

## Patient information leaflet for CHOP± R (Rituximab)

It is a chemotherapy regimen (protocol) which is used for the treatment of many types of non hodgkins lymphoma (NHL). The regimen is named after the drug initials such as cyclophosphamide, doxorubicin, (hydroxydaunomycin), vincristine (oncovin) and prednisolone (a steroid) .For some patients Rituximab (R) may be added which is an immunotherapy or targeted agent (anti CD 20 molecule). The above regimen must be taken under the supervision of a doctor who is experienced in giving chemotherapy medications for cancer.

### Before Using It

Inform of any medical illness such as diabetes, hypertension, heart disorder, liver disorder, congestive heart failure, tingling in hands and feet, heart disease, low blood counts and platelets, pregnancy, breast feeding and **drug allergy**. The above information will be useful to adjust the dose of your medicine.

*Please use some kind of birth control while you are on chemotherapy.*

*Please avoid using any ayurvedic or homeopathic preparation while on chemotherapy.*

### While Taking it.

Chemotherapy drugs may interact with a number of drugs and supplements, which may either raise or lower these drugs in your blood. Tell your doctor if you are taking any of the following:

- **Multivitamin preparation ( Folic Acid)**
- Anti seizure drug (phenytoin, phenobarbitone)
- Digoxin and amlodipine
- Warfarin
- Grape fruit or grape fruit juice

### How is it administered?

CHOP treatment can usually be given to you as a day care patient. Before you start treatment you'll need to have a blood test, either on the same day or a few days beforehand. All drugs are administered through a vein (via cannula, central line, PICC, port) on the first day except tablet prednisolone which is taken as 100 mg once per day for five days starting on the day you receive injectable chemotherapy. The above regimen is repeated every 21 days. Vincristine is given by intravenous push whereas doxorubicin and cyclophosphamide are given as intravenous infusion over ½ to 1 hours. If you are taking a drug called rituximab along with CHOP then rituximab can be administered over 4 hours (first infusion) to as less as 60 – 90 minutes over subsequent infusion. You will be given tablet paracetamol 500 mg along with Inj. Avil 25 mg ½ an hour before starting rituximab to reduce allergic reaction due to the drug. Usually 6–8 cycles are given over a period of 3–4 months.

## Possible side effects

You will probably not have most of the following side effects, but if you have any, talk to your doctor or nurse. They can help you understand the side effects and cope with them. Each person's reaction to chemotherapy is different. Some people have very few side effects while others may experience more. Below are listed the common side effects due to the drugs administered under this regimen.

### COMMON SIDE EFFECTS: (> 10%)

- **Allergic reactions and infusion reactions:** These are mainly during first infusion of rituximab but can be due to any chemotherapy drug and at any time of therapy. Rituximab can cause a variety of allergic reactions (rashes, swelling, coughing, wheezing etc), or flu-like symptoms and even drop in blood pressure. For this reason, the patient is watched closely while receiving this drug and even 1- 2 hours after completing the infusion for the first time. If during infusion you feel these symptoms then instruct your nurse to slow down the drip rate or even stop the infusion temporarily for some time.
- **Low WBC & RBC count and risk of infection** (The lowest WBC count will occur around 10 – 14 days after chemotherapy). If your age is more than 60 years and you are sick with advanced cancer then chances of suffering from infection during low wbc count is high. Please refer to the patient leaflet for febrile neutropenia in case if fever is there.
- **Low platelet count** leading to bruises, bluish patches over body and any ear, nose or gum bleed. Please contact your doctor/nurse/hospital as you may need platelet transfusion for these complaints.
- **Nausea and vomiting.** You will be given a prescription for drug(s) to take after your chemotherapy treatment and/or at home, as it is easier to prevent nausea than to treat it. Tablet dexamethasone 4 mg twice per day along with Tablet domperidone 10 mg thrice per day for three days after chemotherapy.
- **Constipation.** Vincristine and some anti-sickness drugs can cause constipation and tummy (abdominal) pain. Drinking plenty of fluids, eating more fibre and doing some exercise may also help. If you still have constipation you can start syrup cremaffin 4- 6 table spoon at night or a maximum of three times per day to relieve it. Do not strain during defecation while on chemotherapy.
- **Hair loss.** This usually starts 3–4 weeks after starting treatment, although it may occur earlier. Hair usually falls out completely. You may also have thinning and loss of eyelashes, eyebrows and other body hair. This is temporary and your hair will start to grow again once the treatment has finished.
- **Soreness of mouth and ulcers in mouth**
- **Loss of taste and appetite**
- **Urinary tract side effects:** Cyclophosphamide may irritate your urinary bladder. Drink as much as fluids 12 hrs before to 24 hrs after receiving cyclophosphamide. Also doxorubicin may cause reddish pink discoloration of your urine for 24 – 48 hours after injection which is absolutely harmless.
- **Neuropathy:** Vincristine may cause tingling and numbness of hands and feet's or in some cases weakness of hands and feet's. Inform your nurse/doctor if you develop any of these symptoms before receiving your next dose of vincristine.
- **Raised blood sugar & BP due to steroids:** Prednisolone can cause abnormal sugars mainly in patients who have poorly controlled diabetes. You have to monitor your sugar and BP while on steroids.

## LESS COMMON SIDE EFFECTS: (1-10%)

- Fluid retention
- Skin changes and nail changes
- Behavioral changes and mood changes
- Doxorubicin can cause weakness of heart ( Cardiomyopathy) which is rare ( 1 – 2 %).This is usually a late side effects which can be seen few months or years after receiving doxorubicin.
- Impaired fertility
- Irregular periods and temporary or permanent cessation of menstrual periods.
- Redness or soreness at the injection site due to leakage of the chemotherapy drug out of the vein.

## **Brands available in hospital**

DRUG:

Cyclophosphamide

Doxorubicin

Vincristine

Prednisolone tablet

Rituximab