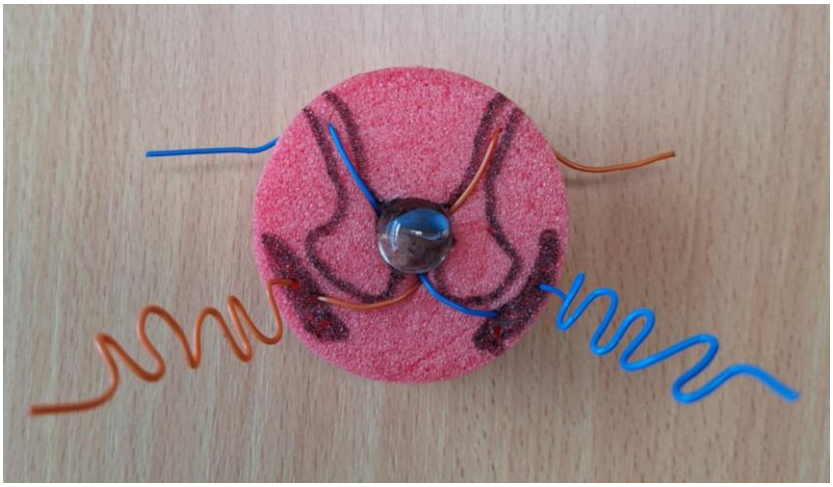
Syringomyelia model preparation

Step 1: Thread red wires through thoracic spinal cord segment to indicate left and right spinothalamic pathways at the thoracic level

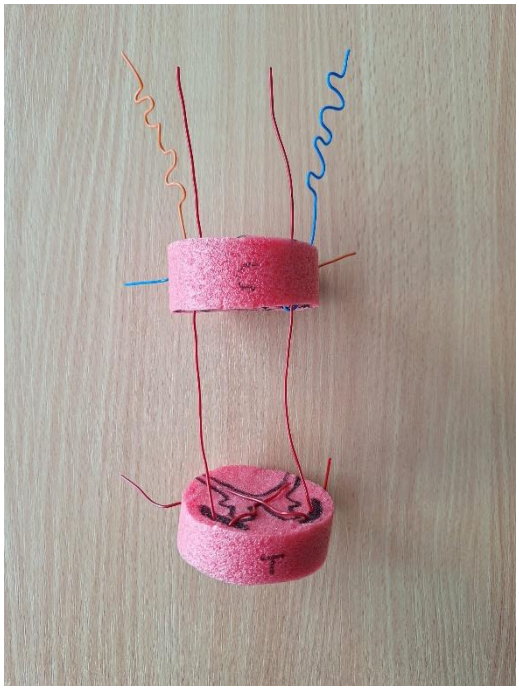
Thoracic segment

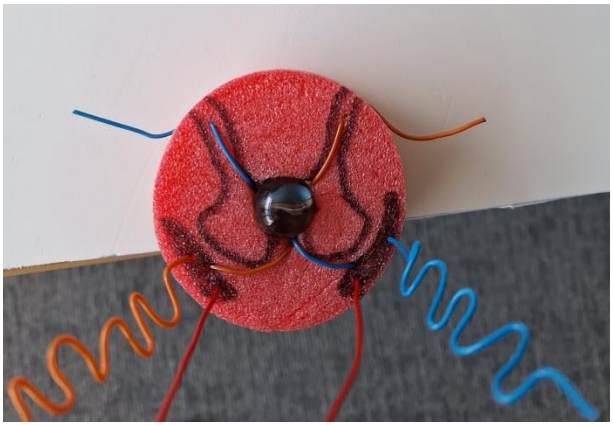
Step 2: Thread orange and blue wires through cervical spinal cord segment to indicate left and right spinothalamic pathways at the cervical level. Insert ball (e.g. small marble) into centre of segment. Bend wires to indicate lesioned tracts (straight wires indicate undamaged tracts; bent wires indicate damaged / lesioned tracts).

Cervical segment

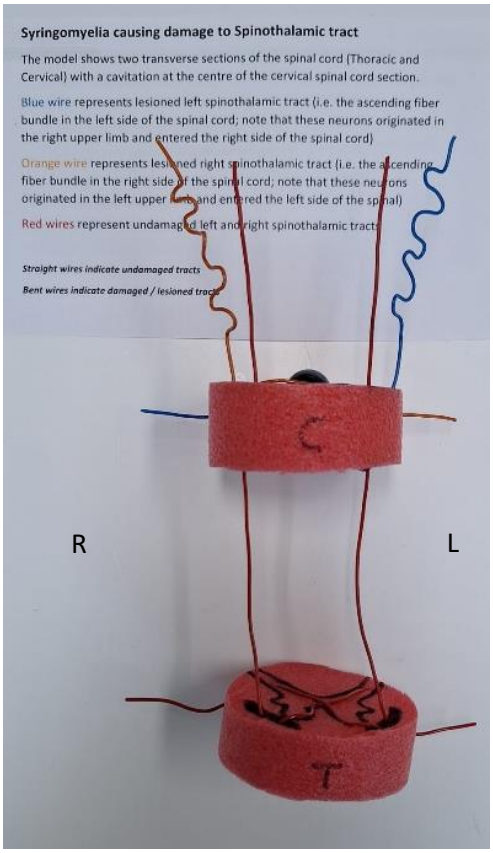


Step 3: Thread red wires from thoracic segment into the cervical segment.





Step 4: Attach both segments to white board using glue. Attach model description to top of white board (see 'Syringomyelia causing damage to Spinothalamic tract' information pasted below).



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 spinal cord section.

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 spinothalamic tracts

Straight wires indicate undamaged tracts

Bent wires indicate damaged / lesioned tracts