Department of Radiation Oncology

The radiotherapy department at B.K.L.Walawalkar Hospital provides a complete cancer care under same roof with the state of art technology, providing a great relief to cancer patients of Konkan area.

Aims and vision:

To deliver state-of-the-art highest quality precision radiation oncology treatment services to all oncological patients.

Facilities available:

1. External Beam Radiotherapy

   I) IMRT- Intensity Modulated Radiation Therapy
   II) VMAT - Volumetric Modulated Arc Therapy
   III) IGRT - Image Guided Radiation Therapy
   IV) 3D CRT- Three - Dimensional Conformal Radiation Therapy

2. Brachytherapy

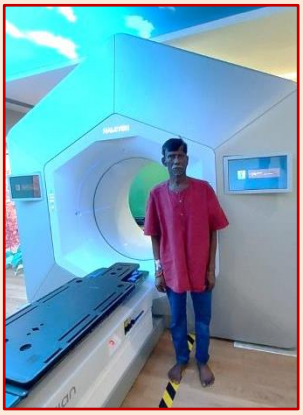
   I) ICRT – Intra cavitary Radiation Therapy
   II) ILRT - Intraluminal Radiation Therapy
   III) Interstitial Brachytherapy
   IV) Mould Brachytherapy

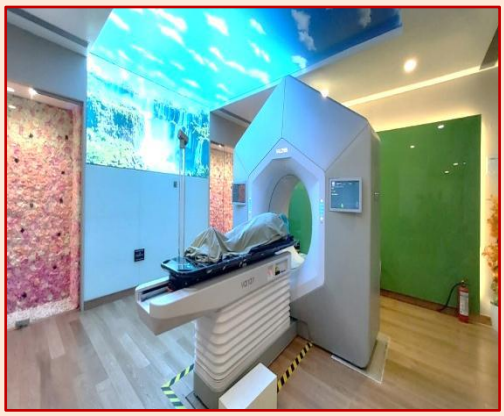
Radiotherapy department of B.K.L.Walawalkar Hospital have following facilities:

1. Linear Accelerator
2. Teletherapy
3. Brachytherapy
4. C.T Simulator

1. Linear Accelerator-Varian Halcyon

A medical linear accelerator (LINAC) customizes high energy x-rays or electrons to conform to a tumor's shape and destroy cancer cells while sparing surrounding normal tissue. It features several built-in safety measures to ensure that it will deliver the dose as prescribed and is routinely checked by a medical physicist to ensure it is working properly.





2. Tele-cobalt

Make and Model:-Bhabhatron-II
Radioisotope used: – CO-60
Type of radiations: – Gamma
Energy : – 1.25 MeV
Here the source is placed at a particular distance from the surface of the patient or from the centre of the tumour.(ie.isocentre).
Doubly encapsulated source of CO-60 (dimensions: 2cm dia, 3cm long) is placed inside the treatment of the unit, which is made up of tons of lead or depleted Uranium. During the treatment the source will come into the â€˜ONâ€™ position with the help of shutter mechanism, and after the treatment it will returns to the safe position.
It can be used for ALL TYPES OF CANCERS

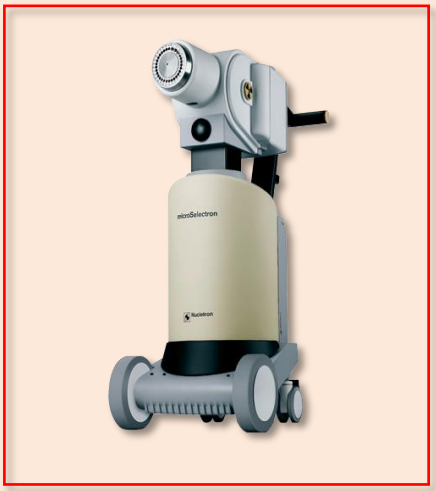
3. High Dose Rate Brachytherapy

Make and Model:- Nucletron Microselectron HDR remote after loader

Radioisotope used:- Ir-192

Type of radiations: – Beta

It is a procedure of placing radioactive material near or inside the diseased tissue as means to administer high doses of radiation. The primary advantage of internal radiation placed within the tumor is its



ability to deliver a high radiation dose to the tumour, while limiting the radiation that the normal tissue receives.

Here a single tiny source of size 1mmÃ—3mm is laser welded to the end of a thin flexible stainless steel cable. This source is housed in a device called remote after loader. The computer guided after loader directs the source through a â€˜transfer tubeâ€™ into the treatment catheter/applicator that has been placed in the patient by radiation Oncologist.

Types of Brachytherapy implants

Based on the location tumour extend and other factors, Radiation Oncologist will decide which type of implant the patient requires.

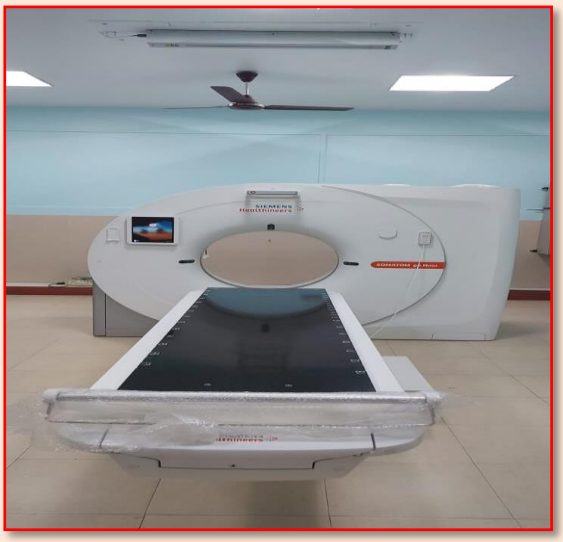
These are of three types.

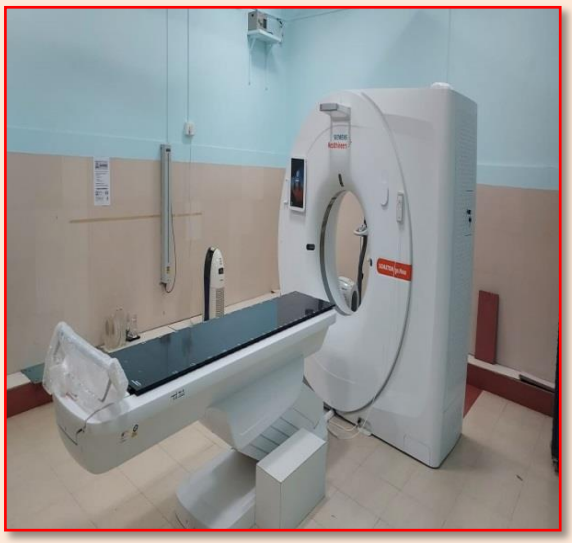
1. Intracavitary
Here the applicator is inserted in to a body cavity to reach the tumour. Local anaesthesia/conscious sedation is all that required.
Mainly used for GYNACOLOGICAL TUMOURS.

2. Intraluminal
Here the catheters are inserted in to a â€˜tubeâ€™ such as bronchus, oesophagus, or bile duct. Patient is treated as an outpatient basis.
Mainly used for LUNGS AND ESOPHAGIAL CANCERS.

3. Interstitial Implant
These are more complex procedure. The implants are done at the O.T with the patient under general anaesthesia. Interstitial catheters are inserted through the body tissue to encompass the tumour.
Mainly used for Breast, Prostate and Gynaecological Tumours

4. CT Simulator





Make and Model:-Siemens SOMATOM Spirit power

An X-ray machine called â€˜Simulatorâ€™ is used to plan radiotherapy treatment. It is called a simulator because it is like (simulates) a radiotherapy machine, but does not give the treatment. Simulation is a planning procedure used to determine the type of fields, energy of the beam, and angles of radiation beam.

With the help of C.T.simulator Konkan people will have proper treatment planning which they would get at TMH or other centres.

Mammography Unit

Department of Radiation Oncology facilities were inaugurated on 2008 in the presence of Dr. Anil Kakodkar Ex Chairmen A.E.R.B at B.K.L Walawalkar Hospital, Diagnostic and Research Centre started with Tele cobalt, Brachytherapy and CT Simulator. Subsequently, Linear Accelerator facilities were inaugurated on 10th October 2022 in the presence of Director Tata Memorial Centre, Mumbai Padmashree Dr. Rajendra Badwe

Faculty:

	**Dr. Shripad D. Banavali** Director (Academic), TMC MD (Med; Bom), BC (Ped; USA), BE (Hem-Onc; USA) Addl. Prof. & Cons. Hematologist-Oncologist Department of Medical Oncology Dr. Ernest Borges Road, Parel, Mumbai – 400 012. INDIA **Honorary faculty from Tata Memorial Centre**
	**Dr. Ajit Kulkarni** H.O.D Department of Radiation Oncology, B.K.L Walawalkar Hospital, Diagnostic and Research Centre Kasarwadi, Sawarde, Ratnagiri, Maharashtra-415606 Fulltime
	**Dr. Gaurav Jaswal** MD, Radiation Oncology Consultant Radiation Oncologist Department of Radiation Oncology B.K.L Walawalkar Hospital, Diagnostic and Research Centre Kasarwadi, Sawarde, Ratnagiri, Maharashtra-415606 Fulltime

Staff

Sr. No	Name	Designation
1	Mr. A.Narayanan	Senior Medical Physicist & RSO
2	Mrs. Anitha	Senior Medical Physicist & RSO
3	Mr.Smithulal	Senior RT Technologist
4	Mr.Gulshan kumar	RT Technologist
5	Mr.Nithish	RT Technologist
6	Mr.Thirukumaran	RT Technologist
7	Mrs. Sayali Chavan	Nursing Assistant

Health Schemes – For Poor Cancer

- Dr. Arun Kurkure Initiation & Treatment Fund
- Rotary Club of Bombay Queen's Necklace
- Indian cancer society
- Mahatma Phule Jan Arogya Yojana

Documents for Health Schemes

- Adhar Card
- Ration Card
- Income Certificate
- Patient Photo

Oncology OPD Tuesday to Sunday 10:00 am to 2:00pm
Contact Details: 8850155375

Dormitory for Cancer Patients

Dormitory is available for poor patients free of cost. The majority of patients coming to Hospital for surgery or post-surgical treatment (radiotherapy, chemotherapy, etc) need a place to stay while undergoing treatment. Anyone who has had to look for accommodation in this rural area knows what an impossible task it can be. And these people are poor, often illiterate, and ill. BKLW Hospital attempts to fill each family's needs.