

DR. Rohini Khurana MD

QUALIFICATIONS:-

- **M.D (Radiotherapy)** King George's. Medical University, Lucknow. (2001-2004)
- **M.B.B.S –** King George's. Medical University, Lucknow. (1992-1997)

PRESENT DESIGNATION :-

- **Professor Jr.** – Department of Radiation oncology, RMLIMS. Lucknow. (06.02.2016 till date).

PROFESSIONAL EXPERIENCES

1. **Associate professor-** Department of Radiation oncology, RMLIMS. Lucknow (06.02. 2013- 05.02.2016)
2. **Assistant professor –** Department of Radiation oncology, RMLIMS. Lucknow (06.02. 2010-05.02.2013)
3. **Pool Officer (SRA) –** Department of Radiotherapy, Sanjay Gandhi Post Graduate Institute of Medical Sciences August 2007 to February 2010
4. **SENIOR RESIDENT** Department of Radiotherapy, SGPGIMS. Lucknow. July 2004-June 2007

National Level Awards:

1. **SMT. PARWATI DEVI GOLD MEDAL (Best paper award)** at 28th Annual Conference of Association of Radiation Oncologists of India ,December 2006, BHU, Varanasi
2. **Dr. G.C. PANT (Best paper award)** at 30th Annual Conference of Association of Radiation Oncologists of India, December 2008, Mumbai

State Level Awards:

1. **Best paper award** at 19th UP Chapter Association of Radiation Oncologists of India ,November 2006, Allahabad

Fellowships

1. Awarded **Neal & Joseph Fellowship for the Year 2005-06** By Association Of Radiation Oncologists of India.(completed at AIIMS ,New Delhi in July 2007)
2. Awarded **GC Pant Fellowship for the Year 2008-09** By Association Of Radiation Oncologists of India. .(completed at AIIMS ,New Delhi in July 2009)
3. Awarded **AROI Fellowship (>40 years)for the Year 2014** By Association Of Radiation Oncologists of India at Imphal,Manipur.(completed at Fortis, Gurgaon in May 2016)
4. Advanced training in IMRT/VMAT/IGRT techniques at University medical centre Mannheim , Germany in November 2013

Area of Interest : Breast Cancer, Head and Neck Cancer, Brain Tumors, Esophageal Cancers and Cancer Support

PAPERS PUBLISHED

1. **Khurana R, Verma M , Swain PK, Bhatia VL, Dabadhav P, Behari S, Banerji D, Kumar S.** An audit of

- conventional radiotherapy in the management of pituitary adenoma , J Radiat Cancer Res 2016; 7:117-21.
2. **Khurana R**, Deswal S, Chandraprakash. cisplatin induced renal insufficiency measured by glomerular filtration rate with ^{99m}Tc- DTPA and by using serum creatinine based formulae : A prospective study Journal of Clinical and Diagnostic Research 2016; 10(12): XC05-XC07
 3. **Rohini Khurana**, Akshyaya Pradhan, Sandip Barik, Kamal Sahni, Variation In Mean Heart Dose By Treatment Plan Optimization During Radiotherapy For Left Sided Breast Cancer. International Journal of Scientific and Research Publications, 2016; 6: 18-26
 4. Akshyaya Pradhan, **Rohini Khurana**, Abhishek Singh, Vijayant Devenraj, Jyoti Bajpai, M. L. B. Bhatt, Sanjay Mehrotra, Study On The Role Of NT-pro-BNP (Brain Natriuretic Peptide) And Troponin I In The Detection Of Anthracycline Induced Cardiotoxicity. International Journal of Scientific and Research Publications, 2016; 6(6): 749-757
 5. Mishra R, **Khurana R**, Mishra H, Rastogi M, Hadi R. .Retrospective analysis of efficacy and toxicity of hypofractionated radiotherapy in breast carcinoma. Journal of Clinical and Diagnostic Research. 2016 Aug, Vol- 10(8): XC01-XC03
 6. Nanda SS, **Khurana R**. Dose escalation with fractionated radiosurgery in oligometastasis brain with controlled extracranial disease: improved progression free survival outcome.JMSCR 2016;04:10033-8 (impact factor 5.2)
 7. **Khurana R**, Mishra H. , Malhotra K.P. Carcinoma of the oesophagus, with multiple cutaneous metastases, BMJ Case Rep Published Online: casereports.bmj.com/9.9.2015/bcr-2015-211653
 8. Azam M, **Khurana R**, Gupta A. An unusual case of pleomorphic rhabdomyosarcoma of shoulder in an adult patient. Clin Cancer Investig J 2016;5:274-7.
 9. **Khurana R**, Azam M. An unusual case of solitary parotid metastasis from early stage breast carcinoma. Clin Cancer Investig J 2016;5:250-2.
 10. Madhup Rastogi, **Rohini Khurana**, Role of Benzydamine Hydrochloride in the prevention of Oral mucositis in head and neck cancer patients treated with radiotherapy (>50Gy) with or without Chemotherapy, Support Care Cancer 2017; 25(5): 1439-43.
 11. **Khurana R**, Mishra H, Rastogi M et al. Unusual Presentation and Survival of Malignant Melanoma in

12. Shaleen Kumar, Kislay Dimri, **Rohini Khurana**, A randomised trial of radiotherapy compared with cisplatin chemo-radiotherapy in patients with unresectable squamous cell cancer of the esophagus Radiotherapy and Oncology, May 2007 Volume 83, Issue 2, Pages 139–147
13. Madhup Rastogi , Shantanu Sapru , Pooja Gupta , Ajeet Kumar Gandhi , Surendra P. Mishra Anoop K. Srivastava, **Rohini Khurana**, Prospective evaluation of Intensity Modulated Radiation Therapy with Simultaneous Integrated Boost (IMRT-SIB) in head and neck squamous cell carcinoma in patients not suitable for chemo-radiotherapy. Oral Oncology 67 (2017) 10–16.
14. Harikesh B Singh, Ajeet Kumar Gandhi, Shantanu Sapru, **Rohini Khurana**. Study of Volumetric Modulated Arc Therapy (VMAT) vs 3-dimensional conformal radiotherapy (3D-CRT) in Post-operative High-grade Glioma: A dosimetric comparison. Iranian Journal of Medical Physics. 2019
15. Sambit Swarup Nanda, Ajeet Kumar Gandhi, Madhup Rastogi, **Rohini Khurana**. Evaluation of XRCC1 Gene Polymorphism as a Biomarker in Head and Neck Cancer Patients Undergoing Chemoradiation Therapy. Int J Radiation Oncol Biol Phys, Vol. 101, No. 3, pp. 593e601, 2018.
16. Mohammad Azam, Satyajeet Rath, **Rohini Khurana**, Saumya Shukla, Ruhi Parween. Rare case of subependymal giant cell astrocytoma without clinical features of tuberous sclerosis: Case report and literature review. Prec. Radiat. Oncol. 2017;1:108–112.
17. Lal P, Bajpai R, **Khurana R** et al Changes in salivary flow rates in head and neck cancer after chemoradiotherapy J Cancer Res Ther , March 2010; Volume 6 458-462
18. Kumar S, Dimri K, **Khurana R** et al .A randomized trial of radiotherapy compared with cisplatin chemo-radiotherapy in patients with unresectable squamous cell cancer of the esophagus. Radiotherapy and Oncology (May 2007); Volume 83 Issue 2: 139-147.
19. **Khurana R** , Dimri K , Lal P, et al Factors influencing the development of ulcers and strictures in carcinoma of the esophagus treated with radiotherapy with or without concurrent chemotherapy J Cancer Res Ther , March 2007; Volume 3 Issue 1:2-7.

Abstracts Published in Indexed Journals:-

1. H. Mishra, **R.Khurana**, R. Mishra et al An audit of colorectal carcinoma at a tertiary cancer Centre. JCRT s1- 2015-volume11 S30 (Impact Factor 0.094)
2. R. Mishra, I. Jaiswal, **R Khurana**, S. Sapru, R. Hadi, M.Rastogi, K.Sahni. Audit of gliomas at a tertiary centre: a retrospective analysis. JCRT sup 1-2015-volume11 S8 (Impact Factor 0.094)
3. **Rohini Khurana**, Ritusha Mishra, Madhup Rastogi, Rahat Hadi, MLB Bhatt. Retrospective analysis of efficacy and toxicity of hypofractionated radiotherapy in breast cancer. Abstract published in JCRT (s1) 2014-volume10 S3 (Impact Factor 0.094)
4. A. Agrawal, P. Gupta, **R. Khurana**, R. Hadi, S.P.Mishra Rectal dose during HDR brachytherapy for cervical cancer: retractor or gauze packing alone? JCRT suppl 1-2015-volume1 (Impact Factor 0.094)
5. I. Jaiswal, **R. Khurana**, M. Rastogi, K. Sahni, R. Hadi, S. Sapru, S.P. Mishra Evaluation of efficacy and toxicity in head and neck cancer patients treated with volumetric intensity modulated arc therapy versus conventional intensity modulated radiation therapy. JCRT suppl 1-2015-volume11 S64 (Impact Factor 0.094)
6. **Rohini Khurana**, Vijaylakshmi Bhatia, Nisha R. S., Preeti Dabadghav, Sanjay Behari, Shaleen Kumar. An audit of conventional radiotherapy in the management of pituitary adenoma: abstract published in J Cancer Res Ther supplement 1,December 2008 ; volume 4:S2
7. Isha Jaiswal, **Rohini Khurana**, Madhup Rastogi, M.L.B. Bhatt, Mishra S. P. Implementation of Lung SBRT treatment using four dimensional cone beam CT verification for target mapping; apreliminary

evaluation. Abstract published in JCRT(s1) 2014-volume11 S39 (Impact Factor 0.094)

8. Pooja Gupta, Shajah, **Rohini Khurana**, Madhup Rastogi, M.L.B. Bhatt, Mishra S. P. Cranio-spinal irradiation in medulloblastoma with three-isocenter IMRT planning : An analysis based on dosimetric indices. Abstract published in JCRT(s1) 2014-volume10 S65 (Impact Factor 0.094)

9. A. Agrawal, P. Gupta, M. Rastogi, **R. Khurana**, R. Hadi, S.P.Mishra. Rectal dose during HDR brachytherapy for cervical cancer ; Retractor or gauze packing alone? Abstract published in JCRT(s1) 2014-volume11 S46 (Impact Factor 0.094)

10. P. Gupta, R. Hadi, M.Azam, S.Rath, M.Ali, **R.Khurana**, M.Rastogi, A.Srivastava. Dosimetric analysis of target volume coverage in point based intracavitary brachytherapy in carcinoma cervix; A single institute study. Abstract published in JCRT(s1) 2014-volume11 S48 (Impact Factor 0.094)

11. S.S.Nanda, K.Sahni, M. Rastogi, **R. Khurana**, R. Hadi, S.P. Mishra. Evaluation of XRCC 1 gene polymorphism as a biomarker in head and neck cancer patient undergoing chemoradiotherapy. Abstract published in JCRT(s1) 2014-volume11 S63 (Impact Factor 0.094)

12. P.Gupta, M. Rastogi, K. Sahni, **R. Khurana**, R. Hadi, S.P. Mishra, S. Sapru, A. Srivastava. Study of toxicity assessment of intensity modulated radiation therapy with simultaneously integrated boost in head and neck squamous cell carcinoma. Abstract published in JCRT(s1) 2014-volume11 S65 (Impact Factor 0.094)

13. S. Rath, **R. Khurana**, S. Sapru, R. Hadi, M. Rastogi, K. Sahni. An audit of adjuvant radiotherapy in post-operative squamous cell carcinoma of oral cavity; a single institutional experience. Abstract published in JCRT (s1) 2014-volume11 S83 (Impact Factor 0.094)

SN	Topics of Thesis Guided	COURSE	YEAR
	<p><u>Chief Investigator for 2 M.D. Thesis</u></p> <p>1. To evaluate the efficacy and toxicity of Intensity Modulated Radiotherapy (IMRT) with Simultaneous Integrated Boost (SIB) technique for head and neck squamous cell carcinomas (HNSCC)</p> <p>2. Study of Purely Accelerated 6 Fraction Per Week Radiotherapy in Post-Operative Oral Cavity Squamous cell Carcinoma.</p> <p><u>Co-investigator for seven MD thesis</u></p> <p>1. Evaluation of Efficacy & Toxicity in Head and Neck Cancer Patients Treated with Volumetric Intensity Modulated Arc Therapy (VMAT) vs. Conventional Intensity Modulated Radiation Therapy (IMRT)</p> <p>2. Evaluation of XRCC 1 GENE Expression as a Biomarker in head and Neck Cancer Patient Undergoing Chemo Radiotherapy</p> <p>3. Study of Toxicity Assessment of Intensity Modulated Radiation Therapy (IMRT) with Simultaneously Integrated Boost (SIB) Technique for Head and Neck Squamous Cell Carcinoma (HNSCC)</p> <p>4. Role of Volumetric Modulated Arc-based Intensity Modulated Therapy (VMAT) with concurrent chemotherapy in muscle invasive bladder cancer as an organ preservation modality</p> <p>5. Phase I/II study of toxicity of intensity modulated Radiotherapy (IMRT) in post-operative carcinoma cervix.</p> <p>6. Dosimetric Comparing of volumetric modulated Arc Therapy (VMAT) and 3-Dimensional Conformal Radiotherapy (3D-CRT) in High Grade Glioma.</p> <p>7. Dosimetric Comparing of volumetric modulated Arc Therapy (VMAT) and 3-Dimensional Conformal Radiotherapy (3D-CRT) in Cervical Cancer.</p>	<p>MD</p> <p>Radiotherapy MD</p> <p>Radiotherapy</p> <p>MD</p> <p>Radiotherapy</p> <p>MD</p> <p>Radiotherapy</p> <p>MD</p> <p>Radiotherapy</p> <p>MD</p> <p>Radiotherapy</p> <p>MD</p> <p>Radiotherapy</p>	<p>2014</p> <p>2015</p> <p>2013</p> <p>2013</p> <p>2013</p> <p>2013</p> <p>2015</p> <p>2015</p> <p>2014</p>

Invited Lectures / Orations/Chairperson :-

1. Invited lecture on challenges in management of bed ridden patient in symposium on symptom management in palliative cancer care at SGPGI on 13th December 2014
2. Invited lecture on management of carcinoma rectum in scientific symposium organized by department of gastrosurgery, RMLIMS, on 06.08.2015
3. Panelist in symposium on management of carcinoma breast on 6th October 2015
4. Invited public lecture on treatment of carcinoma cervix at Vishveshvaraiyaa hall, Lucknow by Cancer aid society on 4th February 2016

a) Papers presented

1. Attended and presented a paper on Dose escalation with stereotactic radiotherapy in multiple brain metastases at ISNOCON 2015 ON 1ST AND 2ND November 2014 at Lucknow.
2. Presented excellent proffered paper on Retrospective analysis of efficacy and toxicity of hypofractionated radiotherapy in breast cancer AROICON 2014, Imphal.
3. Attended Basic course workshop in **Medical Education Technology** organized by MEU on 30th June – 1st May, 2015 at KGMU, Lucknow.
4. Attended and invited as speaker on challenges in management of bedridden patients at symposium in management of palliative care at SGPGI Lucknow.
5. Attended CME on update on bioethics on 31st May 2014 at SGPGI.
6. Attended and panelist in symposium on trastuzumab for management of HER+ breast cancer.
7. Attended a workshop on clinical audits December 2014 at SGPGIMS.

Projects:

1. intramural project titled: Assessment of Cisplatin associated nephrotoxicity in cancer patient

Training

1. Mannheim, Germany for VMAT IMRT
2. Basic course workshop in medical education technologies, april30-May 2, KGMU

Medical Social Work :-

1. Nodal officer of Ram Manohar Lohia Cancer Support Group

The needs of cancer patient are not only limited to medical treatment. The patient may need non-medical support and care for their physical, emotional and cosmetic rehabilitation. We follow the treatment to recovery programme where survivors are invaluable and the purpose of the cancer rehabilitation clinic is to contribute towards this cause.

Trained volunteers including former cancer patient and health professionals conduct the clinic. Free counseling is offered and telephone helplines are available for patient and families to receive guidance and support during difficult times. At present the clinic has 3 programmes-

The Breast cancer support group

1. Patients along with one relative are asked to visit this counselling session on 4th to 7th day of surgery while still admitted (at a given time in a week preferably a group to be addressed)
2. Care of drain is explained, Patients are taught post-surgical exercises
3. A kit is given containing a cloth bag to carry drain, soft ball for exercise, a scarf, small bottle of coconut oil, etc.
4. Information leaflet regarding exercise, chemotherapy, radiotherapy, breast self examination

Contact numbers of breast prosthesis, wig makers, compression bandage .Help is provided to fit temporary breast forms and to acquire permanent external prosthesis.

The Head and neck cancer support group

1. Mouth opening exercise to be explained
2. Diet modification
3. Maintenance of oral hygiene
4. Device for assisting in mouth opening
5. For those who undergo laryngectomy, patients are given guidance in speech therapy, stoma covers care provided.
6. patient are given guidance in speech therapy

Stoma covers and other appliances are available.

The Ostomy Support Group

For those who undergo colostomy, lieostomy or urostomy. Ostomy bags and other products are provided for, with delivery within a week. An ostomate with a similar problem to could be contacted through an appointment by us.

All the programmes are designed to offer information, guidance and moral support to the patient and their families to deal with adjuvant therapy and to resume normal life after surgery

2. Women Cancer Screening Clinic

Every Saturday free clinic is being run at department of RMLIMS to detect breast cancer, cervical cancer as early as possible by clinical examination, radiological investigations, Pap smear examination etc.

3. Public awareness lectures for cancer screening and treatment are done on 4th February (world cancer day) each year