

Video transcript: Know your enemy – Fibrosis

Hi, welcome to another Museum of Human Disease “Know Your Enemy” video.

Here I have a museum specimen displaying fibrosis, or the build-up of thickened fibres of connective tissue. You would know it from any scars you have left behind after an injury to the skin. In some cases, when the injury is internal or ongoing, the build-up of scars can interfere with the normal functioning of the organ.

This specimen is the lung of a patient with cystic fibrosis, a genetic condition which damages tissues causing scar build-up. The resulting fibrosis interferes with the elasticity of the lung and makes breathing difficult, exacerbating other actions of this disease. This is pulmonary, lung gain, fibrosis.

In this case, the damage was caused by long term exposure to a dusty workplace causing silicosis, damaging the lung and creating this scar tissue, causing difficulty breathing. This is just like the outcome of the immune system’s response when a person survives a bout of COVID-19.

Pulmonary fibrosis here again, this time from exposure to asbestos, causing asbestosis. This time, the fibrosis is a response to excessive damage caused by alcohol consumption. The mix of pink scar and yellow fat causes a tawny colouration. In Greek, the colour was known as cirrhosis.

Finally, in this specimen the damage was caused by radiation used in the treatment of cancer. Smoke, dust, alcohol; these are your enemies.