

MANAGEMENT OF CANCER

Oncological Concept



Dr. S.G. Balamurugan

M.S., M.Ch., M.A., FRCS., Ph.D.,

FIAGES, FMAS, FIAMS, FICS, FAIS

- **SURGICAL ONCOLOGIST - GURU HOSPITAL, MADURAI,**
- **ADJUNCT PROFESSOR - THE TN DR M.G.R MEDICAL UNIVERSITY, CHENNAI,**
- **PAST SECRETARY, ASSOCIATION SURGEONS OF INDIA, TAMILNADU 2018- 2022**
- **PAST SECRETARY, IMA HOSPITAL BOARD, TAMILNADU 2020 -2021**
- **NABH ASSESSOR**

ACADEMIC QUALIFICATION

Qualification	Year Completed	College
M.B.B.S.	1991	Madurai Medical College
M.S. (Gen Surg)	1996	Madurai Medical College
M.Ch (Sur. Onco.)	2006	Kilpauk Medical College
M.A. (Yoga)	2011	Bharathiyar University Madurai
FRCS	2019	Royal College Of Physicians And Surgeons Of Glasgow
Ph.D	2019	Commonwealth Vocational University Tonga

FELLOWSHIPS OBTAINED


- **FIAGES** Fellow in INDIAN ASSOCIATION OF GASTROENTERAL ENDO SURGERY (Aug 2008)
- **FMAS** Fellow in THE ASSOCIATION OF MINIMAL ACCESS SURGEONS OF INDIA (May 2011)
- **FIAMS** Fellow in INDIAN ACADEMY OF MEDICAL SPECIALTY (Nov 2016)
- **FIMSA** Fellow in INTERNATIONAL MEDICAL SCIENCE ACADEMY (June 2018)
- **FICS** Fellow in INTERNATIONAL COLLEGE OF SURGEON (Sep 2018)
- **FAIS** Fellow in THE ASSOCIATION OF SURGEONS OF INDIA (Dec 2018)

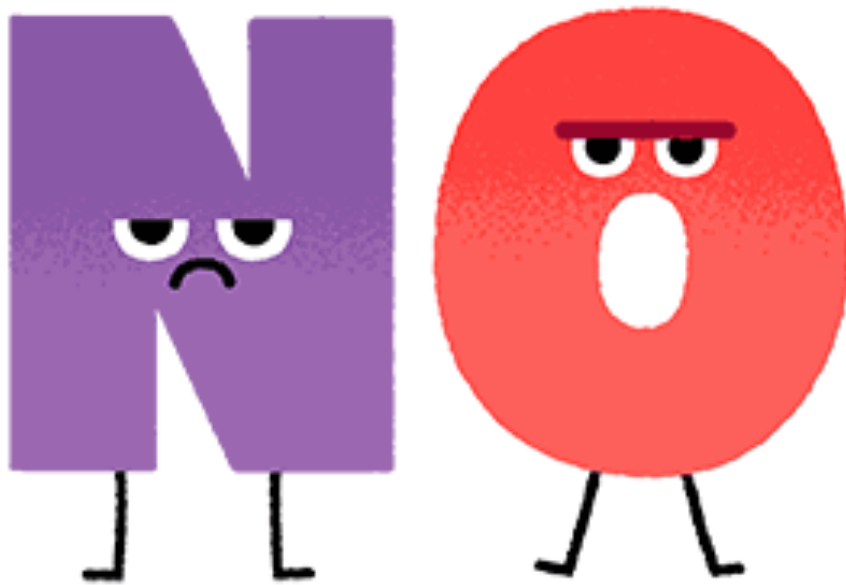
CANCER TREATMENT



Fact
should know **FIRST?**



- 
- A cartoon illustration of a hand with an orange palm and black outline, pointing towards the text.
- **I am a CANCER surgeon**
 - **I have completed my cancer surgery with R0 resection-satisfied loco regional clearance**
 - **Pt will get cure by my surgery?**



Patient
needs
multimodal
treatment
as per
protocol

WHY MULTIMODAL?

- High success rate
- Toxicity of individual treatment is less
- Treatment efficacy will be high





I AM OPERATING SURGEON

AM I REALLY A **PROGNOSTIC FACTOR?**

YES

there is a difference....

ONCOLOGICAL OUTCOME

**Surgeon as a prognostic factor
in the management of Cancer.**

**Why some pt having
better prognosis than
others ?**



TUMOUR BIOLOGY

TUMOR BIOLOGY

WHAT IT IS?

- **BEHAVIOUR OF THE TUMOUR**
(aggressive vs indolent)
- **Dictated by the molecular genetics**

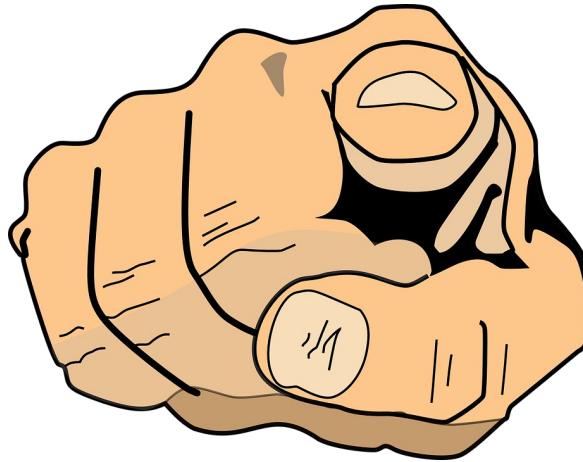
HOW TO EVALUATE?

- BY STUDYING THE TUMOR MARKER
- MOLECULAR GENETICS

HOW IT WILL BE HELPFUL?

- ASSESS THE PROGNOSIS
- PLAN FOR TARGETED THERAPY

YOUR RESPONSIBILITY



ACHIEVING BEST OUTCOME

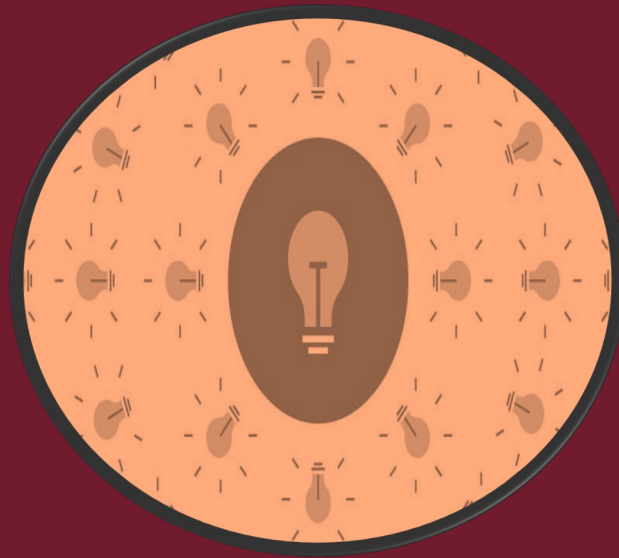
AIM- ONCOLOGY

Cure the cancer

Minimize the treatment related complications

ROADMAP TO **BEST OUTCOME?**





CONCEPT

CONCEPT IN ONCOLOGY ?



- **DIAGNOSE THE CANCER**

- **EVALUATING THE TUMOR BIOLOGY**

- **STAGING THE DISEASE**

- **ASSESS THE GENERAL CONDITION OF THE PATIENT**

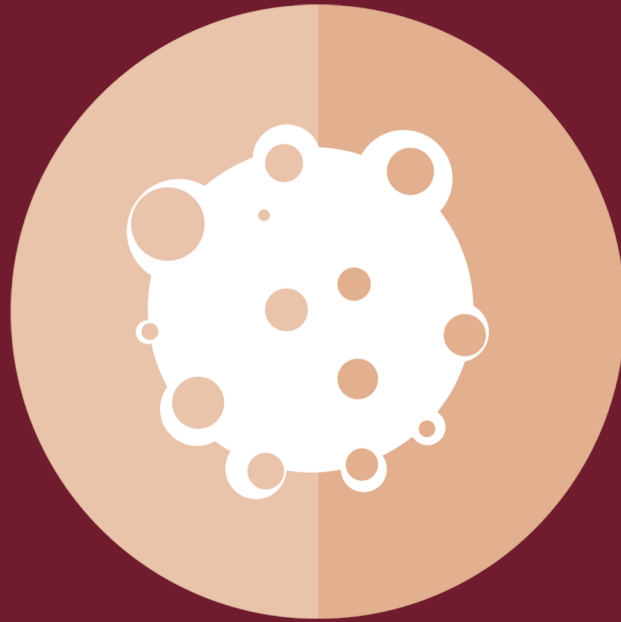
- **FORMULATE THE TREATMENT**

PREOPERATIVE ASSESMENT

7 - Multidisciplinary Tumor Board

Finalize staging- Tumor Mapping

Formulate treatment plan



ONCOLOGY PRINCIPLE

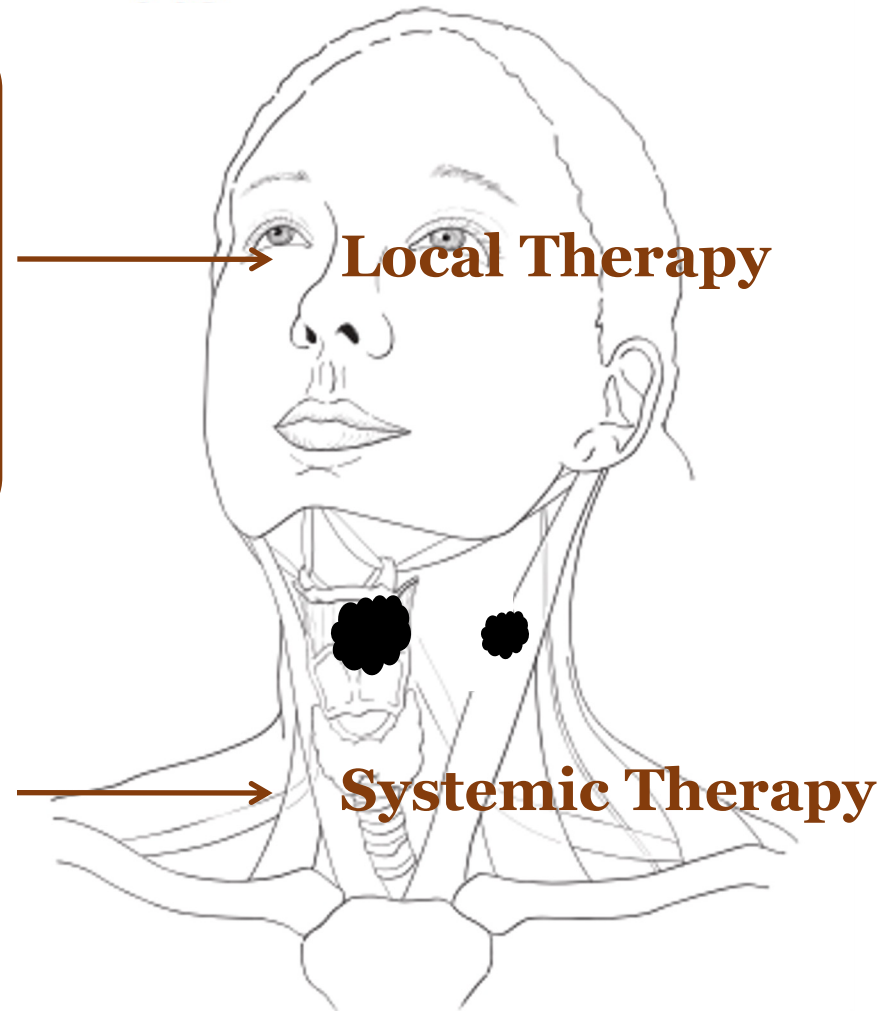
Primary Tumor (Local Disease)



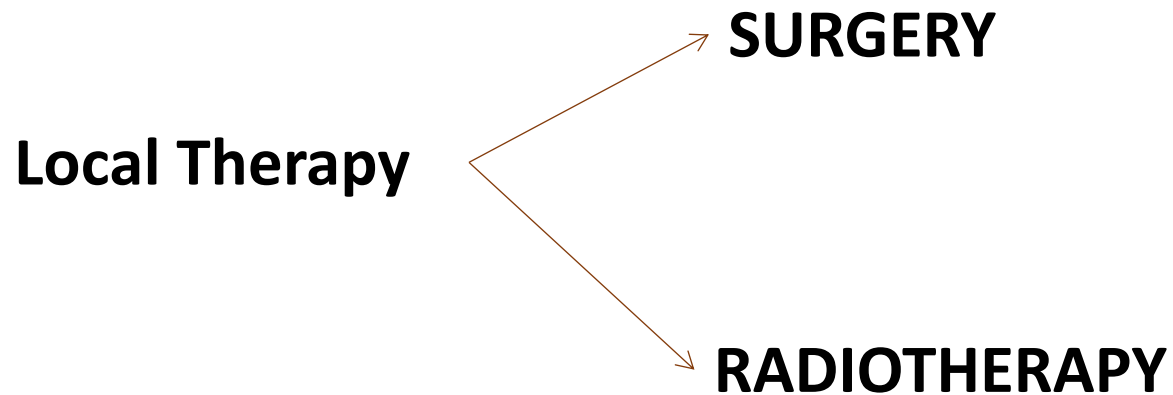
Lymph Node (Regional Disease)



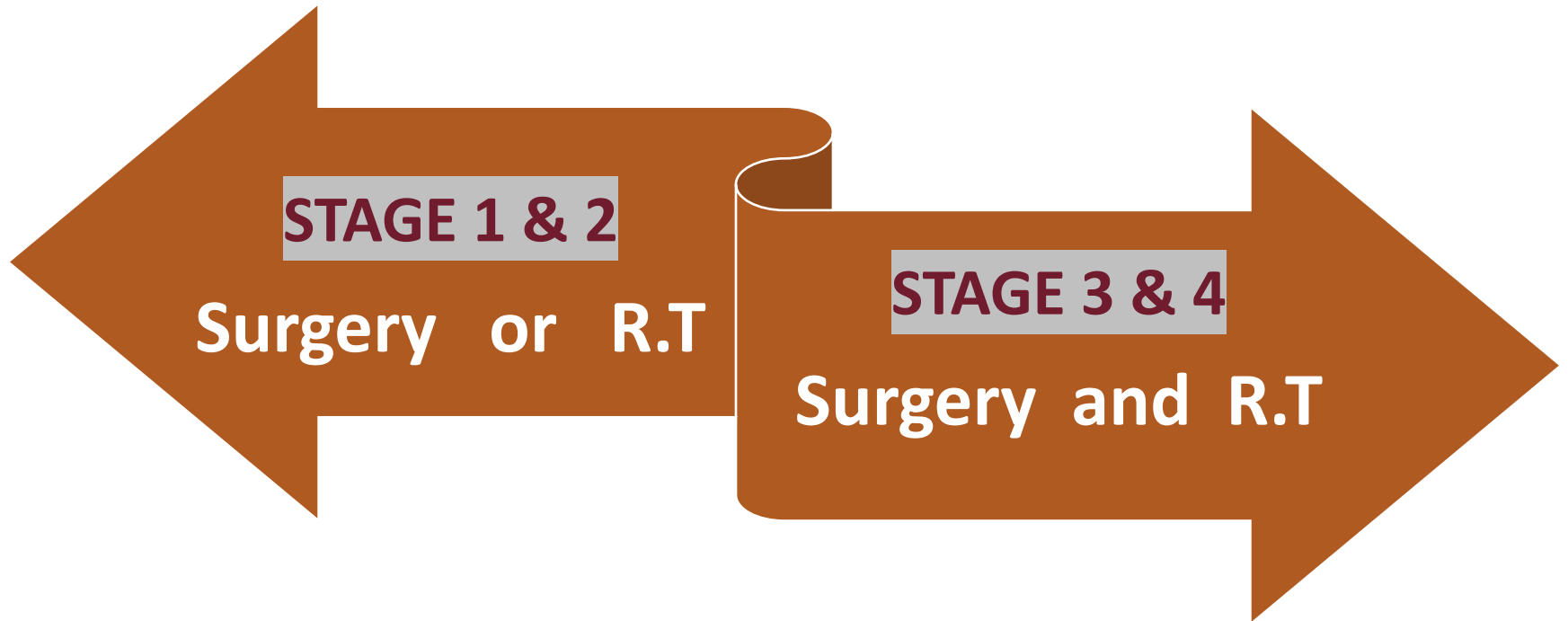
Lung Mets (Systemic Disease)



LOCOREGIONAL CONTROL



TREATMENT OPTIONS



FACTORS

- SITE
- SIZE
- LOCATION (ANT vs POST)
- PROXIMITY TO BONE
- NODAL STATUS
- PREVIOUS TREATMENT
- HISTOLOGY(TYPE,GRADE,DEPTH)
- BIOLOGY

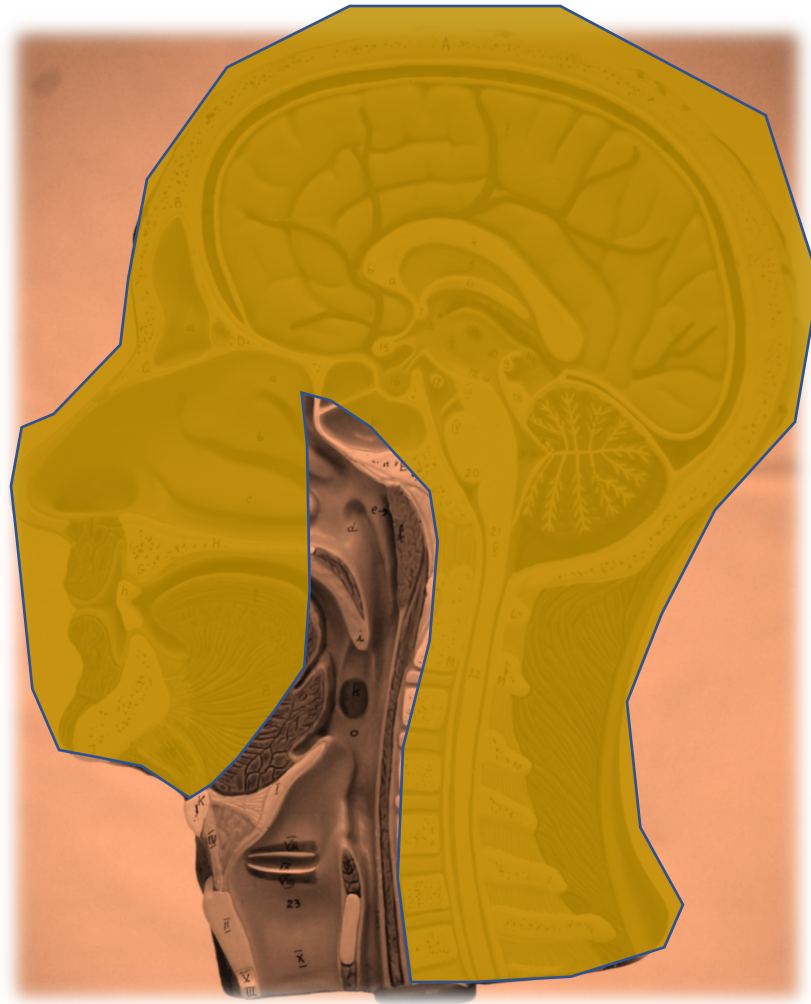
TREATMENT OPTIONS -SURGERY

Sx



TREATMENT OPTIONS -RT

RT





SURGICAL PRINCIPLE

ONCOLOGICAL NORMS

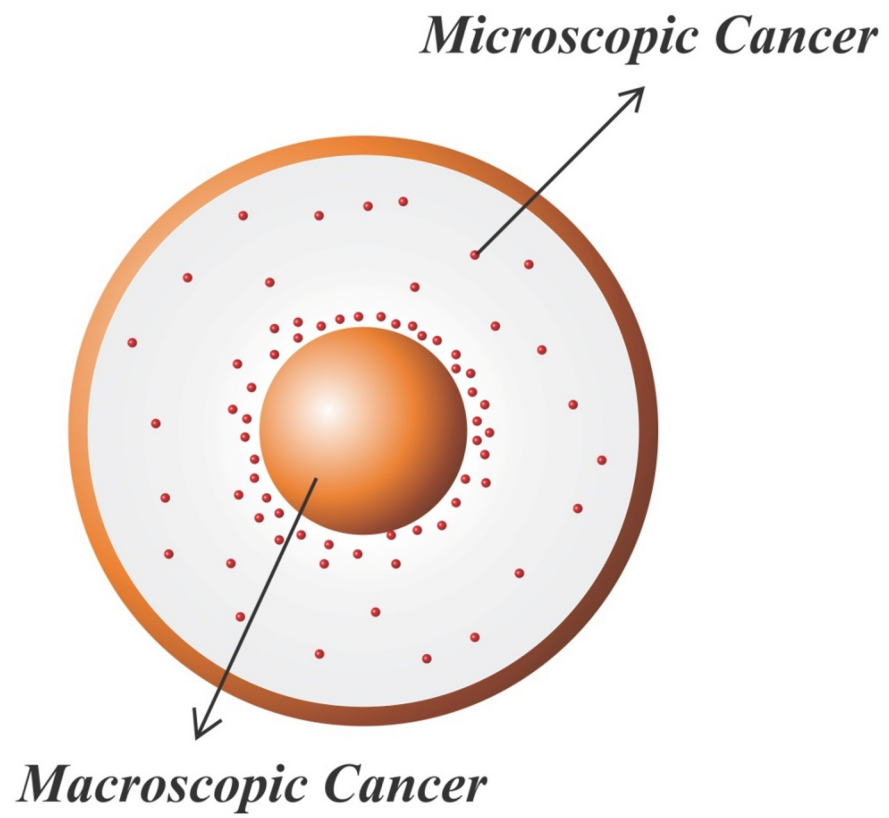
Adequate Surgery + Adjuvant therapy
is the Standard treatment

Adjuvant treatment is not an answer to
INCOMPLETE SURGERY

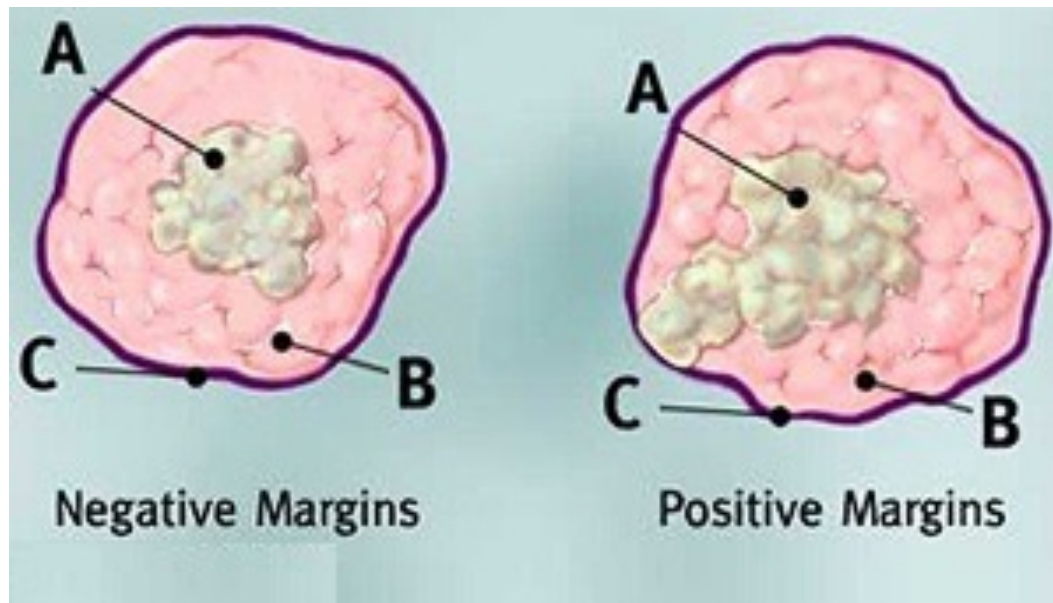
- It does not compromise



Radicality of resection



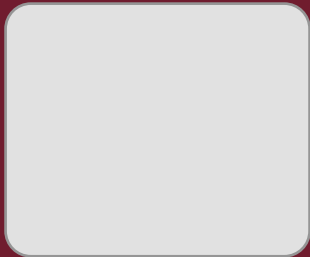
NEGATIVE MARGINS



LINEAR MARGINS



Proximal

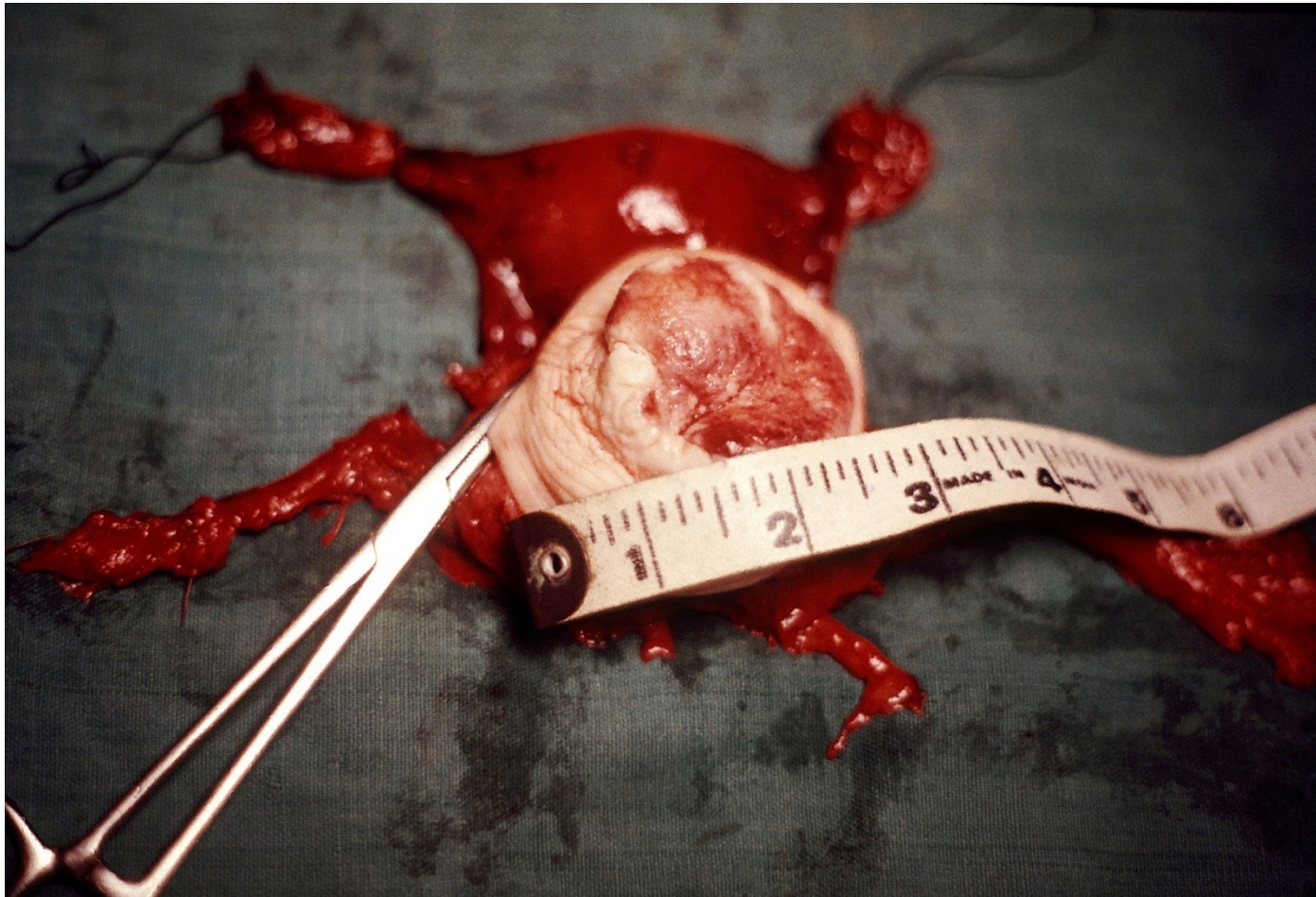


Distal

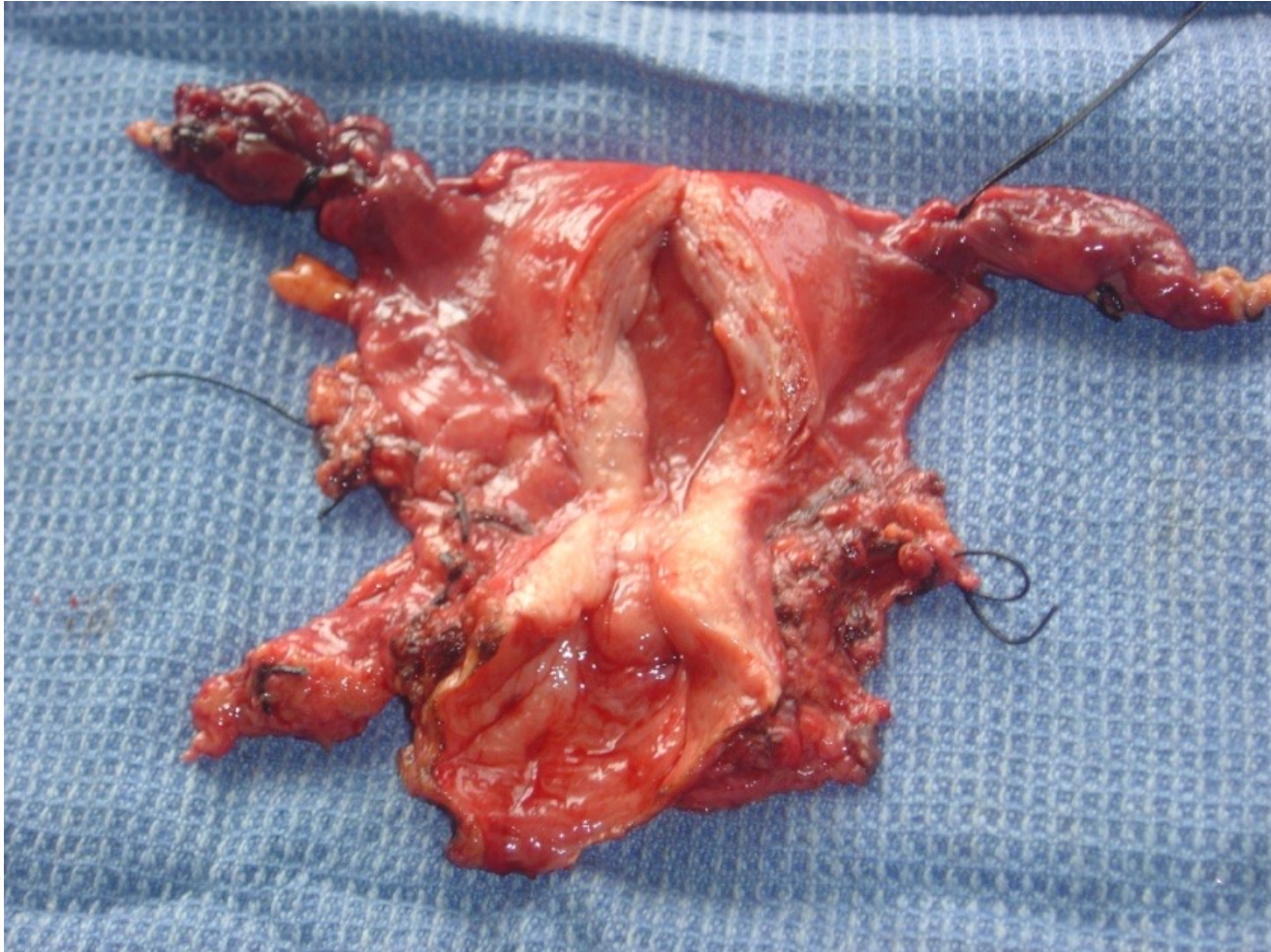
ADEQUATE SURGERY- HOW MUCH CLEARANCE?

- Esophagus - 10 cm
- Stomach - 5 cm
- Hepatobiliary - 1 cm
- Pancreas - 1 cm
- Colon - 5 cm

CLEARENCE DISTAL



CLEARANCE. LATERAL

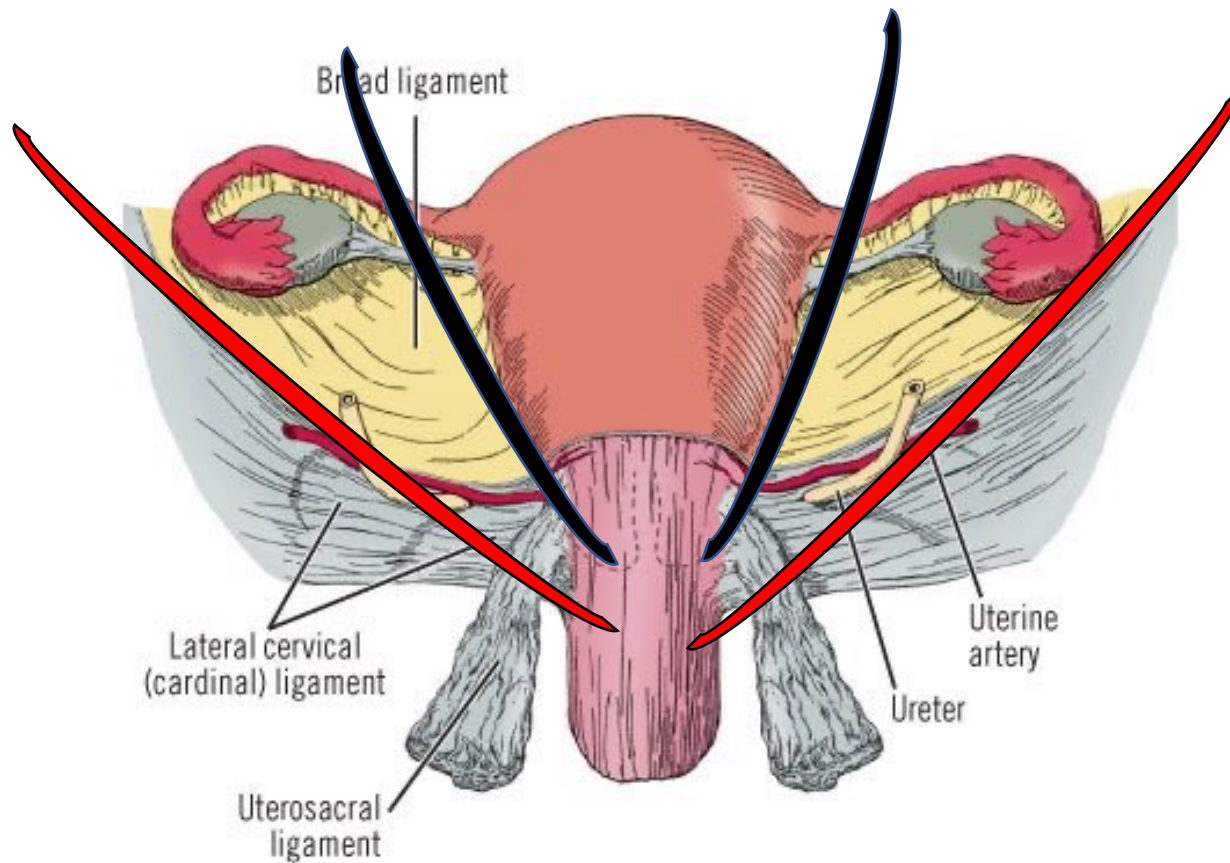


COMPLETENESS OF SURGERY

All tubular structure to be documented



BENIGN vs MALIGNANT



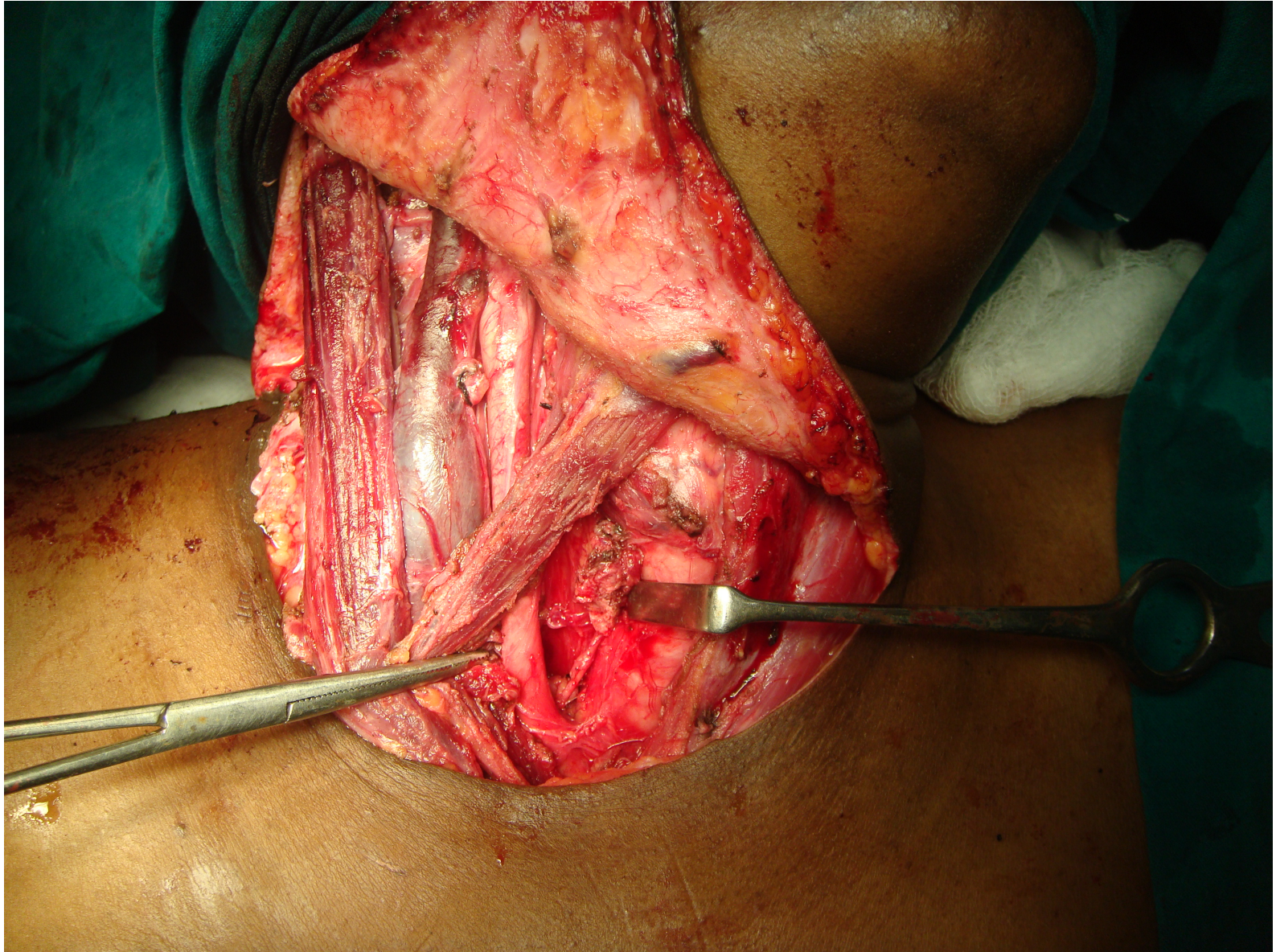
SURGERY

For most solid tumours, surgery remains the definitive treatment.

ONCO SURGERY COMPRISES OF

- Removal of primary disease
- Removal of regional node

FUNCTIONAL NECK DISSECTION



BREAST RECONSTRUCTION TRAM FLAP



LINGUAL THYROID

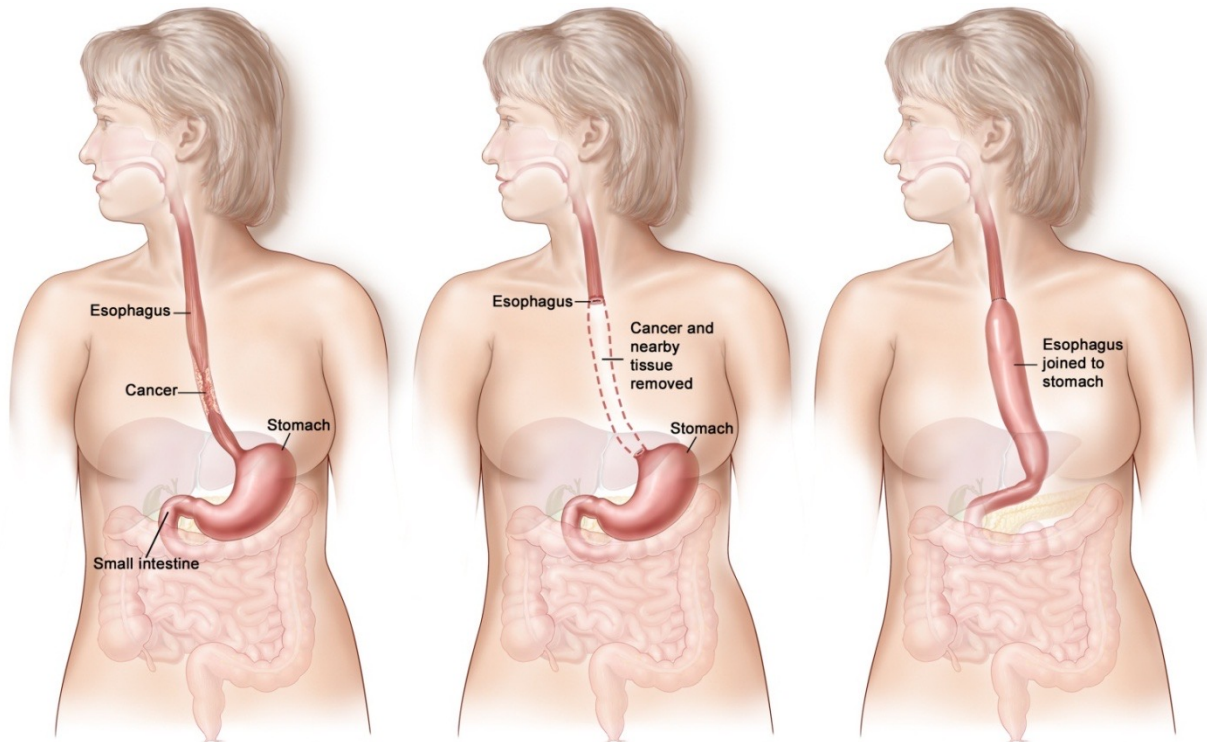


GURU HOSPITAL

SUB MANDIBULAR GLAND TUMOUR

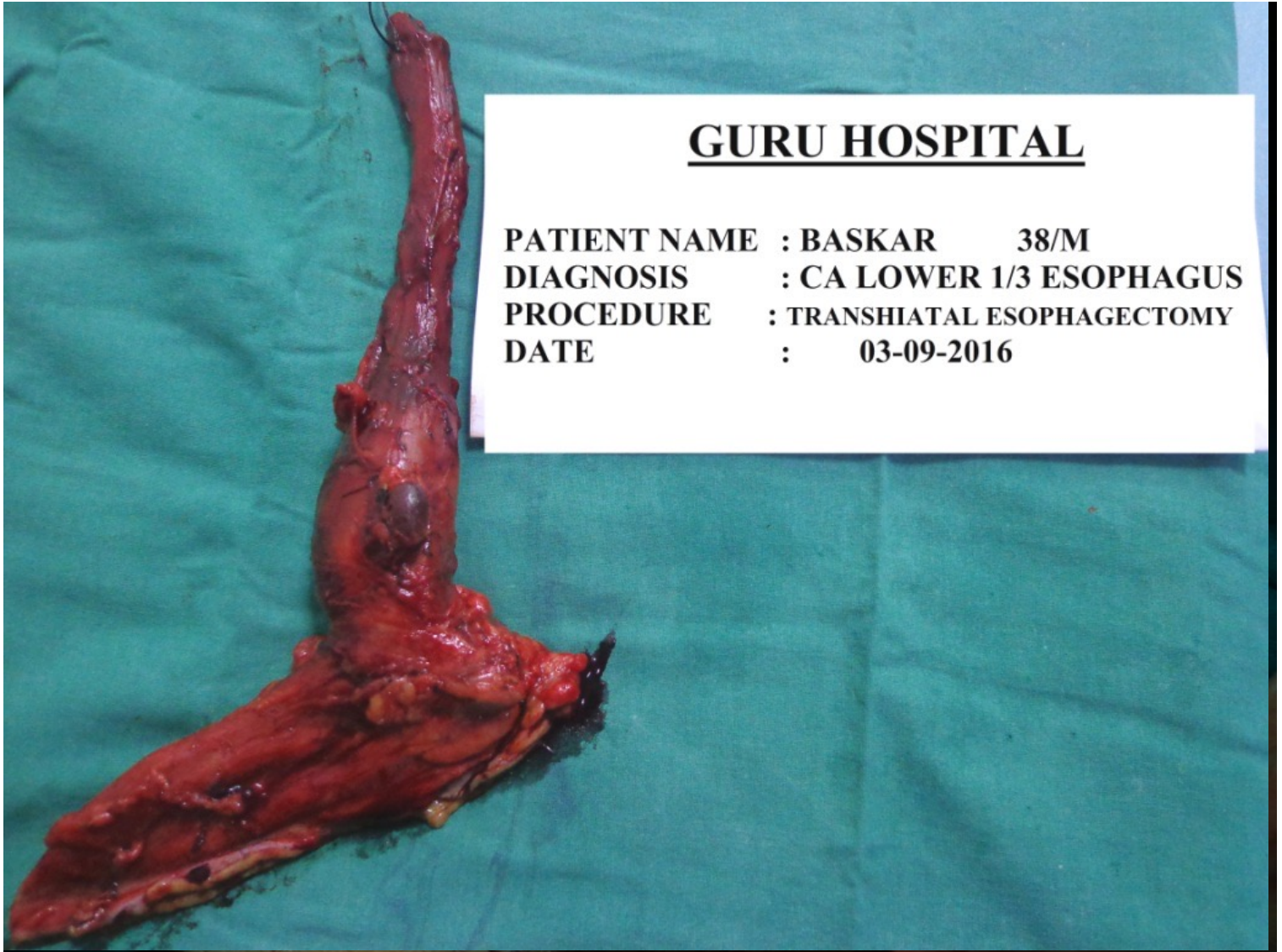


TRANSHIATAL OESOPHAGECTOMY



National Cancer Institute

TRANSHIATAL OESOPHAGECTOMY



GURU HOSPITAL

PATIENT NAME : BASKAR 38/M
DIAGNOSIS : CA LOWER 1/3 ESOPHAGUS
PROCEDURE : TRANSHIATAL ESOPHAGECTOMY
DATE : 03-09-2016

MEDIAL MAXILLECTOMY



LARYNGECTOMY



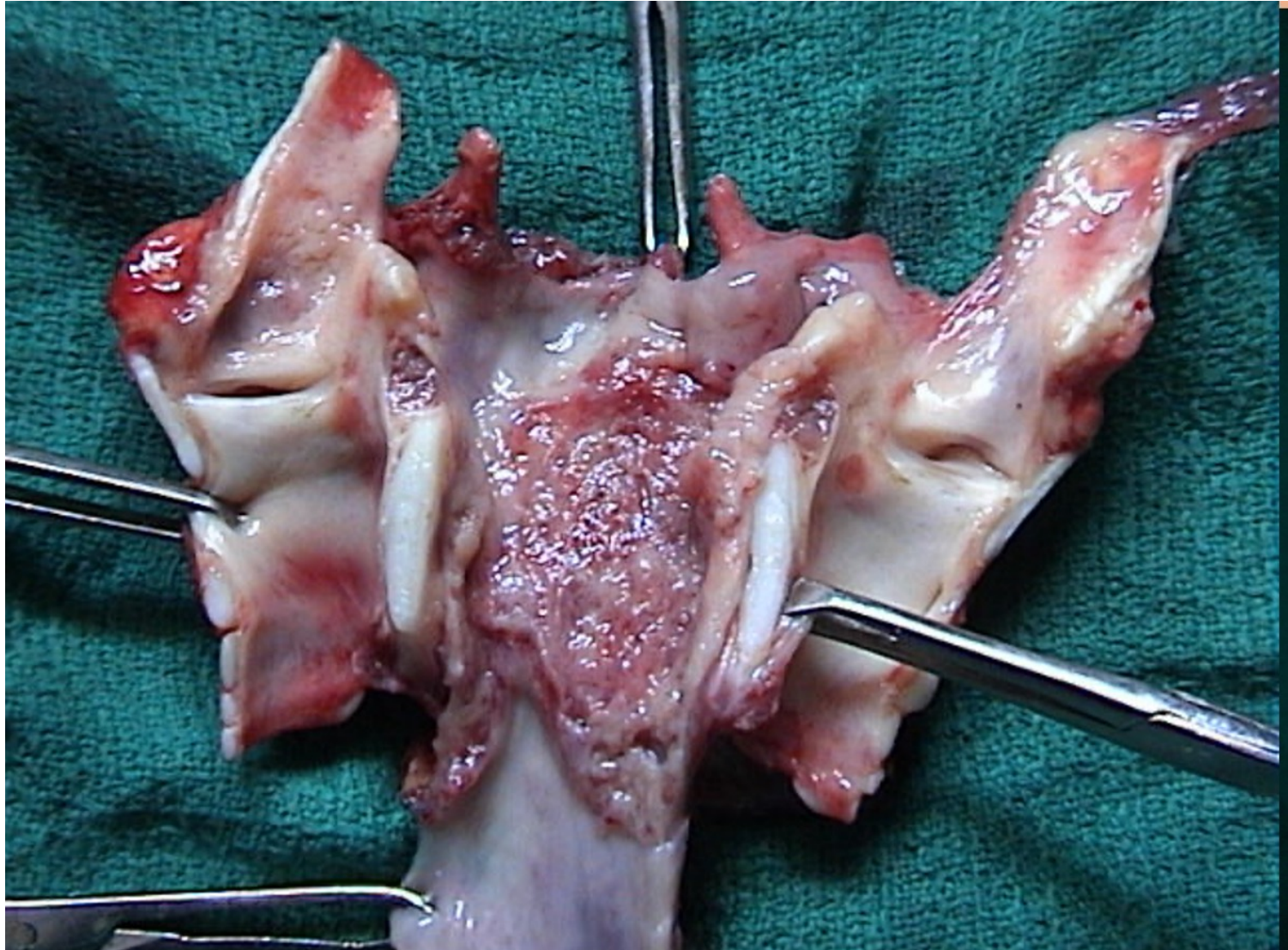
**Ipsilateral
Strap muscles
and Thyroid lobe**



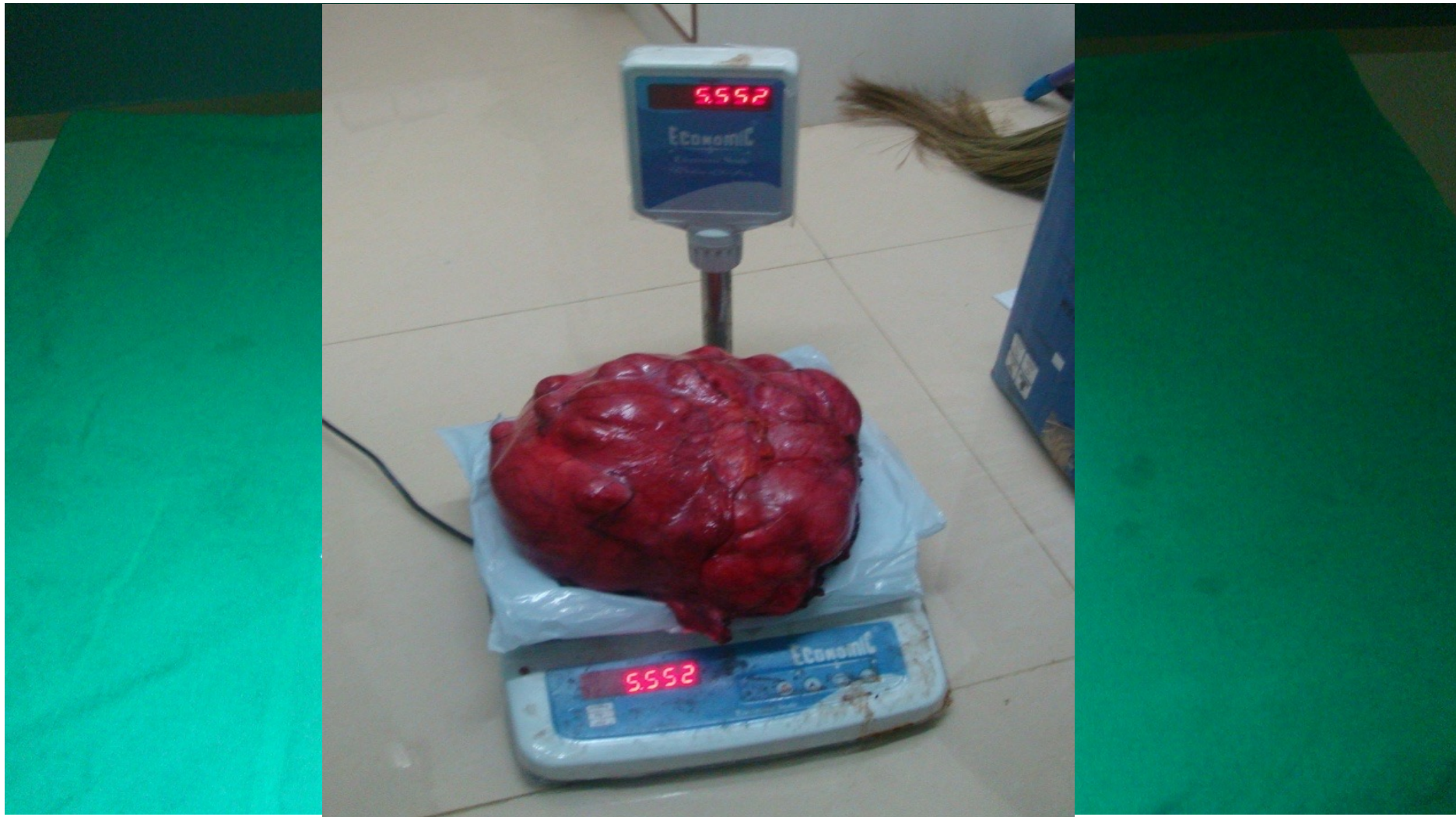
ONGS PROCEDURE



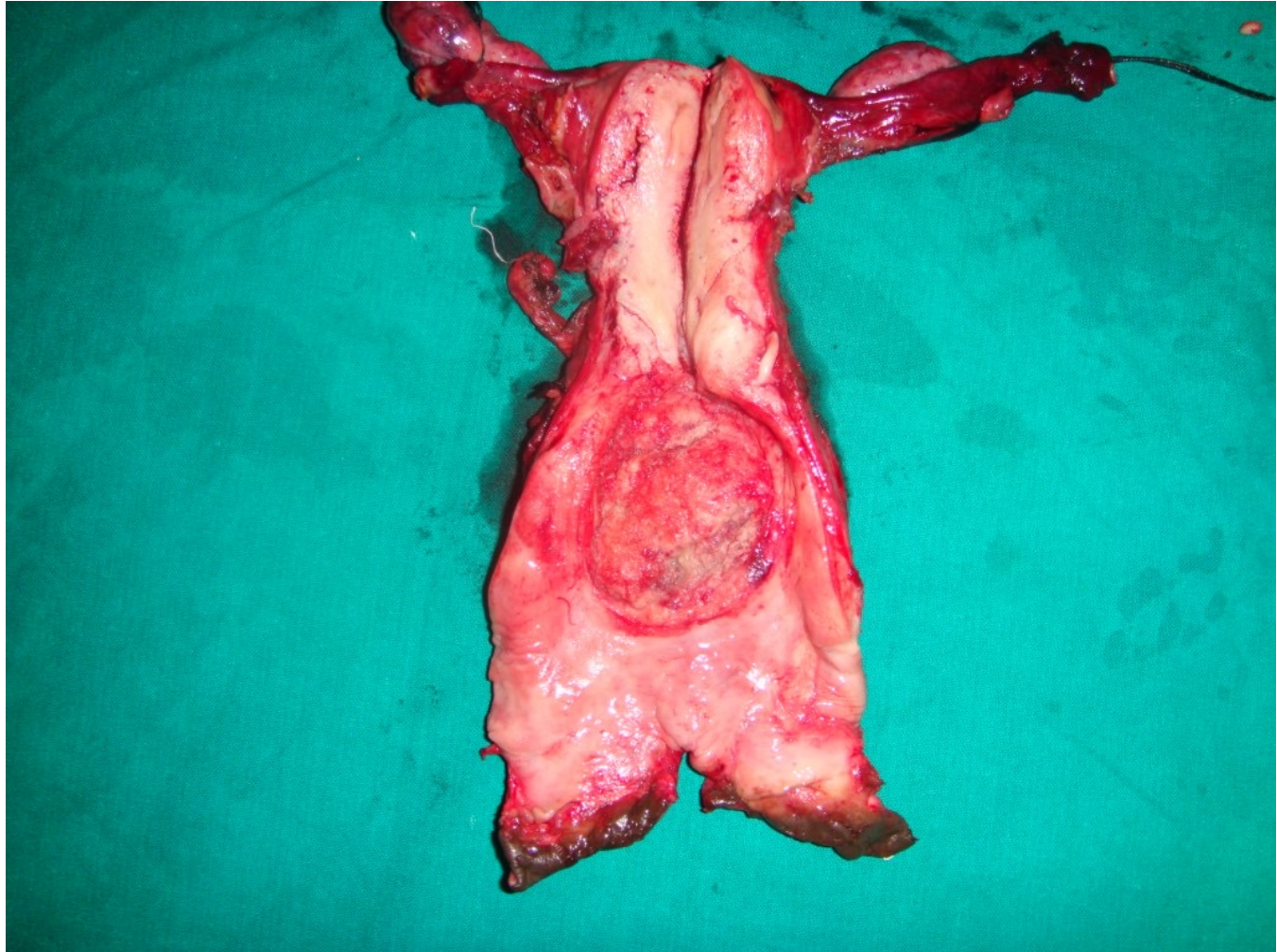
ONGS PROCEDURE

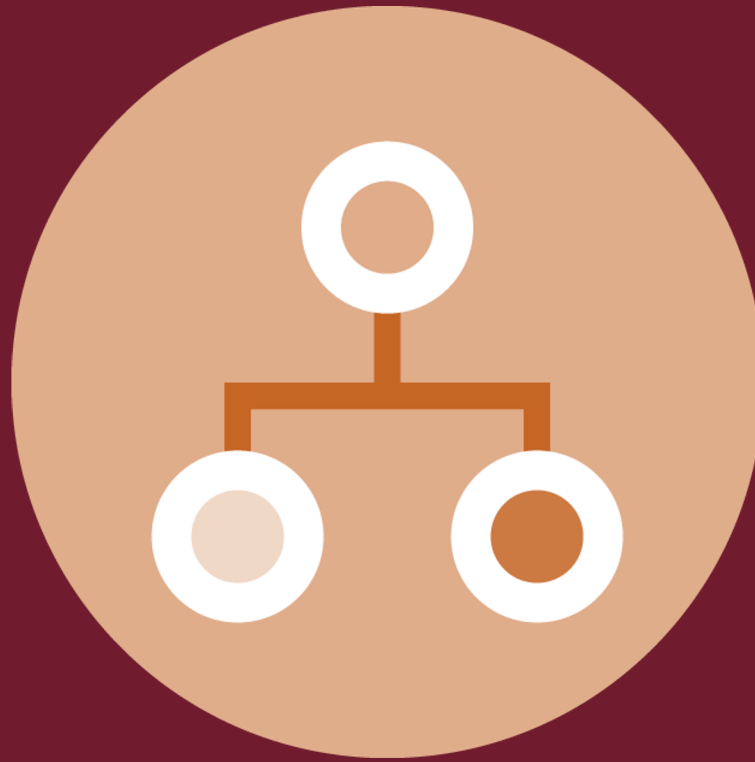


BLADDER STROMAL TUMOUR



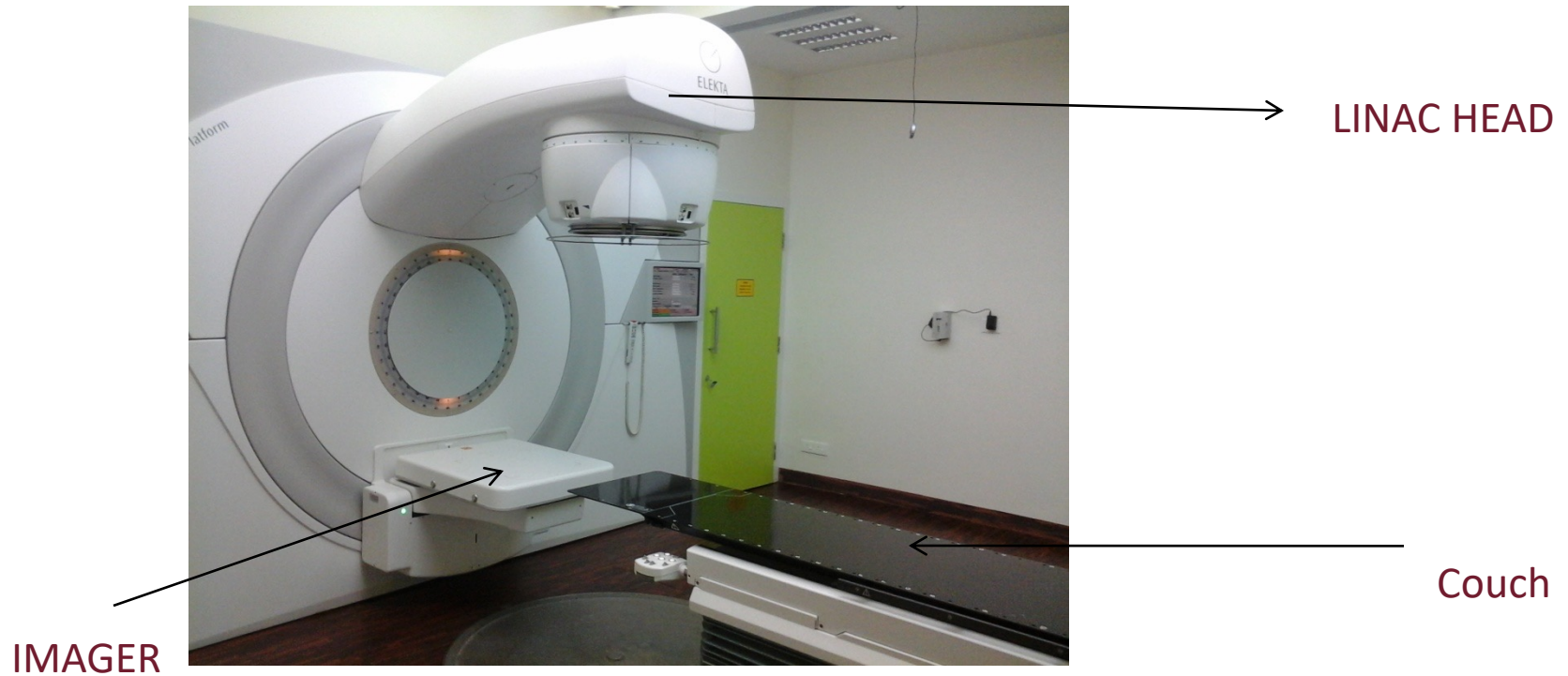
RADICAL VAGINECTOMY





REHABILITATION

OUR LINAC



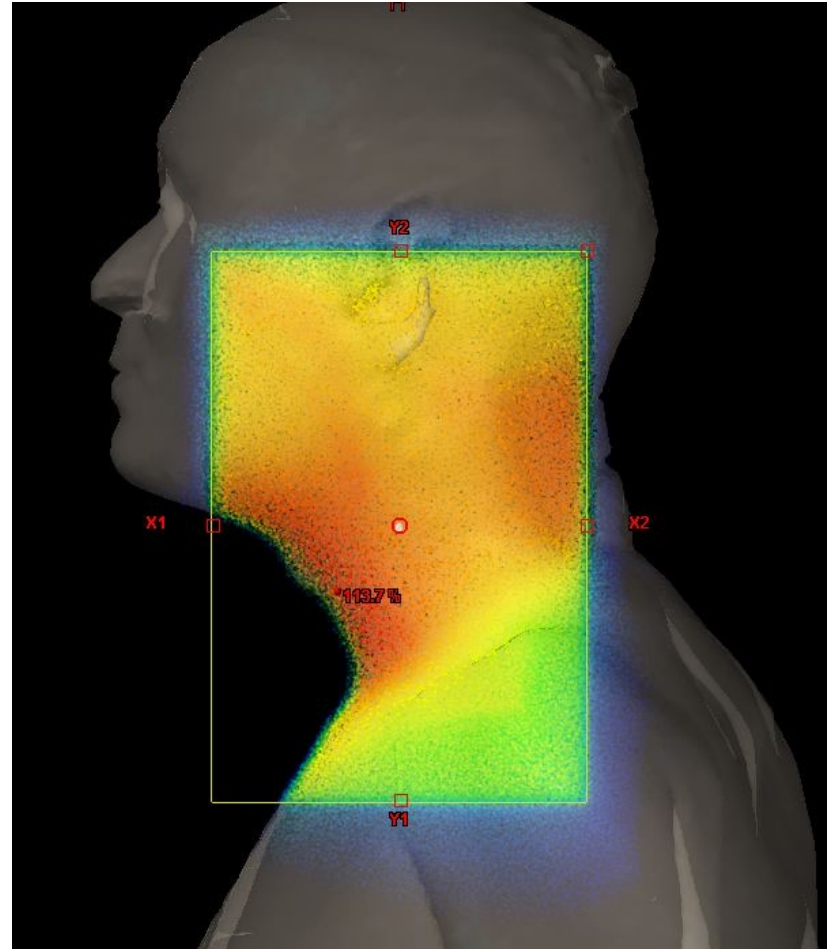
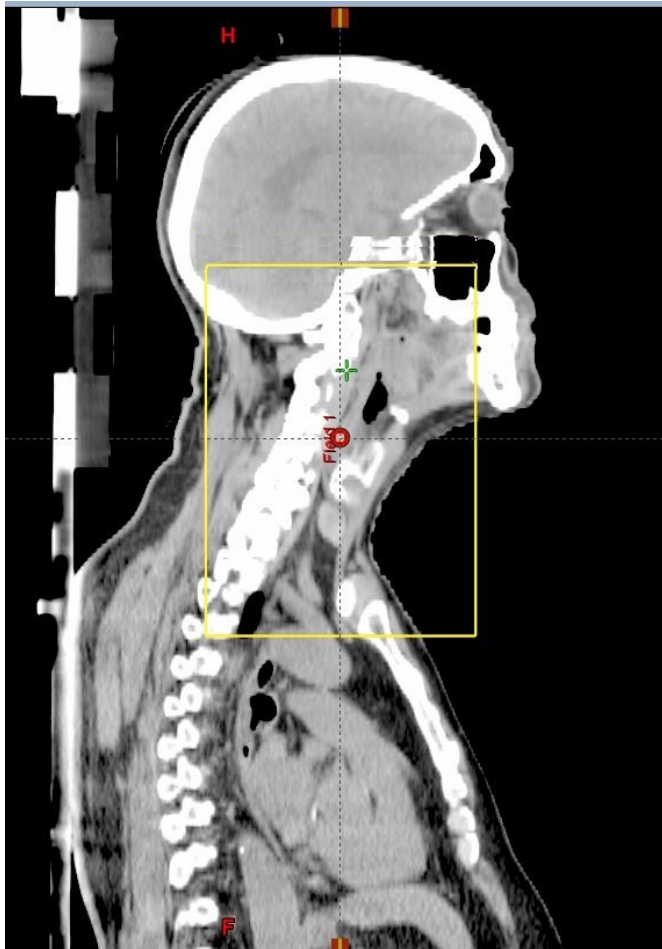
CONVENTIONAL VS INTENSITY MODULATED RADIOTHERAPY

Direction

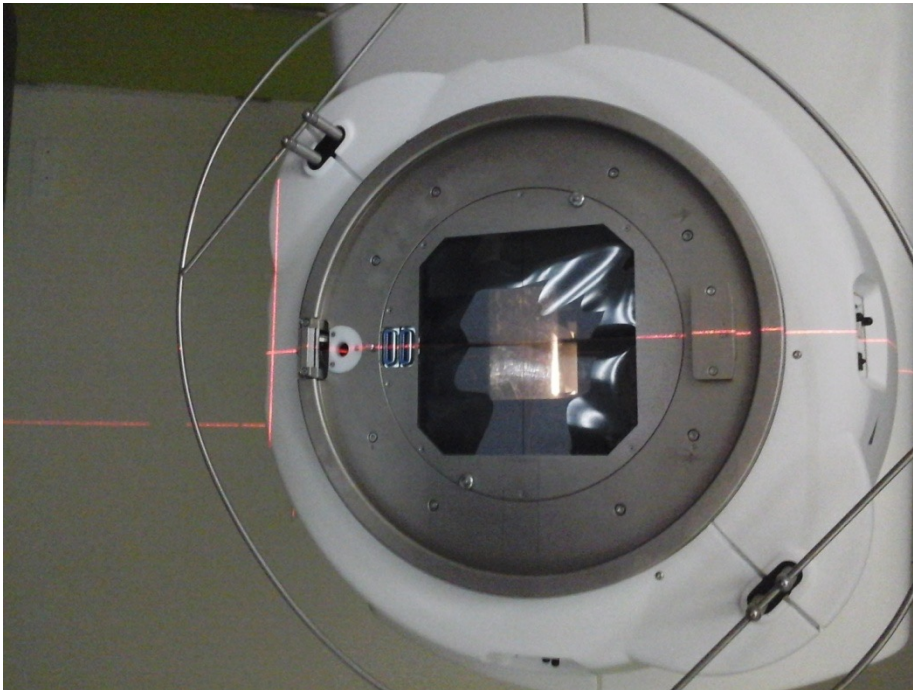
Intensity

Shape

CONVENTIONAL



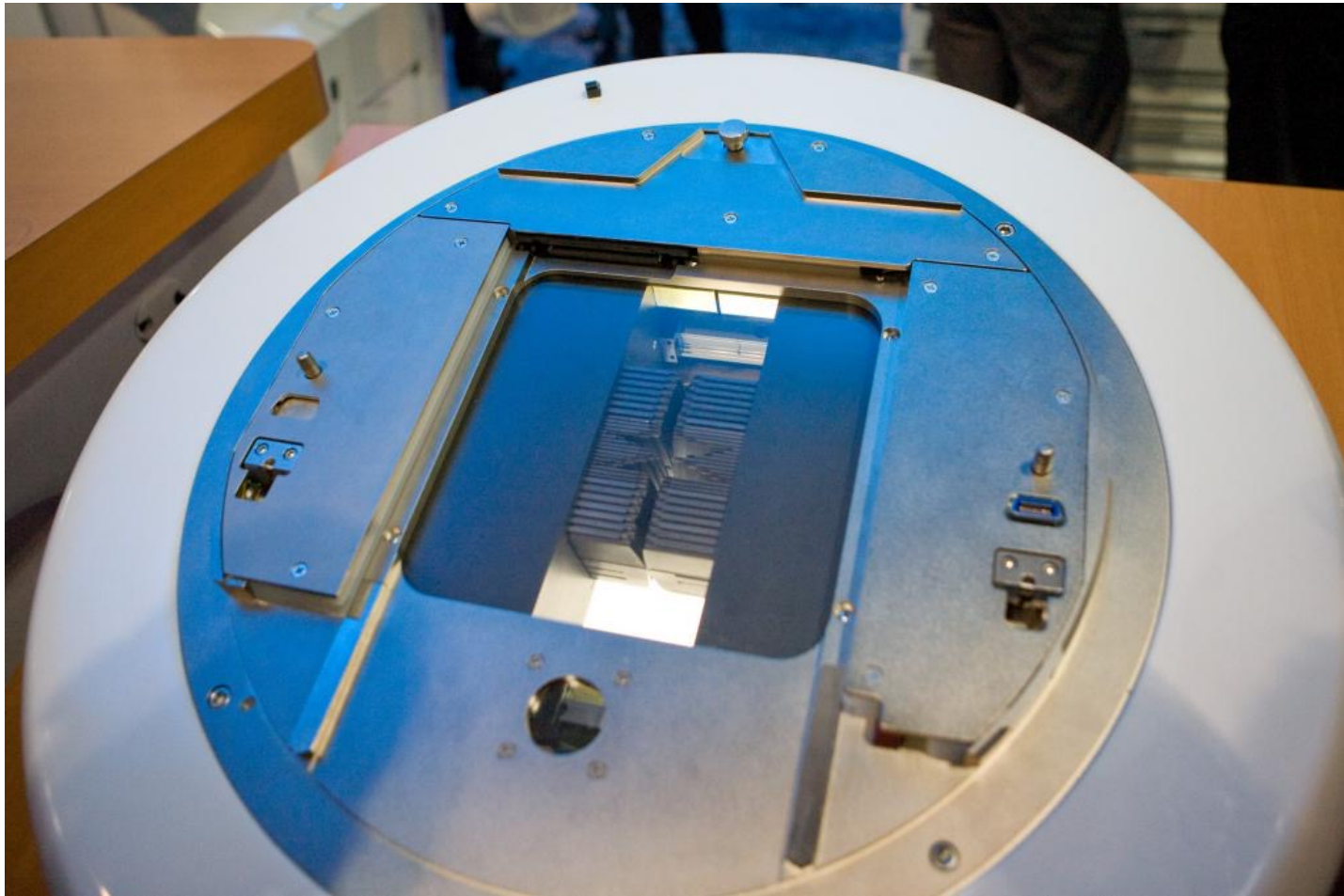
Collimator



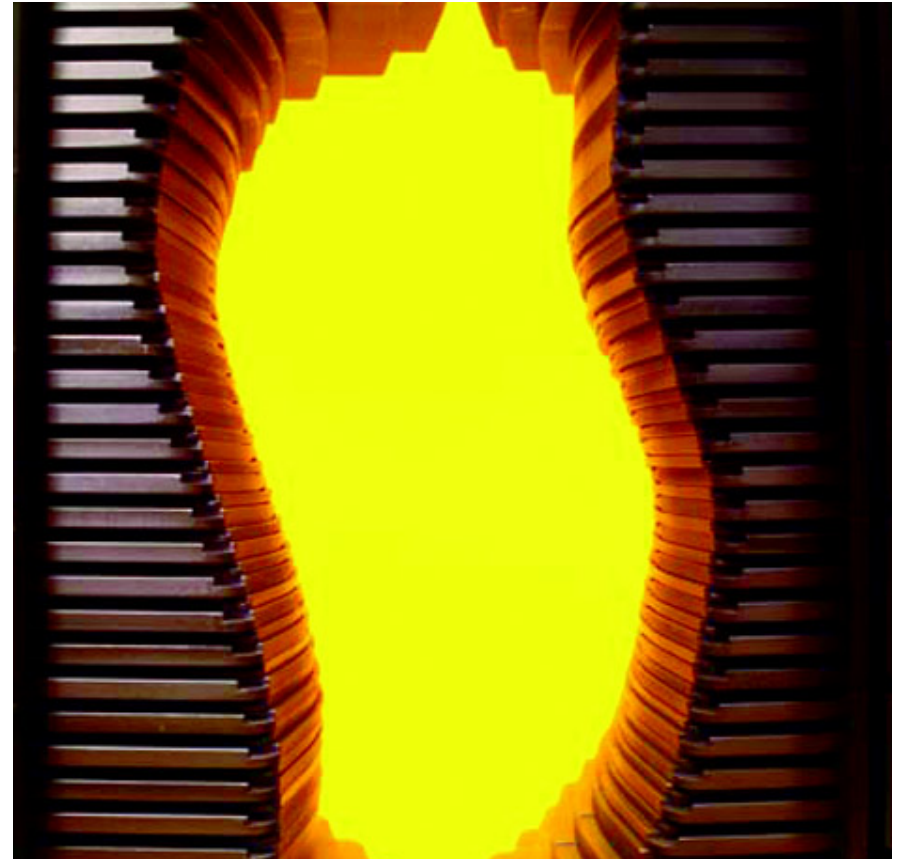
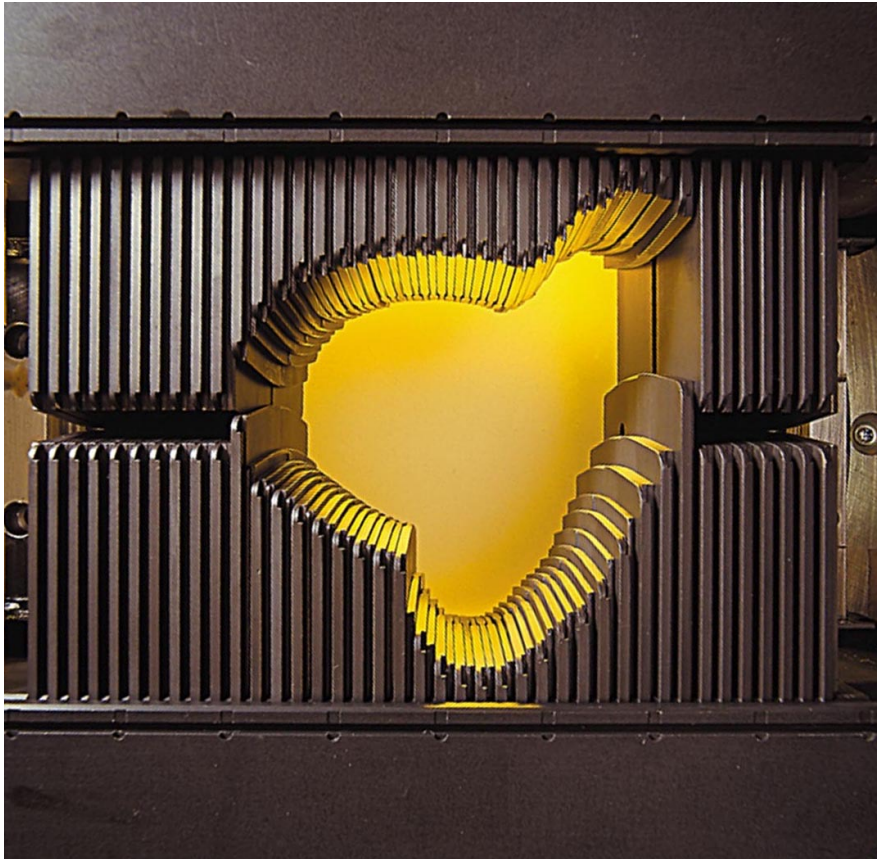
Square / rectangular shaped field.

Can increase or decrease the size of field.

MULTI LEAF COLLIMATOR



SHAPE



DIRECTION

Plan_OK - Unapproved - Model View - CT_1

Isodoses (%)

110.0

105.0

100.0

95.0

90.0

85.0

80.0

3D Dose MAX: 112.4 %

3D MAX for TGT: 112.4 %

3D MIN for TGT: 49.7 %

3D MEAN for TGT: 96.7 %

H

R

112.4 %

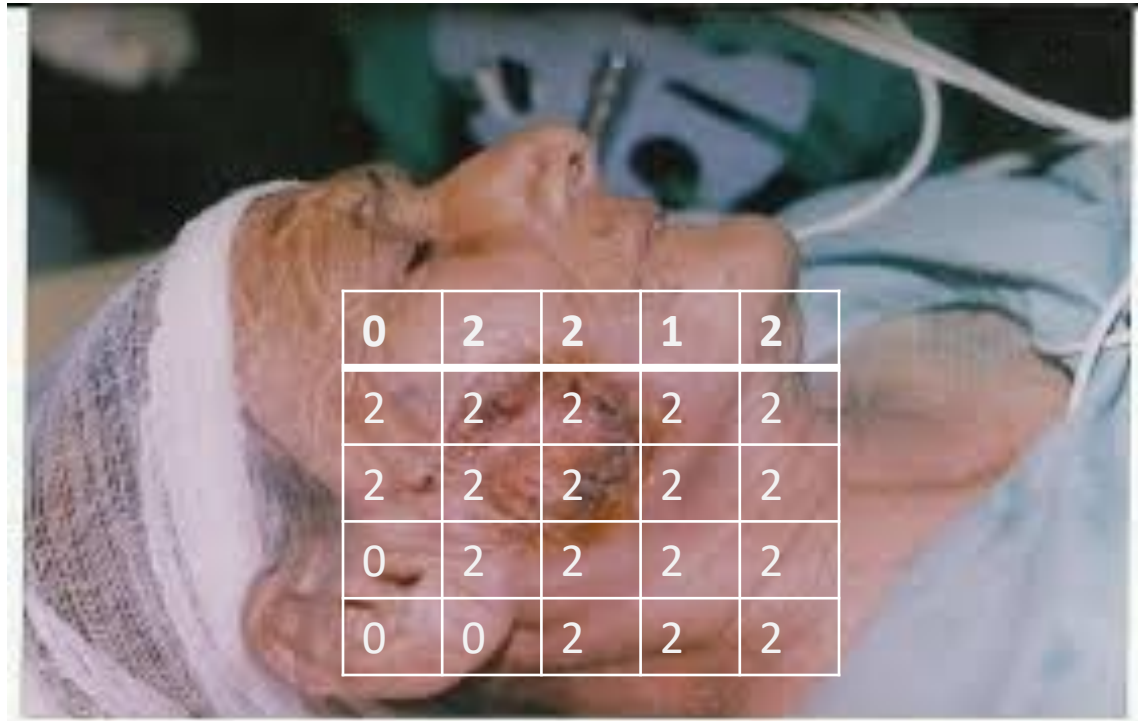
L

F

IEC 61217
Head First-Supine

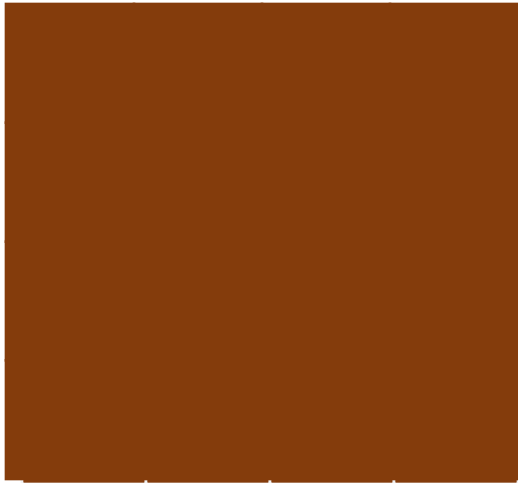


INTENSITY

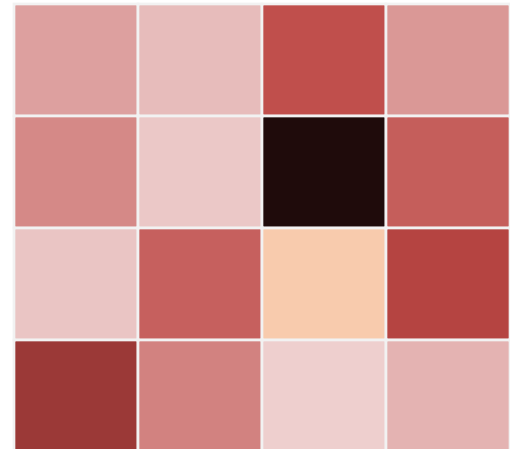


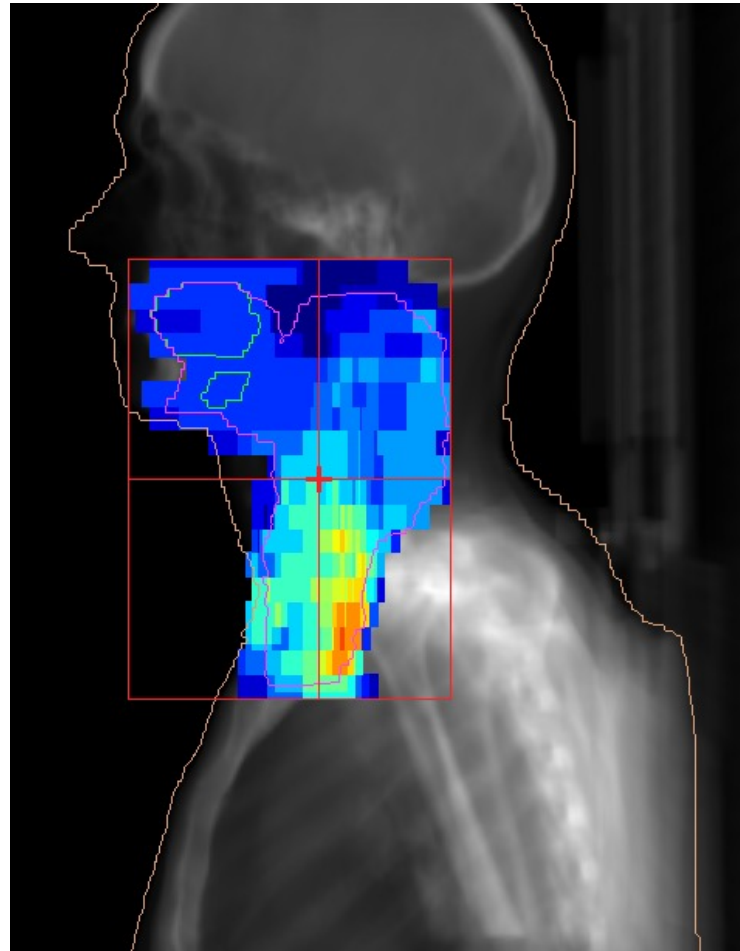
INTENSITY

CONVENTIONAL



IMRT





Dose Sculpting

2-D Planning



3-D
Conformal



IMRT



Courtesy of J. Schreiner Kingston Regional Cancer Centre, Ontario

SCULPTING



Credits: Dr. Ram madhavan, Kochi



HOW SURGEON SHOULD BE?

FIGHT AGAINST CANCER WITH FULL FORCE



GET READY FOLKS
01 10 10

GIVE CONFIDENCE NOT GUARANTEE...



**DON'T MISS
TO START EARLY TREATMENT BY YOURSELF**





TheSUPERHIT.Com





**KNOW ABOUT OUR
GURU HOSPITAL**



Pulavar. S. Gurusampillai
Head Master



NABH Accreditation



Progressive Level Pre- Accreditation



Entry Level Pre- Accreditation



The validity period –4 years

3 months to 12 months

6 months to 18 months.

National Accreditation Board for Hospitals & Healthcare Providers

(Constituent Board of Quality Council of India)

CERTIFICATE OF ACCREDITATION

Guru Hospital

4/120 F, Pandikovil Ring Road, Mattuthavani
Madurai - 625107, Tamil Nadu

- NABH ACCREDITATION - 2022

FELLOWSHIP PROGRAMME

- Fellowship in Minimal Access Surgery - 2
- Fellowship in Endo Gynecology – 2

Affiliated to Dr.M.G.R Medical University.

FELLOWSHIP PROGRAMME

- **B.Sc Physician Assistant**
- **B.Sc OT Technician & Anesthesia Technology**

Affiliated to Dr.M.G.R Medical University.

CASHLESS TREATMENT

- Tamilnadu Chief Minister's Comprehensive Health Insurance Scheme
- Tamilnadu New Health Insurance Scheme for Government Employees
- Tamilnadu Government Pensioners Health Insurance
- The Below Mentioned Mediciam Card Holders

TPA INSURANCE & CORPORATE TIE UP @ GURU



உன்னால் முடியும்
4/120F, Pandikovil Ring Road, Madurai - 625 107.
Email : info@guruhospitals.com
Web : www.guruhospitals.com

7708072543
8754314930

8 BEDED HOSPITAL – 2000



30 BEDED HOSPITAL – 2006



2006 PYKARA-MADURAI

IVF
CENTRE
STARTED
– 2008



GURU HOSPITAL -IVF BABIES



100 BEDED HOSPITAL – 2013



RADIOTHERAPY UNIT STARTED – 2015



**The strongest weapon
against cancer arrives in Madurai.**



RADIOTHERAPY UNIT – WITH MY
PROFESSOR DR. R. RAJARAMAN

DIALYSIS & CT SCAN CENTRE STARTED – 2016



DIALYSIS &
CT SCAN
CENTRE
STARTED –
2017



CARDIAC
CENTRE
STARTED
– 2022



FLOOR – COLOUR CODE



MAMMO BUS

MOBILE CANCER SCREENING

- **MAMOGRAM,**
- **DIGITAL X-RAY**
- **ULTRASOUND**
- **PAPSMEAR.**



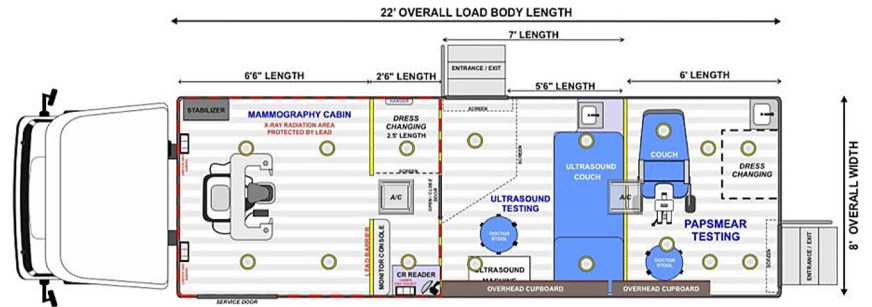
Vehicle Exterior Branding Design
UJCH 011



	Model No.:GHMC/012	Specifications			Customer Approval Sign.
		Painting	Vinyl Sticker	Sun control film	
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<small>* If you are Satisfied with the Branding design, Please confirm the Model number send a email to design@ambalancindia.com with your approval to implement the same. ** This is Computerized copy. Exact Placement of details and colours may be slightly different from the proof in your vehicle, as some adjustment of the material may occur during the installation on process.</small>			

TOP VIEW LAYOUT DRAWING

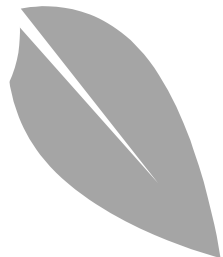
MOBILE MAMMOGRAPHY ON WHEELS
ASHOK LEYLAND 1415HB / 4900MM WB



Part Description	PR/RCM/624	Model	ASHOK LEYLAND	Customer Name	ROTARY CLUB OF MADURAI
Drawing No.	001R05A/1602	Quantity	1 NO	Model	MOBILE MAMMOGRAPHY
Revision No.	00	Project No.	624	Customer Ref. No.	PR/RCM624-001
				Country	INDIA

Scale: Not To Scale / All Dimensions are in inches

Jesai Healthcare India Pvt Ltd,



MAMMO BUS









CAMPS



EVERY YEAR WE
CONDUCT
CANCER
AWARENESS
ACTIVITIES



MINI MARATHON @ Madurai

📍 Guru hospital, Madurai to 📍 Gandhi Museum.



16th October 2022 Sunday, @ 07:00 AM

PINK OCTOBER CANCER AWARENESS PROGRAMME

- ★ T-Shirts, Participation Certificates & Refreshments will be provided for registered participants.
- ★ Registration is Mandatory. Registration Fees - ₹.200/-
- ★ The last date of registration is 12.10.2022.

RegistrationLink: <https://bit.ly/3UiEabg>



GURU HOSPITAL
4 /120-F, Pandikovil Ring Road,
Mattuthavani,
Madurai- 625 107



87543 04562, 893 893 3 893



SCAN TO REGISTER

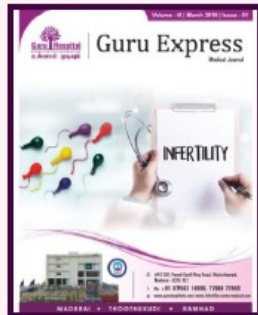
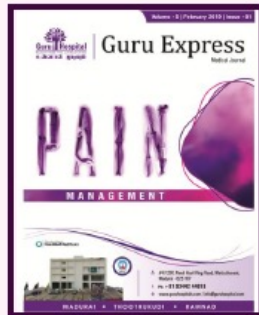
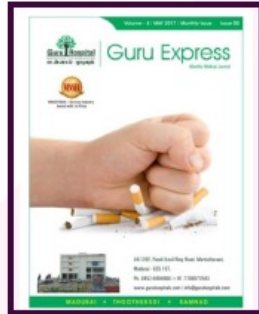


Guru Hospital in Media

MEDICAL EXHIBITION



MEDICAL BULLETIN



BOOK AUTHOR



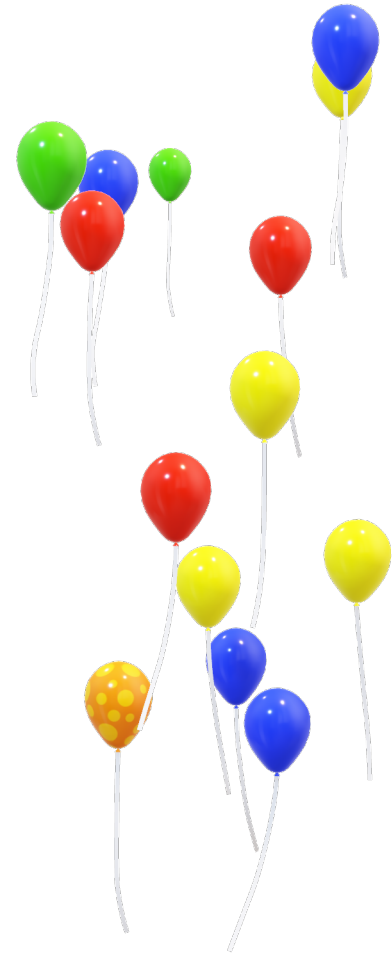
பற்றுநோய் விடியலை நோக்கி book was published by hon. Chief minister Edappadi K. Palaniyandhi on Feb 4th, 2021 World Cancer day



PUBLIC AWARENESS PROGRAM



MY **WISHES** TO ALL





THANK YOU