Radioactive phosphorus (P-32) treatment

You have been referred by your haematology doctor for treatment of your blood condition (polycythaemia vera or essential thrombocythaemia) using phosphorus 32 (P-32). This is an effective treatment for both of these blood conditions.

This leaflet will describe the treatment, possible side effects, and the precautions that we would like you to follow after treatment.

What is P-32?

P-32 treatment is a radio-isotope, which is used for this treatment. It attaches to the bone marrow and reduces the number of blood cells produced.

When is P-32 used?

P-32 is an excellent treatment to control your disease when venesection or medication are no longer an alternative. P-32 will slow down the rate at which your bone marrow produces new blood cells. The benefit of treatment can last for up to two years, or sometimes longer, and can be repeated at the request of your consultant.

How is P-32 given?

You will need to attend the Bristol Haematology and Oncology Centre (BHOC), where you will be seen by a consultant oncologist. They will discuss this treatment with you and ask for your consent for the treatment. This is usually done at a separate appointment, before a date is arranged for treatment, but it can also be done at the treatment visit, particularly if you have been treated before. Treatment will be given in the isotope unit, where radiographers will begin by taking a sample of your blood. This will enable your haematologist to assess how successful the treatment has been at a later date.

P-32 is given by an injection directly into the vein. Treatment should only take approximately 30 minutes. Follow-up appointments will be with your consultant haematologist.
What are the side effects of P-32?

Immediate side effects are very uncommon. Patients treated with P-32 have a slightly higher risk of developing leukaemia compared to those who are untreated. It is not certain whether this is as a result of receiving P-32, or as a part of the natural course of the disease. We advise you to drink plenty of fluids for 48 hours after treatment is given.

Are there any radiation protection restrictions?

P-32 is absorbed into the bone marrow, and emits radiation locally as it decays. The radiation leaves your body mainly through urine, so there are some precautions we would like you to observe following treatment:

- please do not have blood taken for two weeks after treatment, unless this is needed urgently
- for 48 hours following treatment, men should sit down to urinate rather than standing
- please flush the toilet twice after use for the rest of the day, and always wash your hands well afterwards
- if you use pads or have a catheter bag, radiographers will discuss how to manage and dispose of these at home
- please do not bring a friend or relative who is pregnant, or a young child, to your treatment visit. You should limit contact with pregnant women or young children for 24 hours after treatment.

If you have any questions about the treatment, or would like any further information, please telephone the isotope unit on 0117 342 2694. If no-one is available, please leave a message and we will return your call.

If you have an urgent query out of normal office hours, please ring the acute oncology unit on 0117 342 2428.