
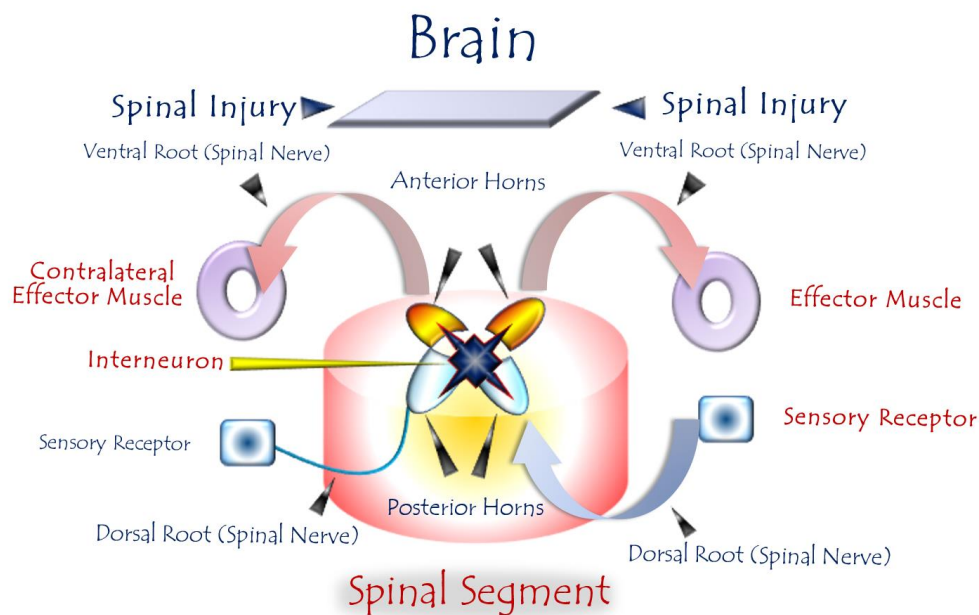


# The Hyperreflexia

## The Pathophysiology of Bilateral- Response Hyperreflex


[For more details concerning the Pathophysiology of the Bilateral- Response Hyperreflex, see the linked video:](#) 

Thanks to the data processing in the brain, the spinal reflex is always unilateral. However, in the upper motor injuries, the hyperreflex might manifest bilaterally. Since the interneurons of the two halves of the spinal segment do interlink between each other, the hyperreflex of both sides unite in one neural network. Hence, the two emerged pathological circuits of the hyperreflexia become one. Therefore, the activation of one circuit will unduly activate the contralateral one, and vice versa; **figure (1)**.



**Figure (1)**

### The Pathophysiology of Bilateral- Response Hyperreflexia



































[For more details concerning the Pathophysiology of the Bilateral- Response Hyperreflex, see the linked video:](#) 

Upon their efforts to discharge their burdens of raw data, the sensory neurons (SNs) sometimes arrive to communicate with the lower motor neurons (LMNs) of both sides; the ipsilateral and the contralateral sides, of the same spinal segment. Therefore, the two emerging hyperreflexes circuits unite in one pathological circuit, which is the bilateral- response spinal hyperreflex.

An example of the prementioned hyperreflex, a tapping on the right patellar tendon can provoke the extension of both knees simultaneously.

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-  [\*This Woman Can Give Birth to Female Children More Than to Male Children\*](#)
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