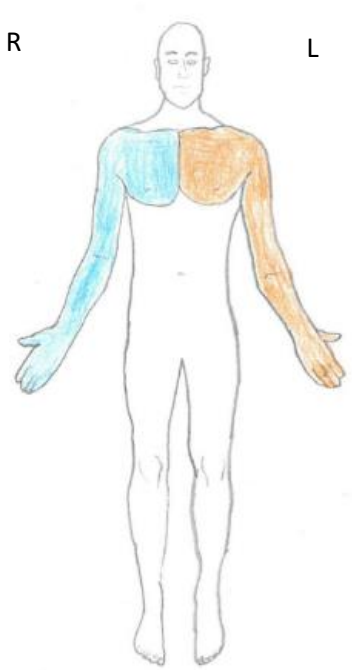
Syringomyelia model information sheet

The spinothalamic tract is responsible for transmission of information related to pain and temperature.

Pain and temperature deficit is described as a 'shawl-like' distribution in Syringomyelia.

The blue and orange areas in the drawing below represent lesioned fibers that are shown in the syringomyelia model.



Blue shading represents lesion of the left spinothalamic tract (i.e. the ascending fiber bundle in the left side of the spinal cord)

Orange shading represents lesion of the right spinothalamic tract (i.e. the ascending fiber bundle in the right side of the spinal cord)

The syringomyelia model shows two transverse sections of the spinal cord (Thoracic and Cervical).

A cavitation in the centre of the cervical spinal cord section has resulted in syringomyelia (represented by the glass marble in the model).

The lesioned area of the spinal cord includes the ventral white commissure where pain and temperature fibers from both sides of the body decussate.

These lesioned fibers are represented by the blue and orange wires. The wires have been bent to indicate that these fibers are damaged and unable to transmit information related to pain and temperature.

Ascending information entering the spinal cord below the lesion ascends in axons that are not disrupted (this is represented by the red wires in the model).

Syringomyelia causing damage to Spinothalamic tract

The model shows two transverse sections of the spinal cord (Thoracic and Cervical) with a cavitation at the centre of the cervical level.

Blue wire represents lesioned left spinothalamic tract (i.e. the ascending fiber bundle in the left side of the spinal cord; note that these neurons originated in the right upper limb and entered the right side of the spinal cord)

Orange wire represents lesioned right spinothalamic tract (i.e. the ascending fiber bundle in the right side of the spinal cord; note that these neurons originated in the left upper limb and entered the left side of the spinal)

Red wires represent undamaged left and right corticospinal tracts

Straight wires indicate undamaged tracts

Bent wires indicate damaged / lesioned tracts