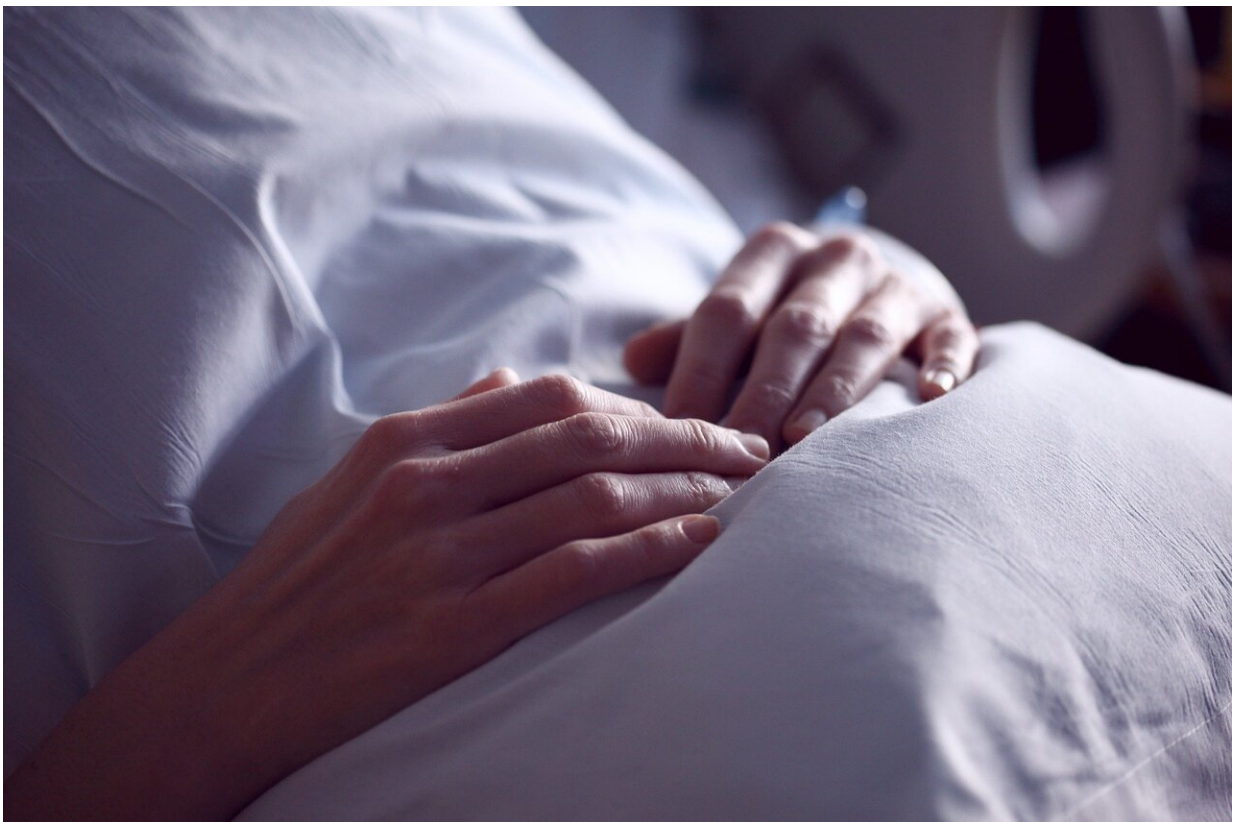


Study: Chemoradiotherapy patients more likely to have mixed infections and should start antibiotic therapy immediately

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Pulmonary malignancy is one of the most frequent and fatal cancers in older patients. Studies have shown that lung cancer patients have a high

incidence of lower respiratory tract infections. This is due to the fact that these patients usually have airway obstruction, sticky sputum that is not easy to cough up, destruction of mucosal surfaces, and treatment with radiotherapy and chemotherapy.

When most patients are found to have lung cancer, they have already developed distal metastasis and lost the chance of surgery, therefore, they usually choose to be treated with radiotherapy, [chemotherapy](#), and targeted drugs. Radiotherapy and chemotherapy may cause lung injury. Patients who develop pneumonia will delay radiotherapy, which is not conducive to the patient's prognosis and long-term survival.

Some patients may only require chemotherapy or may not be able to tolerate radiotherapy, while some patients may be treated with a combination of therapies. Such studies are necessary to clarify the severity and pathogenetic distribution of lower respiratory tract infections in both types of patients and to better focus on treatment.

Recently, researchers from China analyzed the clinical characteristics and pathogenic data of lower respiratory tract infections in advanced [lung cancer patients](#) with different treatment modalities, which were published in [Malignancy Spectrum](#).

The researchers found that compared to patients treated with just chemotherapy, those treated with [combination therapy](#) had more elevated inflammatory markers (calcitonin, blood sedimentation, and ultrasensitive C-reactive protein) and were more likely to have mixed infections after developing [lower respiratory tract infections](#).

Whereas patients treated with simple chemotherapy were more likely to have infections with viruses, those treated with combination therapy were more likely to have infections with gram-negative bacilli.

Therefore, it is best to focus on the use of antibiotics and ensure the coverage of pathogens in patients with advanced lung cancer in two different treatment modalities. Since infections are more severe in combination therapy patients, it is even more important to complete drug sensitivity testing as soon as possible for early intervention.

More information: Ruinan Guo et al, Clinical characteristics and pathogenic analysis of lower respiratory tract infections in advanced lung cancer patients with different treatment modalities, *Malignancy Spectrum* (2023). [DOI: 10.1002/msp2.17](https://doi.org/10.1002/msp2.17)

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