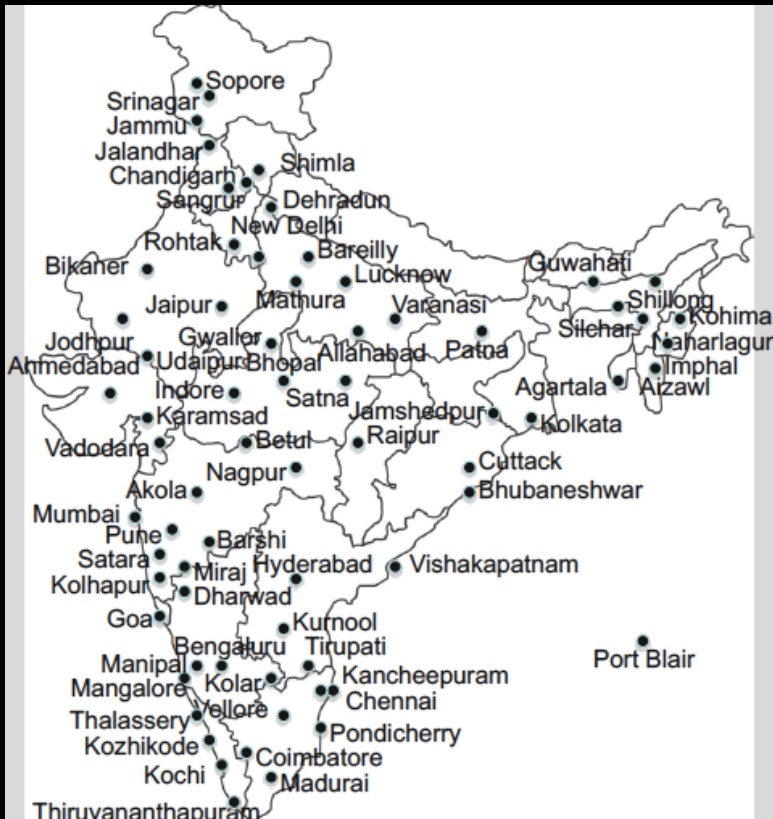



COVID-19, National Cancer Grid and Tata Memorial Centre response



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Disclosures

I have no financial relationships with commercial entities producing healthcare related products and/or services

Objectives

- Institutional coordination, readiness and response to COVID-19 pandemic
 - Patient-related
 - Staff related
 - Hospital preparedness
 - Managing national lockdown
 - Supply chain disruptions
- Key principles of response

Consequences of COVID-19

- Challenges for patients
- Shortage of hospital personnel – quarantine, high-risk, lockdown
- Shortage of supplies – masks, PPEs
- Shortage of beds, ventilators

- Widespread fear amongst general public, patients and HCW

Need to continue
cancer treatment
for patients

Need to ensure
safety of patients
and employees



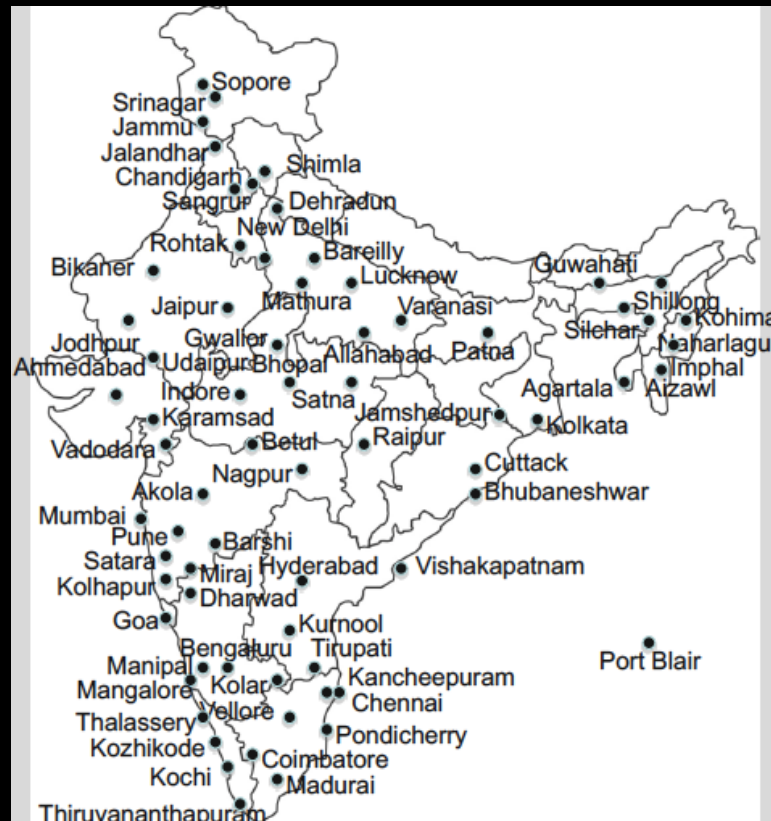
Cancer treatment during COVID-19

- Individualized per institution and patient
- Cannot be prescriptive

Principles

- What stage of the pandemic?
 - Likely trajectory
- Infrastructure available at hospital
- Risk of COVID-19 to patient vs risk of suboptimal treatment for cancer

National Cancer Grid Guidelines for delivery of cancer care in COVID-19



General Principles

- Reducing the risk to patients
- Reducing the healthcare resource utilization
- Identification of suspected cases
- Reducing the risk to HCP

General Principles

- Infection control measures
 - Hand Hygiene
 - Social distancing
 - Cough etiquette
- Avoid overcrowding
 - Rescheduling follow ups
 - Teleconsults
 - Limiting the number of visits

- Screening for fever, sore throat and other symptoms, history of travel and contact – patient and relatives
- Redirecting patients to avoid mixing with the rest
- Calling only relatives for medicine refill/arranging delivery
- Telephonic follow up for compliance
- Rapid consults in OPD area



Staff



- Identification of those at risk
- Staff sparing
- Work from home – data entry, tele-consults
- Multi-tasking
- Training
 - Infection control measures
 - Appropriate Use of masks, gloves and PPE
 - Waste disposal

Cancer treatment during COVID-19

- Individualized per institution and patient

Principles

- What stage of the pandemic?
 - Likely trajectory
- Infrastructure available at hospital
- Risk of COVID-19 to patient vs risk of suboptimal treatment for cancer

Lower Priority

Higher Priority

Imminent risk of early mortality

Acute leukaemias, aggressive lymphomas, metastatic germ cell tumours

Potential high morbidity and/or impaired quality of life

Radiotherapy for spinal cord compression or opioid-refractory pain crisis owing to bone metastases

Definitive curative treatments

Concurrent chemoradiotherapy for head and neck, cervical, or anal cancers

Neoadjuvant or adjuvant indications with substantial benefit

Adjuvant chemotherapy for stage III colon cancer, chemotherapy and/or radiotherapy for high-risk breast cancer

Neoadjuvant or adjuvant indications with modest survival benefit

Neoadjuvant or adjuvant chemotherapy for bladder cancer, or adjuvant chemotherapy for NSCLC

Palliative indications with substantial survival benefit

Immunotherapy for melanoma, systemic therapy for metastatic breast cancer or metastatic colorectal cancer

Palliative indications with modest survival benefit and/or major symptom control

Palliative chemotherapy for upper gastrointestinal cancers, radiotherapy for bone metastasis unresponsive to other treatments

Palliative indications without benefits in terms of overall survival or major symptom control

Second-line and third-line palliative chemotherapy for many solid tumours

Alternative treatments exist or delay does not affect outcomes

Bone metastases manageable with medications, prostate cancer appropriate for active surveillance

Surgery

- Emergency procedures must be given priority
- Cancer surgery not considered elective
- Careful case selection
- Surgeries for cancers with favourable long term outcomes with early treatment should be given priority
- Extensive surgeries to be deferred if possible (risk:benefit)

Radiation

- Appointments of patients on treatment staggered
- Clinical review while they are awaiting treatment or telephonically to reduce footfalls
- On-board imaging minimized to reduce Rx time.
- Hypo-fractionated schedules in many clinical scenarios (breast, prostate, lung cancer)
- Palliative radiotherapy treatment for symptomatic relief can be delivered in single fraction or weekly once regimens.
- Category 1 – aggressive; 2 – less aggressive

Prioritization

1. Radical, curative intent RT for category 1 tumours and patients who have already started
2. Urgent palliative RT: e.g. patients with malignant spinal cord compression with salvageable neurological function, SVCO.
3. Radical RT for category 2 tumours; adjuvant radiotherapy for aggressive tumour biology or gross residual disease.
4. Palliative RT, if that would reduce the need for further interventions.
5. Adjuvant RT, if R0 resection and there is a $\leq 20\%$ risk of local recurrence at 10 years.

Chemotherapy

- Use of alternative less myelosuppressive chemotherapy – (single agent/ fewer drugs)
- Lesser frequency
- Consider switching to oral options
- Abbreviated dose and number of cycles
- Omitting maintenance in solid tumours and B-NHL
- Use of GCSF
- Limiting the dose and duration of steroids

Prioritization

1. Curative intent therapy in hematological malignancies
2. Adjuvant chemotherapy if margin of benefit is high (tolerance needs to be considered too)
3. Disease with high- probability of long term disease control
4. Metastatic cancers with high symptom burden and benefit in prolongation of median survival >1 year
5. Adjuvant chemotherapy with marginal benefit
6. Stem cell transplant

The COVID-19 pandemic and the Tata Memorial Centre response

The Tata Memorial Centre COVID-19 Working Group

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The Tata Memorial Centre COVID-19 Working Group comprises the following:

C S Pramesh, Sudeep Gupta, Sarbani Ghosh Laskar, Manju Sengar, Girish Chinnaswamy, Navin Khattry, Sarita Khobrekar, Sandeep Sawakare, Sumedha Patankar, Vinit Samant, Anil N Sathe, Swapna Joshi, Jigeeshu V Divatia, Sandeep Tandon, Sanjay Biswas, Shraddha Patkar, Nishu Singh Goel, Johnson Lukose, Anand Tiwari, Rajlaxmi Naik, Humayun Jafri, Shalini Jatia, Benny George, Rajendra A Badwe.

The COVID-19 Pandemic and the Tata Memorial Centre Response

The COVID-19 pandemic hit most healthcare providers globally in a way they did not anticipate. In retrospect, this is surprising because the experiences of the Chinese healthcare system should have warned us. However, most assumed that it would never reach global pandemic proportions, and therefore were taken by surprise. The rapidity of transmission (fueled by free international borders) left countries and healthcare systems struggling to cope with

and is a grant-in-aid organization under the Department of Atomic Energy, Government of India. Based in Mumbai, the centre provides treatment and opinions to over 75000 new patients annually, with over 85% of patients hailing from outside Mumbai, and over 60% outside the state of Maharashtra. Consequently, most patients undergoing treatment at the hospital lack strong social and family support in Mumbai. TMC is a specialized hospital treating only patients with cancer. Over 60% of our patients are treated either completely free or at highly subsidized cost.

The TMC response

- Employee directed initiatives
 - Open, transparent communication
 - High-risk employees
 - Staff sparing
- Patient directed initiatives
 - Crowd mitigation strategies
 - Screening stations
 - Tele-consults

The TMC response

- Hospital preparedness
 - SOPs for all COVID-19 related activities
 - Fever Clinic
 - Isolation ward
 - COVID-19 testing
- Handling the national lockdown
 - Staff transport
 - Patients transport, food
 - Hospital hotel – patients, staff

CORRESPONDENCE

COVID-19 NOTES

To rapidly communicate short reports of innovative responses to Covid-19 around the world, along with a range of current thinking on policy and strategy relevant to the pandemic, the Journal has initiated the Covid-19 Notes series.

Cancer Management in India during Covid-19

The Covid-19 pandemic has created major dilemmas for providers in all areas of health care delivery, including cancer centers. The rapid spread of SARS-CoV-2, combined with an unprecedented, near-complete global lockdown, has laid bare the weaknesses in health systems. Lack of adequate health care infrastructure and human resources, serious supply-chain disruptions, and widespread fear among patients and health care workers have resulted in patient care and safety being compromised. Throughout the world, health systems

Table 1. Summary of Covid-19 Measures Taken at Tata Memorial Centre.

Administration

- Creation of a core Covid-19 action group
- Daily debriefings and formulation of action plans

Cancer care

- Avoidance of complex surgeries likely to require multiple blood transfusions and prolonged intensive care unit stays
- Use of hypofractionated regimens whenever possible

Cancer care

Avoidance of complex surgeries likely to require multiple blood transfusions and prolonged intensive care unit stays

Use of hypofractionated regimens whenever possible (e.g., for breast, prostate, and lung cancers); provision of palliative radiotherapy in a single fraction or weekly regimens

Reduced use of myelosuppressive systemic therapy; conversion to oral agents when feasible; deferral when magnitude of benefit is marginal

Patient-directed

Establishment of “screening camps” outside the hospital to reduce patient visits

Stringent restriction of relatives and friends in outpatient clinics and inpatient wards

Use of teleconsults as a substitute for routine follow-up visits

Administration

Creation of a core Covid-19 action group

Daily debriefings and formulation of action plans

Hospital preparedness

Establishment of standard operating procedures for cases of suspected or confirmed Covid-19 infection; use of simulation drills

Establishment of a fever clinic and creation of isolation wards

Employee-directed

Provision of paid leave for high-risk staff members (elderly people, people with multiple comorbidities or who are taking immunosuppressive agents, and pregnant people)

Rotation of staff to ensure a fallback option in case of mass quarantine

Provision of hospital buses to transport staff unable to reach work because of the transportation lockdown

Summary

- Preparedness is key
- Multipronged response
- Attempt to stay one step ahead
- Open transparent communication
- War-room concept
- Agility in decision making

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