

## BLOOD DISORDERS AND DIAGNOSTIC METHODS

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### **What is clinical haematology ?**

Clinical haematology is the area of medical practice dealing with blood associated disorders. Some of these are blood cancers while there are so many other disorders associated with blood which does not come under the cancer category. In the UK physicians only after getting the membership of Royal College of Physicians (MRCP) get special training related to treating and diagnosing blood disorders and become specialists in the area. Some of them get sub specialized to treat blood cancers. That specialty is called Haemato-Oncology. They treat blood cancers which include leukemia, lymphoma and myeloma with various types of chemotherapy and bone marrow transplants (BMT). There is a variety of practices throughout the world and may be it is little different in Sri Lanka. However this is an area needing expertise of Clinical Haematologists, Medical and Clinical Oncologists, Physicians and Pathologists. Hence, it is a multi-disciplinary area which requires expertise input from various members of the team.

### **What do blood disorders mean?**

Blood disorders are any disease related to blood, bone marrow and lymph nodes. Broadly, Haematologists subspecialist to treat blood

disorders. For instance, haematostasis thrombosis management, which is related to blood clotting and bleeding. Then, transfusion medicine, is considering blood transfusions management. Furthermore, in haematology, we treat disorders related to noncancerous blood diseases like thalassemia, sickle cell disease and some people get anaemia.

### **What are the diagnostic methods?**

Treatment is depending on the disease which patient has got. If the patient has blood cancer the ways used to diagnose could be bone marrow biopsies, blood pictures and there are advanced techniques looking at cell surface and also genetic changes in genes. Whereas a patient has non-cancerous blood disorder methods used to diagnose are different. There are biochemical tests like checking serum vitamins levels and haemoglobin electrophoresis for thalassemia, so the diagnostic method depends on the patients' problems.

### **What is blood cancer?**

There are hundreds of types of blood cancers. But, broadly you can divide blood cancers into **leukemia**, that is the most common according to what you have heard, and then there is **lymphoma**.

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Some may call it lymph node cancer. Third type is **myeloma**, can be called multiple myeloma or plasma cell myeloma. Under each category, **leukemia, lymphoma** and **myeloma** there are different types of cancers.

### **How do you get blood cancers?**

Like many other cancers, cause of blood cancer is not known in many instances. In majority of patients, we don't know why they got cancer. In minority or in a few patients we know that blood cancers can be familial or can come from genes. In some cases' blood cancers can be related to certain medications (drugs) or other types of treatments patient have had like radiotherapy. Some blood cancers are associated with infections, particularly viral infections. In some occasions where people are exposed to radiations, this can be caused. In majority of cases we don't know why a patient gets a blood cancer.

### **Can you treat or cure blood cancers?**

Yes, all the blood cancers are treatable, and some of the blood cancers are curable. There is a difference between treatable and curable. When we say treatable, diabetes is treatable, but rarely curable. High blood pressure is also treatable but not curable. If you don't treat, that will lead to problems.

Similarly, some blood cancers are treated to keep it under control while others are treated with the aim to cure. Some types of blood cancers do not need treatment but need only monitoring. It all depends on the type of blood cancer as well as the patient's age, other diseases they have and individual wishes. It is a scientific subject, however there is an art in it; how you diagnose, select patients for treatment and how to look after them during and after treatment needs lot of commitment.