stimulation that no phasic spike discharge was induced in the CM, the limbic stimulation exerted an effect on the driven unitary discharge (DU) in the CM neuron responding to the splanchnic shock.

The driven unitary discharge (DU) was inhibited in more than half number of CM neuron by the amygdaloid or septal stimulation. The effect of amygdaloid and septal stimulation on the spontaneous unitary discharge (SU) of the CM neurons was as follows; The spontaneous unitary discharge (SU) was facilitated increasing in its frequency rate in 64.5% of CM neurons by the limbic stimulation while the SU was inhibited decreasing its frequency rate in 30% of the CM neurons.

It is concluded from the above results that perception of the viscerosensory information in the CM is modulated by the activity of the limbic system.

89. Afferent Projections of Pelvic Nerve to Upper Brain Stem

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Using microelectrode techniques in cats, afferent projections of the pelvic nerve to the upper brain stem were studied. Sixty-seven neurons were examined. They were distributed in the central grey, midbrain reticular formation, dorsolateral part of the hypothalamus, ventromedial nuclei of the thalamus. Small number of neurons were also encountered in the posterolateral and ventrolateral nuclei. Latencies of the responses were in the range of 25 to 50 msec. In reference to the magnitude of threshold, neurons were considered to be excited by fibers with conduction velocities of 50 to 39 m/sec in the pelvic nerve. All the neurons responded to both right and left pelvic nerves indicating no noticeable laterality. Sixty-four neurons were also excited by stimulation of the somatic nerve such as brachial or sciatic nerve. Latencies of responses to somatic nerve stimulation were approximately 10 msec shorter than those to pelvic nerve stimulation. When the pelvic nerve was stimulated repetitively, augmenting or recruiting phenomena were seen in the response. On the other hand, conditioning stimuli of the somatic nerve depressed or suppressed the response to pelvic nerve stimulation.