For the Patient: GIA
Other Names: Palliative chemotherapy for cancer of the liver (hepatoma) using Doxorubicin

GI = GastroIntestinal
A = ADRIAMYCIN® (also known as doxorubicin)

ABOUT THIS MEDICATION
What is this drug used for?
• Doxorubicin is a drug given to treat cancer of the liver (also known as “hepatoma”). It is given directly into the vein, or intravenously (IV).

How does this drug work?
• Doxorubicin works by interfering with dividing cells and preventing an increase in the number of cancer cells.

INTENDED BENEFITS
• This therapy is being given to destroy and/or limit the growth of cancer cells in your body. This treatment may improve your current symptoms, and delay the onset of new symptoms.
• It may take several treatments before your doctor can judge whether or not this treatment is helping.

TREATMENT SUMMARY
How is this drug given?
• You will receive one intravenous (IV) chemotherapy drug called doxorubicin. It is a liquid and appears naturally as the colour red. It will be given to you at the clinic by a chemotherapy nurse. Each treatment will take about 20 minutes. Your first treatment will probably take longer, as the nurse will review information on the chemotherapy drug with you.
• The treatment is followed by a 20 day rest period. This 3 week or 21-day period of time is called a “cycle”. The cycle may be repeated up to 3 or even 6 cycles, but may be changed depending on how the chemotherapy affects you.

The calendar below outlines how your medication is given each 3 week cycle.

<table>
<thead>
<tr>
<th>CYCLE</th>
<th>DATE</th>
<th>TREATMENT PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Week 1</td>
<td>Doxorubicin IV x 1 day</td>
</tr>
<tr>
<td></td>
<td>Week 2</td>
<td>No Treatment</td>
</tr>
<tr>
<td></td>
<td>Week 3</td>
<td>No Treatment</td>
</tr>
</tbody>
</table>
TREATMENT PLAN

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<tr>
<th>CYCLE</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>Week 1</td>
<td>Doxorubicin IV x 1 day</td>
</tr>
<tr>
<td></td>
<td>Week 2</td>
<td>No Treatment</td>
</tr>
<tr>
<td></td>
<td>Week 3</td>
<td>No Treatment</td>
</tr>
</tbody>
</table>

Treatment is continued for a maximum of 6 cycles, as long as you are benefitting from treatment and not having too many side effects.

What will happen when I get my drugs?
- A blood test is done each cycle, on or before the first day of each treatment cycle. The dose and timing of your chemotherapy may be changed based on your blood counts and/or other side effects.

SIDE EFFECTS AND WHAT TO DO ABOUT THEM

Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly important for you to be aware of as they are directly related to the common actions of the drug in your treatment plan.

Your doctor will review the risks of treatment and possible side effects with you before starting treatment. The chemotherapy nurse will review possible side effects of the drug and how to manage those side effects with you on the day you receive your first treatment.

<table>
<thead>
<tr>
<th>SERIOUS SIDE EFFECTS DURING TREATMENT</th>
<th>MANAGEMENT</th>
</tr>
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</table>
| Your **white blood cells** will decrease 7 – 10 days after your treatment. They usually return to normal 3 weeks after your last treatment. White blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, **you are at greater risk of having an infection**. | To help prevent infection:  
- Wash your hands often and always after using the bathroom.  
- Take care of your skin and mouth  
- Avoid crowds and people who are sick.  
- Call your doctor **immediately** at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, or burning when you pass urine. |
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</table>
| Your platelets may decrease during or after your treatment. They will return to normal after your last treatment. Platelets help to make your blood clot when you hurt yourself. **You may bruise or bleed more easily than usual.** | To help prevent bleeding problems:  
• Try not to bruise, cut, or burn yourself.  
• Clean your nose by blowing gently. Do not pick your nose.  
• Avoid constipation.  
• Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene.  
Some medications such as ASA (e.g. ASPIRIN®) or ibuprofen (e.g. ADVIL®) may increase your risk of bleeding.  
• Do not stop taking any medication that has been prescribed by your doctor (e.g. **ASA for your heart**).  
For minor pain, try acetaminophen (e.g. TYLENOL®) first, but occasional use of ibuprofen may be acceptable. |
| **Doxorubicin burns** if it leaks under the skin. | Tell your nurse or doctor **immediately** if you feel burning, stinging, or any other changes while the drug is being given. |
| **Nausea and vomiting** may occur after your treatment and may last for 24 hours. | You will be given a prescription for an antinausea drug(s) to take before your chemotherapy treatment and/or at home. **It is easier to prevent nausea than treat it once it has occurred**, so follow directions closely.  
• Drink plenty of liquids.  
• Eat and drink often in small amounts.  
Try the ideas in the **Practical Tips to Help Manage Nausea** |
| **Diarrhea** may occur. | To help diarrhea:  
• Drink plenty of liquids.  
• Eat and drink often in small amounts  
• Avoid high fibre foods as outlined in **Food Ideas to Help Manage Diarrhea** |
### OTHER SIDE EFFECTS DURING TREATMENT

<table>
<thead>
<tr>
<th>Pain or tenderness</th>
<th>May occur where the needle was placed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your urine may be pink or reddish</td>
<td>For 1-2 days after your treatment.</td>
</tr>
<tr>
<td>Sore mouth</td>
<td>May occur a few days after treatment. Mouth sores can occur on the tongue, the sides of the mouth or in the throat. Mouth sores or bleeding gums can lead to an infection.</td>
</tr>
<tr>
<td>Hair loss is common</td>
<td>And may begin within a few days or weeks of treatment. Your hair may thin or you may become totally bald. Your scalp may feel tender. You may lose hair on your face and body. Your hair will grow back once your treatments are over and sometimes between treatments. Colour and texture may change.</td>
</tr>
<tr>
<td>Your skin may darken</td>
<td>In some areas such as your nails, soles or palms.</td>
</tr>
<tr>
<td>Loss of appetite and weight loss</td>
<td>Are common and may persist long after discontinuation of doxorubicin.</td>
</tr>
</tbody>
</table>

### MANAGEMENT

<table>
<thead>
<tr>
<th>Pain or tenderness</th>
<th>Apply cool compresses or soak in cool water for 15 – 20 minutes several times a day.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your urine may be pink or reddish</td>
<td>This is expected as doxorubicin is red and is passed in your urine.</td>
</tr>
<tr>
<td>Sore mouth</td>
<td>• Brush your teeth gently after eating and at bedtime with a very soft toothbrush. If your gums bleed, use gauze instead of a brush. Use baking soda instead of toothpaste. • Make a mouthwash with ½ teaspoon baking soda or salt in 1 cup warm water and rinse several times a day. • Try soft, bland foods like puddings, milkshakes and cream soups. • Avoid spicy, crunchy or acidic food, and very hot or cold foods. • Try ideas in Food Ideas to Try with a Sore Mouth*.</td>
</tr>
<tr>
<td>Hair loss is common</td>
<td>Refer to For the Patient: Hair Loss Due to Chemotherapy.* You may also want to: • Apply mineral oil to your scalp to reduce itching. • If you lose your eyelashes and eyebrows, protect your eyes from dust and grit with a broad-rimmed hat and glasses.</td>
</tr>
<tr>
<td>Your skin may darken</td>
<td>This will slowly return to normal once you stop treatment with doxorubicin.</td>
</tr>
<tr>
<td>Loss of appetite and weight loss</td>
<td>Try the ideas in Food Ideas to Help with Decreased Appetite.*</td>
</tr>
</tbody>
</table>

*Please ask your chemotherapy nurse, pharmacist, or dietician for a copy

### INSTRUCTIONS FOR THE PATIENT

- Tell your doctor if you have ever had an unusual or allergic reaction to doxorubicin, daunorubicin, epirubicin, idarubicin, mitomycin or mitoxantrone before treatment begins.
- The drinking of alcohol (in small amounts) does not appear to affect the safety or usefulness of doxorubicin.
- Doxorubicin may cause sterility in men and menopause in women. If you plan to have children, discuss this with your doctor before being treated with doxorubicin.
- Doxorubicin may damage sperm and may harm the baby if used during pregnancy. It is best to use birth control while being treated with doxorubicin. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- Tell doctors, dentists, and other health professionals that you are being treated with doxorubicin before you receive any treatment from them.
Medication Interactions

Other drugs such as digoxin (LANOXIN®) and cyclosporine (NEORAL®, SANDIMMUNE®) may interact with doxorubicin. Tell your doctor if you are taking either of these or any other drugs as you may need extra blood tests or your dose may need to be changed.

Check with your doctor or pharmacist before you start taking any new drugs.

THE FOLLOWING INFORMATION IS VERY IMPORTANT

SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of heart problems such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty breathing, swelling of ankles or fainting.
- Signs of an infection such as fever (over 100°F or 38°C by an oral thermometer); chills; cough; pain or burning when you pass urine.
- Signs of bleeding problems such as black, tarry stools; blood in urine or stools; pinpoint red spots on skin, extensive bruising.
- Signs of an allergic reaction (rare) soon after a treatment including dizziness, fast heart beat, face swelling or breathing problems.

SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Severe skin reaction where you have had radiation.
- Signs of gout such as joint pain.
- Changes in eyesight.
- Skin rash or itching.

CHECK WITH YOUR DOCTOR IF ANY OF THE FOLLOWING CONTINUE OR BOTHER YOU:

- Uncontrolled nausea, vomiting or diarrhea.
- Easy bruising or minor bleeding.
- Redness, swelling, pain or sores where the needle was placed.
- Redness, swelling, pain or sores on your lips, tongue, mouth or throat.

If you experience symptoms or changes in your body that have not been described above but worry you, or if any symptoms are severe, contact:__________________________at telephone number:_________________