

## Ghon Complex

A Ghon complex is a lesion in the lungs that occurs from a primary tuberculosis infection. It refers to the combination of a caseating granuloma in the lungs (a Ghon focus) with lymphadenopathy of the ipsilateral hilar lymph nodes in that lung. When these findings are seen together, it is called a Ghon complex. It typically occurs after a primary infection and is often seen in children.



PLAY PICMONIC

### Calcified Focus of Infection

[Calcified-cow](#) [Focused-eye](#)

The first portion of a Ghon complex is the Ghon focus, a caseating granuloma of tuberculosis bacteria that will undergo calcification over time. This process is controlled by cell-mediated immunity. Eventually, when the Ghon complex becomes fibrosed and fully calcified, it can be identified radiographically and is known as a Ranke complex.

### Hilar Lymph Nodes

[Hilary-Duff](#) [with Lymph-limes](#)

To be considered a Ghon complex, the ipsilateral mediastinal hilar lymph nodes of the lung must be involved since these lymph nodes receive drainage from the Ghon focus.

### Primary Tuberculosis

[1st Degree](#) [batting at TB-TV](#)

The Ghon focus, which is part of the Ghon complex, occurs from a case of primary TB, where the bacillus causes an area of inflammation in the lung, leading to parenchymal caseating necrosis. Often, healing occurs and viable bacteria are housed, enclosed in a calcified shell, allowing the infection to be reactivated later.

### Typically in Children

[Child](#)

This disease occurs typically in children due to their immature immune system which makes them more vulnerable to tuberculosis and more likely to progress to active or disseminated forms of the disease, such as miliary tuberculosis or tuberculous meningitis.