

## Ghon Complex

Ghon's complex is a lesion in the lungs which 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, which is 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 fully calcified, it can be identified radiographically and is known as a Ranke complex.

### Hilar Lymph Nodes

#### Hitler hit by Lymph-lime

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 enclosed in a calcified shell, allowing the infection to be reactivated later.

### Typically in Children

#### Child

Children are non-immune hosts, so primary TB can progress to bacteremia and invade nearby lymph tissue. Furthermore, children may face the very serious complication known as miliary tuberculosis.