

### Differentiation of the Cs in lung cancer: Cancer vs. COVID

Urgent referrals for cancer in general and for lung cancer specifically have fallen during the COVID-19 pandemic that will likely lead to an increase in mortality and morbidity from lung cancer.

Overlapping symptoms means that the message to patients about early diagnosis is negated by the messages necessary to control the COVID pandemic.

As well as attempting to clarify the distinction between lung cancer and COVID-19, there needs to be easy access for patients to have their symptoms assessed if they think they might have lung cancer. Current arrangements in primary care and on the NHS 111 services are unlikely to help patients present early and do not specifically address the issue of overlapping symptoms.

The following is a suggested mitigation for the overlapping symptoms of cough, breathlessness and fatigue.

<b>A</b> <b>Features more suggestive of lung cancer</b>	<b>B</b> <b>Indeterminate Features</b>	<b>C</b> <b>Features more suggestive of COVID-19 infection</b>
<p>Overlapping symptoms are <i>unaccompanied</i> by COVID-19 symptoms:</p> <ul style="list-style-type: none"> <li>• Unexplained persistent cough</li> <li>• Unexplained persistent breathlessness</li> <li>• Fatigue of duration &gt;4 weeks</li> <li>• Persistent or recurrent chest infection</li> </ul> <p>May be <i>accompanied</i> by more specific red-flag symptoms of lung cancer including:</p> <ul style="list-style-type: none"> <li>• haemoptysis,</li> <li>• chest pain</li> <li>• weight loss</li> <li>• appetite loss</li> </ul> <p>And examination / other findings:</p> <ul style="list-style-type: none"> <li>• finger clubbing</li> </ul>	<p>Cough, unclear onset and persistence Breathlessness, unclear onset and persistence</p> <p>Unclear if any fever</p> <p>Flu-like symptoms lasting longer than 3 weeks.</p> <p>Feeling of chest tightness</p> <p>Difficulty in taking a deep breath</p> <p>Fatigue with duration &lt;4 weeks</p> <p>Recurrent chest infections with possible features of COVID-19</p> <p>No other clear red flag symptoms</p>	<p>Acute onset of:</p> <ul style="list-style-type: none"> <li>• Dry cough</li> <li>• Breathlessness</li> <li>• Fever</li> <li>• Myalgia</li> <li>• Loss of smell</li> <li>• Loss of taste</li> </ul> <p>Close contact with a confirmed/ highly suspected case of COVID-19</p> <p>Initial flu-like symptoms for 1-2 weeks with onset of respiratory symptoms from 7-10 days.</p>

<ul style="list-style-type: none"> <li>• supraclavicular lymphadenopathy or persistent cervical lymphadenopathy</li> <li>• chest signs consistent with lung cancer</li> <li>• thrombocytosis.</li> </ul> <p>Also consider risk factors for lung cancer:</p> <ul style="list-style-type: none"> <li>• smoking history</li> <li>• Age</li> <li>• Asbestos exposure</li> </ul>		
<p><b>Action:</b></p> <p>Arrange an urgent nasal/oropharyngeal swab for SARS-CoV-2 PCR and if negative:</p> <p>Refer for Chest X-ray or direct to lung cancer service for CT and triage on the National Optimal Lung Cancer Pathway</p> <p>If PCR positive, manage according to current COVID-19 guidelines and review after 2 weeks if hospital admission not required; consider 2 week wait referral in patient recovered from COVID-19 in whom lung cancer suspected</p> <p>If symptoms require urgent attention, consider emergency admission</p>	<p><b>Action:</b></p> <p>Arrange a nasal/oropharyngeal swab for SARS-CoV-2 PCR and if negative:</p> <p>Ask patient to self-isolate for 14 days and then review symptoms; if persistent refer as for <b>A</b></p> <p>If PCR positive, manage according to current COVID-19 guidelines and review after 2 weeks if not admitted to hospital</p> <p>If symptoms require urgent attention, consider emergency admission</p>	<p><b>Action:</b></p> <p>Manage patient according to the latest guidelines on the management of COVID-19.</p>

*Authors: Matthew Evison, Seamus Grundy, Simon Bailey, Richard Booton, Rajesh Shah, Neil Bayman, Fiona Blackhall, Colin Lindsay, Liz Toy, Matthew Hatton, Denis Talbot, Sanjay Papat, David Gilligan, Yvonne Summers, Douglas West, Andrew Wilcock, Richard Lee, David Baldwin and members of the Lung Cancer Clinical Expert Group.*