LEUKAEMIA

Definition:- It is a group of malignant disorder, affecting the blood and blood-forming tissue of the bone marrow lymph system and spleen. The word Leukaemia comes from the Greek leukos which means "white" and aima which means "blood".

The stem cells are committed to produce specific types of blood cells. Lymphoid stem cells produce either T or B lymphocytes. Myeloid stem cells differentiate into three broad cell types: RBCs, WBCs, and platelets.

Function of the bone marrow:- The bone marrow is found in the inside of bones. The marrow in the large bones of adults produces blood cells. Approximately 4% of our total body weight consists of bone marrow.

There are two types of bone marrow:-
1. Red marrow, made up mainly of myeloid tissue.
2. Yellow marrow, made up mostly of fat cells.

Red marrow can be found in the flat bones, such as the breast bone, skull, vertebrae, shoulder blades, hip bone and ribs. Red marrow can also be found at the ends of long bones, such as the humerus and femur.

White blood cells (lymphocytes), red blood cells and platelets are produced in the red marrow. Red blood cells carry oxygen, white blood cells fight diseases. Platelets are essential for blood clotting.

Yellow marrow can be found in the inside of the middle section of long bones.

White blood cells, which help the body to fight infection.
Red blood cells, which carry oxygen to all parts of the body.
Platelets, which help in blood clot.

If a person loses a lot of blood the body can convert yellow marrow to red marrow in order to raise blood cell production.

Etiology:-
1. Combination of predisposing factors including genetic and environmental influences.
2. Chronic exposure to chemical such as benzene.
3. Cytotoxic therapy of breast, lung and testicular cancer.

Congenital anomaly:- The presence of primary immunodeficiency and infection with the human T-cell leukemia virus type-1

The lack of control causes:- normal bone marrow to be replaced by immature and undifferentiated leukocytes or blast cells, abnormal immature leukocytes then circulates in the blood and infiltrate the blood forming organs (liver, spleen, lymph nodes) and other sites throughout the body.

Different types of leukaemia:- It may be acute or chronic. Acute leukaemia gets worse very fast and may make feel sick right away. Chronic leukaemia gets worse slowly and may not cause symptoms for years.

Lymphocytic and Myelogenous Leukaemias are also subdivided into the type of affected blood cell. If the cancerous transformation occurs in the type of marrow that makes lymphocytes, the disease is called lymphocytic leukaemia.

If the cancerous change occurs in the type of marrow cells that produce red blood cells, other types of white cells, and platelets, the disease is called myelogenous leukaemia.

- Dr. Suhas V. Agre
M.D. (Medicine)
Dental Health And Cancer Treatment

Dental and oral health refers to the well-being of the entire mouth, which includes the teeth, gums, mucosa (lining of the mouth) and salivary glands. Cancer or not, many people tend to overlook dental health, but it is a critical component of overall health. Dental health is key for a person’s general health. Without good oral health, many times the rest of the body can be at risk due to the vast amount of bacteria living in the mouth, which can create problems. Oral health has been linked to a variety of health conditions, such as diabetes and heart disease. As a result, the World Health Organization has integrated oral health into its efforts to prevent chronic diseases.

Cancer Treatment and oral health:

When most people think about the side effects of cancer treatment, they conjure images of nausea and hair loss—but there are a variety of other common side effects, including oral complications such as mouth sores (mucositis) and dry mouth (xerostomia). These seemingly small complications can have serious consequences because they can interfere with planned cancer treatment, reduce quality of life and even lead to life-threatening infections. Several types of cancer treatments are associated with oral side effects, including chemotherapy, bone marrow transplantation and radiation to the head and neck. These treatments can slow or stop the growth of new cells, limiting the ability of oral tissue to repair itself. What’s more, some cancer treatments can upset the healthy balance of bacteria in the mouth, which can lead to mouth sores, infections and tooth decay. Finally, radiation to the head and neck can directly damage and break down oral tissue, salivary glands and bone.

Preparing for treatment:

Sometimes oral complications are inevitable, but a little preparation goes a long way toward minimizing their effects. One must pay a visit to the dentist prior to beginning cancer treatment, if possible. Make sure you are in good oral health prior to starting cancer treatment because it will be easier to maintain. Because the environment of the mouth changes during cancer treatment, an increased risk of cavity growth is possible in people who have neglected their teeth. Ideally, patients should undergo a comprehensive oral evaluation one month before beginning cancer treatment. This allows for adequate recovery time in the event that invasive dental procedures are necessary. The pretreatment evaluation should include a thorough examination of the hard and soft tissues of the mouth. Many patients will come in prior to starting chemotherapy/radiation and have teeth extracted, cavities filled and gum health checked. This is important because once treatment starts, the immune system is depressed and the body is at higher risk of infection and other complications. Just as cancer treatment can affect oral health, oral health can affect cancer treatment. Even some oral health problems can interfere with a patient’s ability to begin treatment. For example, some may need to have infected teeth extracted and then allow ample time for the socket to heal before they could begin there cancer treatment.

Maintaining dental health before, during and after treatment:

Dental health is important all of the time but especially during cancer treatment. Patients need to do the following:

- Ask your Dentist about fluoride application before starting chemotherapy/radiotherapy it may help in preventing tooth decay.
- Brush teeth; use a soft toothbrush if required.
- Use Floss or Water Floss to maintain interdental space clean. Don't use normal floss if it causes bleeding when your platelet count is low; you can use water floss in such cases. (available online on websites like amazon)
- Scrape the tongue (don't use metal tongue cleaners)
- Avoid commercial mouthwashes because they may contain alcohol which may irritate your mouth. If your doctor has prescribed both an alcohol free antibacterial mouthwash and an antifungal lozenge (nystatin), do not take them together because they will not work as well. Separate them by at least one hour.
- A lot of the issues that arise during treatment are the result of a dry mouth. Artificial saliva (Saleva mouthwash) can be tried and is available in most pharmacies. Drinking water or juice frequently may also help. You may find that chewing sugarless gum or sucking on sugarless candy is helpful. Coating your lips with a lip balm such as Vaseline or Chapstick will help prevent them from cracking.
- Wear dentures only for meals.
- Stay hydrated.
- Eat a healthy diet low in sugar and carbohydrates.
- Taste changes during the first six months following radiation therapy are common. You may find a decrease in taste and an altered taste sensation. These changes may result in a decrease in appetite. It may help to: Try different foods, add various herbs and mild spices. Add more liquid food supplements to increase caloric intake until your appetite returns. If possible visit a Dietician for more suggestions regarding the diet.
- After consulting your Oncologist or Dentist, you may also apply a topical anaesthetic gel on ulcers, especially before meals to prevent discomfort when eating.

Cont...on Pg 3
• While on chemotherapy, it is important not to take any painkillers, aspirin or other medicines without asking the oncologist since they may cause bleeding problems.
• Do not smoke cigarettes, cigars, pipes, or chew tobacco and avoid drinking alcohol. These are all very irritating and drying to a sore mouth.

Should you undergo dental procedures during cancer treatment or wait?
That depends on the dental health issue, the type of cancer treatment and the advice of the treating oncologist. Often cancer treatment can compromise the immune system, and an invasive oral procedure could be risky in terms of infection. If dental treatment is absolutely necessary during cancer treatment, to reduce the risk of infection it is important to coordinate it between chemotherapy cycles and at a time when white blood cell counts are high.

Long-term dental health for cancer survivors:
Once cancer treatment is complete, it is important to continue staying on top of oral health, as cancer treatment can have long-term effects. High-dose radiation can result in a lifelong risk of dry mouth, cavities and even osteonecrosis of the jaw, which is a severe bone disease that occurs when the jawbone is exposed and begins to starve from lack of blood. Because of this risk, this subset of patients should avoid invasive surgical procedures, including extractions that involve irradiated bone. There may definitely be a long-term impact. Typically, there are changes in the mouth, especially if someone has undergone radiation to the head and neck. This can cause dry mouth and more susceptibility to cavities. Ultimately, cancer survivors may need to pay closer attention to their oral health and schedule more-frequent visits to the dentist. It is worth it because good oral care before, during and after treatment can prevent or reduce the incidence and the severity of oral complications, which can enhance survival and quality of life.

New drug shows promise in halting spread of brain cancer
Scientists have developed a novel drug that could block glioblastoma -- the deadliest form of brain cancer -- from spreading. The tissues in our bodies are largely made of fluid. It moves around cells and is essential to normal body function. But in some cases, this fluid may be doing more harm than good.
In people who have glioblastoma, this fluid has a much higher pressure, causing it to move fast and forcing cancer cells to spread.
The AMD3100 drug, which has already been used in clinics, was found effective in stopping the inevitable cancer cell spread, the researchers said.

GM plant removes cancer-linked pollutants
Modified houseplant can remove benzene and chloroform from air in homes
Scientists have genetically modified a common houseplant to remove cancer-causing pollutants from our homes. While a variety of air filters in our homes can keep allergens and dust particles at bay, some hazardous compounds are too small to be trapped in these filters. Small molecules like chloroform, which is present in small amounts in chlorinated water, or benzene, which is a component of gasoline, build up in our homes when we shower or boil water, or when we store cars or lawn mowers in attached garages.
Both benzene and chloroform exposure have been linked to cancer.
Researchers at the University of Washington in the US have genetically modified a common houseplant pothos ivy to remove chloroform and benzene from the air around it.
The modified plants express a protein, called 2E1, that transforms these compounds into molecules that the plants can then use to support their own growth, according to the study published in the journal Environmental Science & Technology.
"People haven't really been talking about these hazardous organic compounds in homes, and I think that's because we couldn't do anything about them," said Stuart Strand, a research professor at University of Washington.
"Now we've engineered houseplants to remove these pollutants for us," said Strand.
The team decided to use a protein called cytochrome P450 2E1, or 2E1 for short, which is present in all mammals, including humans. In our bodies, 2E1 turns benzene into a chemical called phenol and chloroform into carbon dioxide and chloride ions.
However, 2E1 is located in our livers and is turned on when we drink alcohol. So it's not available to help us process pollutants in our air.
The researchers made a synthetic version of the gene that serves as instructions for making the rabbit form of 2E1. Then they introduced it into pothos ivy so that each cell in the plant expressed the protein.
Plants in the home would also need to be inside an enclosure with something to move air past their leaves, like a fan, Strand said.

Mumbai Mirror - December 27, 2018

Hindustan Times - November 20, 2018
Cancer Aid & Research Foundation (CARF) has been conferred with many Awards and recognitions for its wonderful work towards the poor and needy cancer patients. Receiving honour for the support and help we provide for the poor and needy cancer patients is the perfect motivation to us and it helps us to do more for the needful.

CARF has received many such Awards in the past for the good works for the cancer patients.
It was a proud moment for CARF, when Mr. Shamshi Mulla, Chairman of CARF was honoured by Bhartiya Janatha Party, South Mumbai, OBC Morcha at Byculla, Mumbai on 7th October, 2018 in the hands of Shri. Vijay Chaudhari, Chairman of OBC morcha, Maharashtra region. The function was attended by many dignitaries including Shri. Ashish Shellar, President, Aamdar, Shri. Madhu Chauhan, Spokes person BJP, Shri. Siddharth Gamre, District President- South Mumbai and Shrmati. Surekha Lokhande, Nagar Sevika. Special thanks to Mr. Rohidas Lokhande, Vice President, OBC Morcha for organising such a successful program and honouring CARF for its good work.

Similarly on 30th November 2018 The Economic for Health and Education growth presented our Chairman with an Award to mark the outstanding work for the poor and needy cancer patients. Chairman was honoured for the tremendous help and support he provides to the poor and needy cancer patients in our society. He is a true leader and his work gives motivation to everyone to work more for the downtrodden people in our society. We wish our beloved Chairman many more Awards and a wonderful journey ahead.

My Name is Supriya and I wish to share the troublesome time we had during the treatment phase of my mother. My mother, Mrs. Kalpana Patkar is 59 years old and she is a house wife. In the year 2015, she was regularly having itching on her breasts and it was unbearable after sometime. Within few weeks of home remedies for itching her nipples also got inverted. This resulted in contacting the family doctor who suggested Biopsy and mammography to be done. The reports confirmed that she was suffering from Breast Cancer. Doctors suggested her 6 cycles of chemotherapy and other medical cares. Our family is not too financially sound so the treatment cost for cancer was too much for us. That is when we were suggested to approach CARF for help and from the moment we have visited CARF, we have received all possible support financially, medically and also counseling during the treatment phase. My mother is completely fine and she is taking homeopathic medications for her full recovery. We thank CARF for its continuous support for us and till now after 4 years we still receive call from CARF confirming her health status.

Mrs. Supriya, Daughter of Kalpana Patkar

Mrs. Wardha S. Nadiadwala 6th July
Mrs. Geeta Gawali 20th July
Mr. Anup Jalota 27th July
Mr. Bhaskar Jadhav 1st Aug.
Prof. Dr. Rehan Kazi 24th Aug.
Mr. Mahesh Bhatt 20th Sept.
Justice (Retd.) Shafi S Parkar 1st Oct.
Mr. Khan Mohammed Arif Nasim 21st Oct.
Mrs. Savita Nathani 2nd Nov.
Mr. Usman Kazi 6th Nov.
Dr.(Mrs.) Irfana Rehan Kazi 24th Nov.
On 30th July 2018, a simple craft idea of making ‘Do it yourself Night lamp’ was held at Buculla municipal school building for cancer patients. More than 10 cancer patients attended the rehabilitation activity. Mr. Pravin Parmar explained in detail about the making of night lamp with ice cream sticks and other stationary. Everyone participated in the activity and understood the idea of making the night lamp. Mr. Vasudev Rawal did overall monitoring of the activity. Rehabilitation is one of the reasons to allow cancer patients to be motivated and get back to the society.

Independence Day is celebrated throughout India with full vigour and enthusiasm. Independence Day marks the sacrifice of all the freedom fighters who sacrificed for our nation in bringing the independence on 15th August 1947. Every year, CARF celebrates Independence Day by organising various activities. This year CARF participated by asking all CARFIANS to wear dresses in Indian flag colour and traditional wear. Everyone participated in the activity and the colourful dresses portrayed the colourfulness in everyone's life because of the independence.

CARF Drive is an awareness drive organised by CARF to make general people aware about the ill effects of smoking. CARF drive was organised on 29th August at Gulati petrol pump in association with Indian oil. Students from Jai hind college participated in the drive as volunteers and supported the activity. The drive created awareness among the general public as the volunteers and CARFIANS placed stickers of ‘Quit Smoking’ and ‘Keep Smiling’ on vehicles and stay ‘United Against Cancer’. CARF is thankful to Indian oil and the volunteers for supporting this noble cause of awareness for cancer patients.

Doctor's Talk -
Dr. Marita Monteiro Singh

Doctor's talk is conducted regularly for cancer patients and their relatives. On 31st August, 2018 a doctor's talk was conducted by Dr. Marita Monteiro Singh. The topic for the session was Overview on the precaution of cancer and understanding about cancer. She explained about the care to be taken to prevent cancer and necessary preventive measures to be taken during the treatment phase. She also explained the trouble a family goes through during the phase of cancer treatment. She gave an example of her family as her father passed away because of cancer. Mrs. Tabassum Khan, GM event management thanked her and the patients and relatives for participating in the session.

Every month a session is conducted by renowned doctors on various topics relating to cancer for the patients and their relatives. On 16th July 2018, such a session was conducted by Dr. Abhilasha Mishra at Buculla office. The topic of the session was 'Physiotherapy in cancer'. During the session it was explained in detail about the importance of physical therapy for cancer patients. The session began by welcoming Dr. Abhilasha by Mrs. Rashida Kazi, Chairperson Emeritus. Every patient and their relatives who participated in the session were really happy to understand the importance of physical therapy and also thanked the doctor for the hints and tips during the treatment. Overall, CARF is thankful to Dr. Abhilasha for conducting such a session.

Doctor's Lecture on Physiotherapy in Cancer
by Dr. Abhilasha Mishra
Children's Day is celebrated in India every year with great enthusiasm on 14th of November. It is celebrated with the kids with great passion and excitement. On this occasion, CARF organised a get-together for kids suffering from cancer at the Byculla office. A drawing competition was organised for the kids and winners were chosen in 3 categories. The main purpose was to motivate these kids and make them happy. The program commenced at 11 am with light entertainment program followed by lunch to all the children. CARF is really happy to see the smile on the faces of these young kids affected by cancer.

"Old News bring Good News"

Let us bring happiness in the life of cancer patients

This scheme was conceived and designed by CARF in a very informal way through the collection of old News Papers, Magazines, Bottles, Toys and other stuff as a part of local resource mobilization from the well wishers and friends of CARF.

Today, the number of contacts has grown enormously and it is no more restricted to friends and well wishers. Rather, we are directly reaching new individuals, groups and organisations for their support.

As a result, today, we have many ‘Friends of Cancer patients’ contributing generously towards the cause of cancer and other difficult circumstances. The donors include households, apartments, corporate sectors, commercial undertakings, hotels, social clubs etc. Everyone wants to be involved in social cause, some get involved financially and others through different mediums like donation in kind. Newspaper donation is a major impactful way of donation for a cause as the impact of financial donation and donation in kind is the same.

To be part of the bigger cause of cancer care and treatment, support the idea and donate old News Papers, Magazines, Bottles, Toys and other stuff. Once you have decided to donate, kindly contact our team to come and collect the items from your place. The concerned collection person will have our ID card for verification. Do share the scheme with all your friends and family so that together we can be united against cancer. Be part of this journey and support the noble cause.

Contact us on 022-23005000/7000 to donate News Paper

Food is not merely a material pleasure. Eating well gives a spectacular joy to life and contributes immensely to goodwill and happy companionship. It is of great importance to the morale. Every Human has the right to good food. World Food Day is celebrated every year around the globe on 16 October in recognition of the date of the establishing of the Food and Agriculture Organization of the United Nations in 1945. This day is celebrated widely by many other organisations to mark the importance of food and the human right to enjoy food daily in their life. With such a motive CARF organised a food distribution on 26th October for the poor and needy cancer patients staying at Sant Gadge Maharaj Dharamshala in Dadar. More than 350 Cancer patients were present and they were really happy with the food served and the noble gesture showed by CARF.

The rose is a symbol of love, care and concern. On September 22 every year, Rose Day is observed, for all the people all over the world who are battling cancer. On the occasion of World Rose Day, CARF organised a visit to the zoo for children affected by cancer. Cancer kids were taken to Veermata Jijabai Udyan popularly known as ‘Byculla Rani Baug’. The children had a wonderful time visiting the zoo and enjoying every minute of their visit. A sumptuous lunch was also provided to all. Overall, it was a day filled with learning, fun and enjoyment. CARF wishes everyone a Happy Rose Day.
CARF wishes all its readers and well wishers

Happy New Year 2019

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