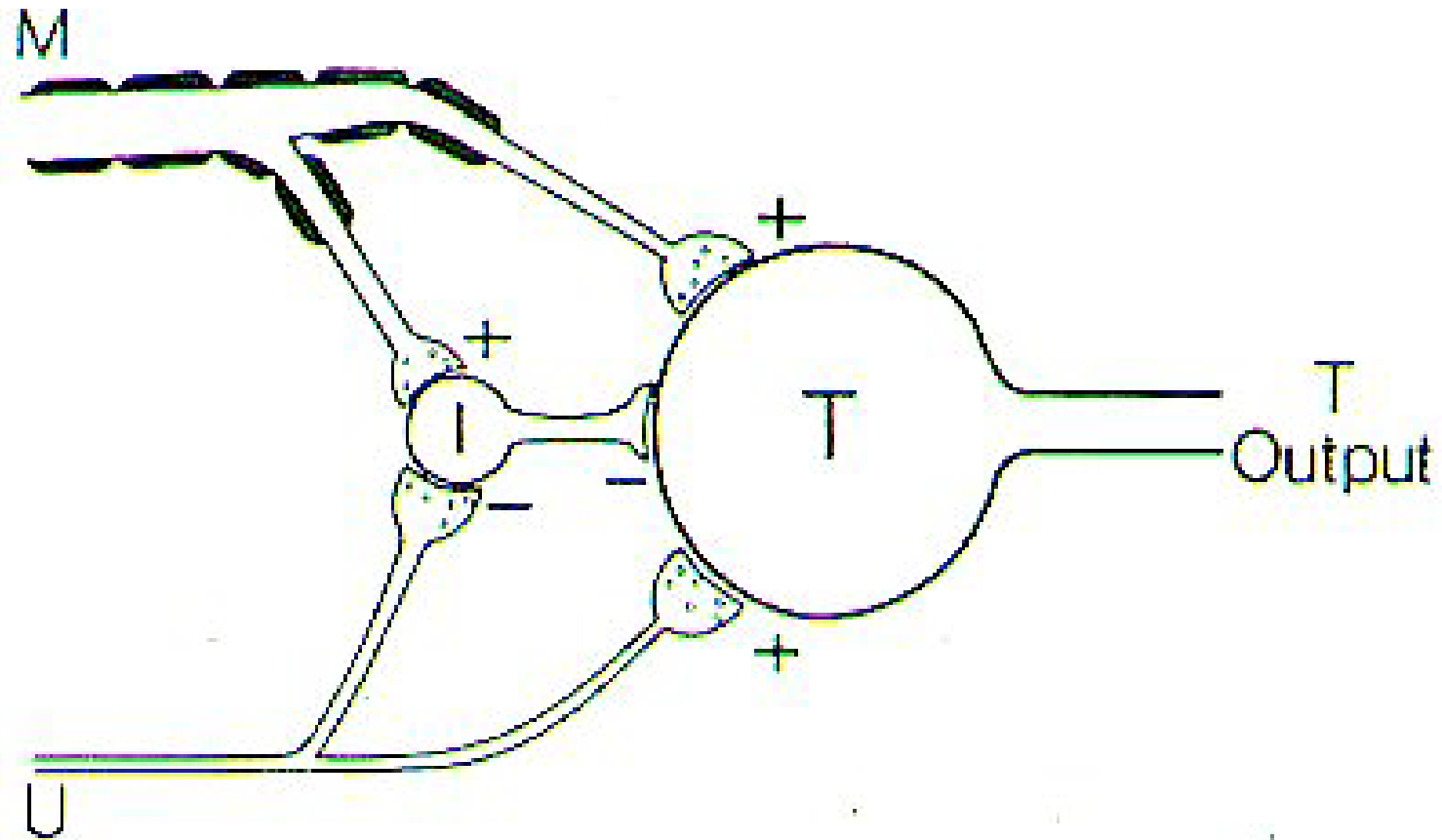


Mechanisms of SCS

Mechanisms of Action of Spinal Cord Stimulation:

- **Antidromic activation of large fibers.. Gate Control Theory**
- **Segmental Spinal Conductance Blockade**
- **Activation of Supraspinal Centers**
- **Release of Putative Neuromodulators**
- **Autonomic inhibition**

The Gate Control Theory



Evidence from Linderoth et al from the Karolinska Institute, Stockholm, Sweden is that SCS activates multiple mechanisms: **SCS...**

- **Activates putative gate control mechanisms**
- **Turns off sympathetic outflow at segmental and supraspinal regions**
- **Releases inhibitory neuromodulators including substance P, GABA, and alanine**