It was with great interest that I read the Letter to the Editor of Lichtigfeld and Gillman (2003) about their earlier finding of ‘the variable response to the exogenous opioid, psychotropic analgesic nitrous oxide (PAN) in depressed patients and the suggestion of an underactivity of the endogenous opioid system in depression’. In this context they refer to other findings in this direction such as \( \mu \)-receptor density and affinity in the brains of suicide victims (Gross-Isseroff et al., 1990) and the successful use of buprenorphine in the treatment of refractory unipolar non-psychotic major depressive disorders (Bodkin et al., 1995).

I would like to point out two other findings relevant to the relationship between depression and the opioid system:

(1) From the late 19th century until the introduction of the classic antidepressant drugs in the late 1950s the ‘Opiumkur’ was used in some European countries as an effective antidepressant treatment, especially in melancholic type of depression with a lower than expected incidence of addiction and withdrawal syndrome (Weber, 1987).

(2) We can show that the growth hormone response to the specific and highly potent \( \mu \)-opiate agonist receptor agonist, fentanyl, is significantly reduced in depressed patients, especially in recurrent unipolar and bipolar patients, in comparison to healthy controls (Matussek and Hoehe, 1989). Of further interest is that the well known euphoric action of opiate agonists measured with a visual analogue scale was found only in the healthy controls and not in depressed patients. This finding could explain the lower incidence of addiction reported in depressed patients with the Opiumkur mentioned above.

From our results we concluded, as did Lichtigfeld and Gillman (2003), that at least in a subgroup of depressed patients an underactivity of the endogenous opioid system exists, probably due to subsensitive \( \mu \)-opiate receptors (Matussek and Hoehe, 1989).

The opioid system deserves more attention in depression research.

References


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