

Module 5 – SCI Biology Part II: Secondary Complications

Summary of Key Points

This concludes the module on SCI Biology Part II: Secondary Complications. Before you take the quiz, let's review the key points:

- Many people with SCI experience health problems that are distant from but related to the original injury, which are called “secondary complications.”
- Some secondary complications are a direct result of the injury and are caused by the interruption to communication between the brain and the body, while others are consequences of loss of motion or sensation, or because of the ways an SCI affects daily life.
- The autonomic nervous system, that you don't have to consciously control, is at the root of many (but not all) of the secondary complications that a person can experience following an injury to the spinal cord.
- The autonomic nervous system controls the automatic, involuntary functions of your body that you don't have to think about and that continue whether you are awake or asleep.
- It includes two coordinated systems that work together to keep the body in balance and functioning healthily:
 - One part is the **sympathetic** nervous system, which responds to stress or danger and is responsible for activating the body's “fight-or-flight” response.
 - And the **parasympathetic** nervous system, which is responsible for activating body's “rest-and-digest” processes.
- Examples of secondary complications caused by autonomic dysfunction include problems with breathing, the heart and circulatory system, bladder and bowel problems, sexual dysfunction, problems sweating and regulating body temperature, and more.
- Secondary complications that are caused by loss of motion and other changes to daily life after an SCI include:

- Changes to body composition, such as bone loss, muscle atrophy, and obesity, which are caused or exacerbated by disuse of parts of the body where motor function is lost or impaired.
- Chronic pain, especially musculoskeletal pain caused by injury or overuse, and visceral pain caused by organ dysfunction after an SCI.

Now, let's take the quiz!