study describes the visual information coding ability of single neurons in the suprageniculate nucleus (Sg), and provides new data concerning the visual information flow in the suprageniculate/anterior ectosylvian pathways of the feline brain. The visual receptive fields of the Sg neurons have an internal structure rather similar to that described earlier in the anterior ectosylvian visual area (AEV). The majority of the Sg units can provide information via their discharge rate at the site of the visual stimulus within their large receptive fields. This suggests that they may serve as panoramic localizers. The sites of maximum responsivity of the Sq neurons are distributed over the whole investigated part of the visual field. There is no significant difference between the distributions of spatial location of maximum sensitivity of the AEV and the Sg neurons. The mean visual response latency of the Sg units was found to be significantly shorter than the mean latency of the AEV neurons, but there was no difference between the shortest latency values of the thalamic and the cortical single-units. This suggests that the visual information flows predominantly from the Sg to the AEV, though the corticothalamic route is also active. The Sg seems to represent a thalamic nucleus rather similar in function to both the first-order relays and the higher-order thalamic nuclei. These results, together with the fact that the superior colliculus provides the common ascending source of information to the suprageniculate/anterior ectosylvian pathway, suggest a unique function of the AEV and the Sg in sensorimotor integration ¹⁾.

1)

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