

Reply to the reviewers' comments

| Reviewer Number | Original comments of the reviewer | Reply by the author(s) | Changes done on page number and line number |
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| Reviewer 1 | <p>General Comments:</p> <p>The review is devoted to important and topical issues - the problems of organizing medical care for patients with bronchogenic carcinoma in COVID-19 conditions. The impossibility in some cases to postpone the treatment of patients with oncological pathology leads to the fact that both patients and medical personnel are at a high risk of COVID-19 infection. For patients with bronchogenic carcinoma, the risk of COVID-19 infection is of particular concern, both due to the similarity of clinical manifestations, and the likelihood of a sharp deterioration in the condition due to deterioration of the respiratory and cardiovascular comorbidities in patients. The author analyzed the results obtained by world clinics and summarized optimal strategies for organizing medical care and managing patients with bronchogenic carcinoma in COVID-19 conditions. The manuscript focuses on the need to prioritize when addressing the</p> | | |

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| | <p>following issues: prevention of infection of patients and medical staff, risk stratification for patients with bronchogenic carcinoma, the use of artificial intelligence in the analysis of images of pathological processes in the lungs, the choice of optimal treatment tactics for patients with an established diagnosis. The author of the manuscript notes the main problems faced by practical health care in providing medical care to cancer patients - the inability of healthcare stakeholders to adequately streamline ample resources for patients with cancer and a lack of resources, which have been seriously reduced due to their redistribution in favor of patients with COVID-19. The material of the review is presented consistently and logically. Clinical findings and features of COVID-19 imaging on CT scan in patients with bronchopulmonary manifestations of COVID-19 and patients with bronchogenic carcinoma are detailed. The author gives a classification of priorities in the visualization of bronchodilatory carcinoma, depending on the risks of disease progression, and fully and comprehensively discusses various approaches to the timing and methods of treating patients in different world clinics.</p> | <p>-</p> | |
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| | <p>The manuscript is written in good English. The information given in the manuscript can be used in the practice of both oncologists and doctors involved in the diagnosis and treatment of patients with new coronavirus infections.</p> | | |
| | <p>Specific Comments:</p> <p>1. It is possible that in some sections of the manuscript there is repetitive material, similar in content and meaning.</p> <p>2. Section: Management of COVID-19 patients. It seems not entirely logical in one section to provide information on the peculiarities of diagnosis and features of the management of patients with COVID-19.</p> | <p>1. Repetitive content has been removed as per reviewer's suggestion.</p> <p>2. The section has been deleted as per reviewer's suggestion. Further I have elaborated as below:</p> <p>Overlap of COVID-19 imaging findings and what it means for patients with bronchogenic carcinoma?</p> <p>Although consolidation and ground-glass opacification associated with COVID-19 related pulmonary syndrome tends to be more peripheral in location, the</p> | <p>Page 7, Page 8</p> |

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| | | <p>radiological changes can mimic treatment induced chemotherapy or radiotherapy and immunotherapy related pneumonitis in bronchogenic carcinoma patients. However, the latter tends to be more confluent and perihilar in location. ^[17] In situations where clinicians encounter overlap in imaging findings, evaluation of such patients by a multidisciplinary team consisting of oncologists and radiologists should be undertaken with due consideration given for RT-PCR testing. CT pulmonary angiography represents a valuable imaging investigation for diagnosing pulmonary thromboembolism and for planning further management strategies in patients with COVID-19 and lung cancer related</p> | |
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| | | <p>complications. ^[18] Although the current guidelines do not recommend imaging as the first line investigation for screening of COVID-19 related pneumonia, most countries have adopted diagnostic imaging as an adjunct tool for follow-up of disease progression in these patients.</p> <p>References:</p> <p>17. Rogiers A, Pires da Silva I, Tentori C, et al. Clinical impact of COVID-19 on patients with cancer treated with immune checkpoint inhibition. <i>J Immunother Cancer</i>. 2021;9(1):e001931. doi:10.1136/jitc-2020-001931 [PMID: 33468556]</p> <p>18. Lax SF, Skok K, Zechner P, et al. Pulmonary Arterial Thrombosis in COVID-19 With Fatal Outcome: Results From a Prospective, Single-Center, Clinicopathologic Case Series. <i>Ann Intern Med</i>. 2020;173(5):350-361. doi:10.7326/M20-2566 [PMID:</p> | Page 30, Page 31 |
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| | <p>3. The author provides evidence that cancer patients are more prone to lesions of covid-19. However, it is quite possible that the higher infection rate is due to the need to visit medical institutions, especially the CT scan of the chest, which significantly increases the risk of contact with infected patients and medical personnel.</p> | <p>32422076]</p> <p>3. In the light of the current COVID-19 pandemic, low-dose computed tomography of chest which was traditionally performed for bronchogenic carcinoma screening should be rescheduled especially in patients with underlying cardiopulmonary abnormalities which can put them at increased risks for mortality from COVID-19 pneumonia. Additionally, higher infection rates of COVID-19 in patients with bronchogenic carcinoma is partly attributed to the need to visit medical institutions, especially for performing diagnostic chest imaging, which significantly increases the risk of contact with infected patients and medical</p> | <p>Page 25</p> |
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| | <p>4. Unfortunately, the author practically does not touch upon the situation when, in connection with CT diagnostics of covid-19, the number of cases of detection of asymptomatic focal changes in the lungs has significantly increased.</p> | <p>personnel alike.</p> <p>4. Incidental detection of bronchogenic carcinoma on computed tomography</p> <p>COVID-19 has caused considerable disruption in screening of bronchogenic carcinoma. During the pandemic, there were fewer new patients screened, more patients were apprehensive to visit the healthcare system, and an increased proportion of nodules suspicious for malignancy. However, there were rare instances encountered where incidental detection of bronchogenic carcinoma was made possible while performing routine chest computed tomography scans in patients with COVID-19 related pulmonary syndrome. The number of newly</p> | <p>Page 26</p> |
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| | | <p>detected cases with asymptomatic focal changes in lungs have significantly increased during the COVID-19 pandemic. Identifying bronchogenic carcinoma early on routine CT scans undertaken during the pandemic may provide a critical advantage to patients, especially those with heightened risk. This review can provide a framework for future decisions amid the ongoing COVID-19 pandemic.</p> | |
| Reviewer 2 | <p>General Comments:</p> <p>The manuscript is well written and very interesting.</p> | - | |
| Science Editor | <p>General Comments:</p> <p>1 Scientific quality: The manuscript describes a review of the imaging diagnosis of bronchogenic carcinoma during times of COVID-19 pandemic. The topic is within the scope of the WJCO. (1) Classification: Grade A, Grade B and Grade C; (2) Summary of the Peer-Review Report: The review is devoted to</p> | | |

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| | <p>important and topical issues - the problems of organizing medical care for patients with bronchogenic carcinoma in COVID-19 conditions. The manuscript is well written and very interesting. The questions raised by the reviewers should be answered, you can ignore the request to cite Islam's references; and (3) Format: There are no tables and figures. A total of 75 references are cited, including 75 references published in the last 3 years. There are no self-citations. 2 Language evaluation: Classification: Grade A and two Grades B. 3 Academic norms and rules: No academic misconduct was found in the Bing search. 4 Supplementary comments: This is an invited manuscript. No financial support was obtained for the study. The topic has not previously been published in the WJCO. Recommendation: Conditional acceptance.</p> | - | |
| | <p>Specific Comments:</p> <p>1. Authors should always cite references that are relevant to their study. Please check and remove any references that not relevant to this study.</p> <p>2. Please add table/figure to this review.</p> | <p>1. Only references relevant to the current study have been included as per science editor's suggestion.</p> <p>2. Figures and tables have been included. The following are the figure and table legends:</p> <p>Figure 1: Axial high-resolution</p> | <p>Page 39, Page 40</p> |

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| | | <p>computed tomography chest image demonstrating small cell carcinoma of the right lung with dystrophic calcifications.</p> <p>Figure 2: Axial high-resolution computed tomography chest image demonstrating central cavitary squamous cell carcinoma of the left lung. Note the metastatic lesion in the right lung.</p> <p>Figure 3: Axial high-resolution computed tomography chest image demonstrating large solid mass lesion with lobulated margins in a case of adenocarcinoma of the left lung.</p> <p>Figure 4: Axial high-resolution computed tomography image of chest demonstrating extensive</p> | |
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| | | <p>peripheral consolidation with numerous air bronchograms in a case of bronchoalveolar carcinoma of left lung.</p> <p>Figure 5: Axial high-resolution computed tomography chest image demonstrating mass lesion with surrounding ground glass component representing lepidic tumor growth in a case of adenocarcinoma of the right lung.</p> <p>Figure 6: Axial contrast-enhanced computed tomography image at the level of mediastinum demonstrating left hilar mass lesion with mediastinal invasion in a case of adenocarcinoma of the lung.</p> <p>Figure 7: Axial high-resolution computed tomography chest image</p> | |
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| | | <p>demonstrating primary bronchogenic carcinoma in the right lung with nodular and irregular interlobular septal thickening consistent with features of lymphangitis carcinomatosa.</p> <p>Figure 8: Axial contrast-enhanced computed tomography chest image demonstrating sign of short burrs and spinous processes of tumor margins in a case of squamous cell carcinoma of the right lung. Note the tapered extension of the lesion to pleura and adjacent pleural retraction.</p> <p>Figure 9: Axial high-resolution computed tomography chest image demonstrating peripheral cavitary squamous cell carcinoma of the left</p> | |
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| | | <p>lung. Note bilateral pleural effusions.</p> <p>Figure 10: Axial high-resolution computed tomography image of chest demonstrating mass lesion invading the oblique fissure of the right lung in a case of non-small cell lung carcinoma.</p> <p>Figure 11: Axial high-resolution computed tomography image of chest on day 5 after symptom onset demonstrating peripheral predominant consolidation pattern with areas of ground glass opacification in bilateral lower lobes in a patient with COVID-19 pneumonia.</p> <p>Figure 12: Axial high-resolution computed tomography image of chest on day 9 after symptom onset</p> | |
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| | | <p>demonstrating extensive consolidation predominantly in basal segments of bilateral lower lobes in a patient with COVID-19 related pulmonary syndrome. Note the bilateral pleural effusions which is an atypical finding in COVID-19.</p> <p>Table Legends:</p> <p>Table 1: Imaging priorities for bronchogenic carcinoma.</p> | |
| Company editor-in-chief | <p>General Comments:</p> <p>I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastrointestinal Oncology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors.</p> | - | |

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| | <p>Specific Comments:</p> <p>Before final acceptance, the author(s) must add a table/figure to the manuscript.</p> | <p>Figures and tables have been included in the Figures.ppt and Tables.docx files respectively.</p> <p>Figures 1-12</p> <p>Table 1</p> | <p>Page 39, Page 40</p> |
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