Summary

Present knowledge indicates the existence of many structures in the brain that are associated with sexuality and show sexual dimorphism. Interestingly, brain centers showing the relationship of sexuality are interconnected with the neural pathway, for example, the SCN sends nerve fibers to the POA, BNST and central amygdala. Centers showing sexual dimorphism are mainly located in the hypothalamus, which is involved in controlling our functions without our will. The hypothalamus is the seat of sexual behavior, sexual identity and orientation. The centers of the brain showing sexual dimorphism often show similarities in homosexual men and women. This confirms the Dorner's hypothesis, which assumes that homosexuals have a female hypothalamus. SDN-POA centers and SCN appear to be related to sexual orientation, whereas the SDN-POA centers and BNST to the gender identification. This implies the biological foundations of homosexuality and transsexualism. Interestingly, the same centers may be responsible also for functions not related to sexuality, such as the SCN that is also responsible for circadian rhythms, VMN for a feeling of satiety, and the amygdala and hippocampus for memory. There are three groups of brain structures exhibiting sexual dimorphism. First, it is the hypothalamus, which controls sexual behavior, secondly it is the amygdala, along with the hippocampus, involved in the process of remembering, and third is a system of commissures responsible for communication between two hemispheres.