

**Bates KA, Harvey AR, Carruthers M, Martins RN. Androgens, andropause and neurodegeneration: exploring the link between steroidogenesis, androgens and Alzheimer's disease. Cell Mol Life Sci 2005; 62: 281-92. (12515)** The relationship between menopause and cognitive decline has been the subject of intense research since a number of studies have shown that hormone replacement therapy could reduce the risk of developing Alzheimer's disease in women. In contrast, research into andropause has only recently begun. Furthermore, evidence now suggests that steroidogenesis is not restricted to the gonads and adrenals, and that the brain is capable of producing its own steroid hormones, including testosterone and estrogen. Sex hormones have been demonstrated to be of critical importance in the embryonic development of the central nervous system (CNS); however, we are only just beginning to understand the role that these hormones may play in the normal functioning and repair of the adult mammalian CNS. This review will summarize current research into the role of androgens and andropause on cognition and the possible mechanisms of action of androgens, with particular reference to Alzheimer's disease.