

Short Communication

Cite this article: Lewis S, Gurram L, Velu U, and Sharan K. (2022) Triaging and adaptations of surveillance of cancer services in the COVID pandemic. *Journal of Radiotherapy in Practice* 21: 300–302. doi: [10.1017/S1460396920001004](https://doi.org/10.1017/S1460396920001004)

Received: 20 October 2020
Revised: 27 October 2020
Accepted: 27 October 2020
First published online: 26 November 2020


Keywords:

cancer; COVID 19; follow-up visits; low middle-income countries; telemedicine

Author for correspondence:

Dr Krishna Sharan, Professor, Department of Radiotherapy and Oncology, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, Karnataka, India-576104.
E-mail: tk.sharan@manipal.edu

Triaging and adaptations of surveillance of cancer services in the COVID pandemic

Shirley Lewis¹ , Lavanya Gurram², Umesh Velu¹ and Krishna Sharan¹

¹Department of Radiotherapy and Oncology, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, Karnataka, India and ²Department of Radiation Oncology, Tata Memorial Centre, HBNI, Mumbai, India

Abstract

Introduction: Coronavirus disease (COVID-19) has significantly challenged the access to cancer care and follow-up for a patient with cancer.

Methods: Based on published literature and our experiences, it is reasonable to presume that clinical examination and follow-up visits have been significantly curtailed worldwide in order to adhere to the new norms during the pandemic. Although telephonic and telemedicine consultations may help bridge a few gaps, completely dispensing with in-person consultation has its challenges, especially in low middle-income countries. Telephonic consultations could facilitate triaging of ambulatory cancer patients and allocation of face-to-face consultations for high priority patients.

Conclusions: We propose a telephonic consultation-based triaging approach for ambulatory cancer patients in order to identify those needing in-hospital consultations.

Introduction

The care of a patient commences with the first consultation and often continues into a lifelong therapeutic bond despite cure or disease progression.¹ Clinical examination is an essential component of disease evaluation, assessing clinical response and toxicity and complements imaging findings.² Minimisation of Coronavirus disease (COVID-19) infection risks necessitated cancellation or rescheduling of elective outpatient follow-ups. Moreover, redeployment of oncology staff to COVID-19 workflow has also contributed towards curtailment of cancer care.³ Although the pandemic demands attention, it cannot undermine the importance of the initial examination, patient communication, treatment review and follow-ups in a cancer care setting. The excessive focus on COVID-19, leading to a diminished quality of cancer management and sub-optimal cancer outcomes, is not desirable. Minimising interruptions to cancer treatment while safeguarding the well-being of patients and healthcare providers is paramount. With regard to radiation oncology, the RADS framework: Remote visits, and Avoidance, Deferment or Shortening of radiation therapy, initially proposed for prostate cancer, serves as a useful template to build upon for all disease sites.⁴

Importance of follow-up and novel adaptations

Surveillance following treatment for cancer aids in identifying early recurrence or a new primary, monitoring toxicity and addressing patient symptoms.⁵ It serves to monitor overall disease outcomes for a region and the quality of oncology services.⁶ Patients prefer regular follow-up with tests and have found them to be reassuring. Despite the robust ethos, proof of the concept of routine surveillance in the era of evidence-based medicine is weak.⁷ The worth of regular clinical follow-ups in all treated patients has been questioned for decades, especially in low middle-income countries (LMIC). In countries like India, with a large population, rising cancer incidence, inadequate infrastructure and poor doctor–patient ratio, maintaining regular follow-ups are a challenge. The meta-analysis by Jeffery et al. showed that there was no survival benefit with the intensification of follow-up in colorectal cancers following curative surgery, despite better salvage rates.⁸ The alternative options to a face-to-face clinical follow-up include telephonic structured interviews or questionnaires, personal digital assistant capture systems, follow-up with primary care physicians or general practitioners and follow-up by an allied healthcare professional.^{9,10} The use of these strategies have proven to be non-inferior in breast, prostate, lung and early endometrial cancers.^{11,12} Faithful et al. have reported the safety and feasibility of telephonic follow-up in patients undergoing radiotherapy for prostate cancer.¹³ Innovative approaches, like the use of WhatsApp messenger services have also been tried during this pandemic.¹⁴ Trials with family physician led follow-up have involved early-stage patients, indolent tumour diagnosis, and many have addressed the psychological issues rather than clinical outcomes.^{11–13}

© The Author(s), 2020. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Table 1. Categories for prioritisation of follow-up

| Category | Description | Solution |
|----------|--|--|
| A | Symptomatic with features suggestive of recurrence, progression or new primary with salvage options available or severe toxicity of treatment. | In-person visits |
| | Late-stage patients on palliative care | First follow-up in person if feasible. Encourage video recordings of patient with only patient caregiver visits. |
| B | Mildly symptomatic with features suggestive minor toxicity. | Telephonic consult. |
| | | Use photos or videoconferencing where feasible. |
| | | Liaison with primary care physicians. |
| C | Survivors. Previous follow-up disease controlled or evidence of cure. | Telephonic consult alone. |

Hurdles for cancer care follow-up in LMIC

Robust follow-up depends on accessibility, ease, patient understanding of the need for periodic assessments, trust and economic viability. The various challenges for follow-up are poor patient compliance due to financial constraints resulting from out-of-pocket spending, large rural populations having to travel long distances to access the cancer centre and busy outpatient clinics with few clinicians adding to the waiting time. High rates of illiteracy and lack of access to technology (smartphone, computers, internet access) curtails telemedicine consultations. The COVID-19 pandemic has reduced health seeking behaviour, leading to late clinical presentation and increased distress among patients.^{15,16} Early detection of residual or recurrent disease is missed due to reduced follow-up visits.

Modification of follow-up visits

Delaying or postponing all follow-up visits until the end of pandemic may lead to missing recurrences, late presentation of disease and risk of overburdening the system with the accumulation of visits. This is amplified in LMIC with lack of well-defined screening programmes and the collapse of primary healthcare by COVID-19. These are likely to impact survival and quality of life. In our opinion, telephonic follow-up assumes a middle path between no follow-up and physical follow-up. It offers the benefits of ease of access and reduced cost leading to increased compliance, while providing reassurance, guidance and timely intervention, in addition to the valuable capability of tracking the patient's status. Virtual visits with detailed history assisted with photographs or videoconferencing may enable the clinician to get a better picture. A study from India has shown video follow-up to be feasible in neuro-oncology practice.¹⁷ A telephonic consult would serve as a triage to decide on the need for examination and imaging tailored to patients' expectations and fears. Table 1 shows prioritisation of follow-up visits.

A simple telephone access is feasible for all. While during the pandemic, patients have welcomed this move, it could have psychosocial consequences for a few instilling a sense of abandonment while struggling with diagnosis and treatment. With increasing adoption, we can expect further refinements in the teleconsultation process over time. These include videoconferencing, development of a local directory of primary care physicians with access to Information Technology for sharing information and training nurses or dedicated clinical managers to conduct telephonic follow-ups. This strategy needs to be validated both within the hospital and out in the community and be developed so that it

is sustainable throughout the present pandemic and unexpected events in future.

We should continue to have in-person follow-ups and examination based on risk assessment and telephonic triage. In the words of William Osler "*Medicine is learned by the bedside and not in the classroom. See and then reason and compare and control. But see first*".¹⁸ In the long run, no technology can substitute a doctor's clinical acumen based on examination. Slow resumption of follow-up examinations should be considered with precautions in place.

Conclusion

Telephonic consultation could facilitate triaging of ambulatory cancer patients and enable allocation of face-to-face consultations for high priority patients.

Acknowledgements. None.

Conflict of Interest. None.

References

1. Trevino KM, Maciejewski PK, Epstein AS et al. The lasting impact of the therapeutic alliance: patient-oncologist alliance as a predictor of caregiver bereavement adjustment. *Cancer* 2015; 121: 3534–3542.
2. Rosenzweig MQ, Gardner D, Griffith B. The history and physical in cancer care: a primer for the oncology advanced practitioner. *J Adv Pract Oncol* 2014; 5: 262–268.
3. Al-Shamsi HO, Alhazzani W, Alhuraiji A et al. A practical approach to the management of cancer patients during the novel coronavirus disease 2019 (COVID-19) pandemic: an international collaborative group. *Oncologist* 2020; 25: e936–e945.
4. Zaorsky NG, Yu JB, McBride SM et al. Prostate cancer radiation therapy recommendations in response to COVID-19. *Adv Radiat Oncol* 2020; 5: 659–665.
5. Vargas GM, Sheffield KM, Parmar AD et al. Physician follow-up and observation of guidelines in the post treatment surveillance of colorectal cancer. *Surgery* 2013; 154: 244–255.
6. Swaminathan R, Rama R, Shanta V. Lack of active follow-up of cancer patients in Chennai, India: implications for population-based survival estimates. *Bull World Health Organ* 2008; 86: 509–515.
7. Shah M, Denlinger CS. Optimal post-treatment surveillance in cancer survivors: is more really better? *Oncology (Williston Park)* 2015; 29: 230–240.
8. Jeffery M, Hickey BE, Hider PN. Follow-up strategies for patients treated for non-metastatic colorectal cancer. *Cochrane Database Syst Rev* 2019; 9 (9): CD002200.
9. Schütze H, Chin M, Weller D et al. Patient, general practitioner and oncologist views regarding long-term cancer shared care. *Family Pract* 2018; 35: 323–329.

10. Cox K, Wilson E. Follow-up for people with cancer: nurse-led services and telephone interventions. *J Adv Nurs* 2003; 43: 51–61.
11. Dickinson R, Hall S, Sinclair JE et al. Using technology to deliver cancer follow-up: a systematic review. *BMC Cancer* 2014; 14: 311.
12. Mathew A, Agarwal J, Munshi A et al. A prospective study of telephonic contact and subsequent physical follow-up of radically treated lung cancer patients. *Indian J Cancer* 2017; 54: 241.
13. Faithfull S, Corner J, Meyer L et al. Evaluation of nurse-led follow up for patients undergoing pelvic radiotherapy. *Br J Cancer* 2001; 85: 1853–1864.
14. Gebbia V, Piazza D, Valerio MR et al. Patients with cancer and COVID-19: a Whatsapp messenger-based survey of patients' queries, needs, fears, and actions taken. *JCO Glob Oncol* 2020; 6: 722–729.
15. Maringe C, Spicer J, Morris M et al. The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis in England, UK: a national, population-based, modelling study. *Lancet Oncol* 2020; 21: 1023–1034.
16. Ballal D, Gulia S, Gulia A. The psychosocial implications on cancer patients: the hidden collateral of the war on coronavirus disease 2019. *Indian J Palliat Care* 2020; 26: 126–129.
17. Patil VM, Pande N, Chandrasekharan A et al. Shadow study: randomized comparison of clinic with video follow-up in glioma undergoing adjuvant temozolomide therapy. *CNS Oncol* 2018; 7: Cns14.
18. Stone MJ. The wisdom of Sir William Osler. *Am J Cardiol* 1995; 75: 269–276.