<td>No specific positioning required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lying on your right side</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lying on your left side</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lying on your back</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lying on your stomach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General post-operative guidelines:
- Sleep with the eye patch at night and for naps for 2 weeks, or as per your doctor’s recommendations.
- Avoid rubbing your eyes for the first 2 weeks.
- Do not wear eye make-up for 2 weeks.
- Do not bend the head.
- You can read, watch television, and do your usual activities.
- Avoid any trauma to the eye.
- Be careful to not fall.
- You can take a bath or a shower upon your return home.
- Avoid spraying water directly in the operated eye.
- Wash your hair over the sink with your head tilted backwards.
- You will be able to wear your glasses. Your ophthalmologist will advise you to when it will be necessary to readjust them.
- You will be comfortable wearing sunglasses, especially in sunlight.
- It’s normal to experience some discomfort and pain inside and around the operated eye after the surgery.
- It’s normal to have headaches.

Anticoagulant medication must be taken on: ________________________________

✓ Take the analgesic medication regularly for the first few days after the surgery if you have pain.
### ACTIVITY
<table>
<thead>
<tr>
<th>VITRECTOMY AND/OR SCLERAL BUCKLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driving a motor vehicle</td>
</tr>
<tr>
<td>Do not drive a car for the first few weeks; wait until your doctor gives you authorization to drive.</td>
</tr>
<tr>
<td>Resume sedentary occupations</td>
</tr>
<tr>
<td>Depending on the healing process: between 4-6 weeks.</td>
</tr>
<tr>
<td>Resume physical work</td>
</tr>
<tr>
<td>After 4-6 weeks</td>
</tr>
<tr>
<td>Lift objects</td>
</tr>
<tr>
<td>Maximum of 10 pounds during 4 weeks</td>
</tr>
<tr>
<td>Sport activities</td>
</tr>
<tr>
<td>Wait at least 2 months before resuming any sport activity. Get authorization from your doctor prior.</td>
</tr>
</tbody>
</table>

N.B.: The length of recovery will be discussed with your doctor.

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The following symptoms are NORMAL. They will gradually disappear with time.

<table>
<thead>
<tr>
<th>Effects of the drops</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The pupil of the eye will be dilated from the mydriatic drops (Cyclogyl, Atropine, Homatropine).</td>
</tr>
<tr>
<td>- The effect can last a few days after the end of the treatment.</td>
</tr>
<tr>
<td>- You may feel a burning sensation, a bad taste in the mouth or a runny nose with the application of the drops</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effects of the surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The conjunctiva and the eyelid will be red and inflamed (eyelid swollen, pink eye).</td>
</tr>
<tr>
<td>- You might have a bruise around the eye (black eye). You may feel a burning sensation, a feeling of tightness and pressure in the operated eye.</td>
</tr>
<tr>
<td>- You might have the feeling of having sand in your eye: that is because of the stitches, which will take 7-10 days to dissolve.</td>
</tr>
<tr>
<td>- The stitches will dissolve and disappear by themselves.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effects of positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Both your eyelids and your face can become swollen, especially if your positioning is on your stomach and face down.</td>
</tr>
<tr>
<td>- This should go away within a few days after the end of the required positioning.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effects of gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Vision will be blurry for a few weeks, and the improvement in vision will be gradual.</td>
</tr>
</tbody>
</table>
Be vigilant:
- If you experience **significant decrease in eyesight**, **or excessive pain or redness to the operated eye**, blindspots, light flashes in the operated eye (to see some small light is normal) and persisting nausea and vomiting, **call us or present to the Emergency Room of the hospital to ensure proper follow-up as soon as possible**.

Follow-up:
- Your next appointment will be tomorrow at ____________________.

Nursing and Medical follow-up:
- As per your physician.

To contact us:
During the day, Monday to Friday:
- At the ophthalmology clinic: 418 682-7511 poste 4739

Evening, nights and weekends:
- Info-Santé: 811

At any time in case of complications, present yourself at the Emergency Room of Saint-Sacrement Hospital.
This guide makes recommendations in accordance with the scientific information available at the time of its publication, i.e. May 15th 2013. However, these recommendations are in no way a substitute for the judgment of a clinician. If you have any questions, we invite you to contact your healthcare professional. If in one way or another you misuse the information contained in this document, the CHU de Québec cannot be held responsible for any damages of any kind in this regard.

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