

and severe depression in Austria, from the perspective of the *Gebietskrankenkassen*.

**Methods:** Clinical decision analysis techniques were used to perform a cost-effectiveness analysis to determine the cost per successfully treated patient. Treatment paths were developed from clinical trial data, interviews with Austrian physicians and the published literature.

**Results:** Mirtazapine was found to be the more cost-effective antidepressant, since it was clinically more effective. The cost per patient successfully treated with mirtazapine was between ATS15,157 and ATS17,404 less than with either amitriptyline or fluoxetine.

Sensitivity analyses showed the findings to be robust. Changing the proportion of patients absent from work, or the unit costs of psychiatric consultations with GPs and psychiatrists, or the proportion of hospital admissions had little effect on the cost-effectiveness of mirtazapine - the expected cost per patient successfully treated with mirtazapine remained less than for a patient successfully treated with amitriptyline or fluoxetine, due to its superior clinical profile.

Sick Fund payments to patients during their time off work accounted for up to 50% of the costs, whereas hospital stay accounted for up to 19% and the acquisition costs of antidepressants for between 6 and 18%.

**Conclusion:** Mirtazapine is more cost-effective than amitriptyline and fluoxetine. The cost per patient successfully treated with mirtazapine is between ATS15,000 and ATS18,000 less than with either amitriptyline or fluoxetine.

## Tues-P36

### PREGNANCY DURING USE OF MIRTAZAPINE

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We describe the first case of pregnancy during the use of mirtazapine. A 28-year old woman (1.68 cm, 63.3 kg) with a DSM-III-R diagnosis of a major depressive episode and a 17-HAMD score of 26, was included into a clinical study with mirtazapine. Both the patient and the husband were informed about the aim of the study, and were advised about the need for contraception. As the patient refused to use oral contraceptives, the couple agreed to use condoms in combination with contraceptive ovula. The patient responded well to short-term intravenous treatment with mirtazapine for 14 days (up to 45 mg/day), and continued with study medication for 6 months. At the last study visit, one week after the intake of last dose of mirtazapine, the pregnancy test was positive ( $\beta$ -HCG = 3728 mIU/ml). Last menstrual bleeding was 26 days before the last dose of mirtazapine. The couple agreed to continue pregnancy. The patient was regularly followed by psychiatrist and gynecologist. Her depression remained in remission, while the course of the pregnancy was normal. In 39th week she gave a birth to a healthy baby girl (3360 gr. 51 cm, Apgar score 8/10/10). Delivery was spontaneous, placenta complete, and amniotic fluid normal.

In our patient, the use of mirtazapine during the first month of pregnancy did not cause any complications during its further course, nor any adverse events or defects in the newborn.

## Tues-P37

### EFFECTS OF MILNACIPRAN AND VENLAFAXINE ON EXTRACELLULAR LEVELS OF 5-HT AND NORADRENALINE IN GUINEA PIG HYPOTHALAMUS

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The antidepressants milnacipran and venlafaxine inhibit both the uptake of 5-hydroxytryptamine (5-HT, serotonin) and noradrenaline (NA) in rat brain synaptosomes. The aim of the present work was to compare the effects of milnacipran and venlafaxine on the extracellular levels of 5-HT and NA and their metabolites as a resulting increase in their synaptic amounts in the guinea pig brain. The output of 5-HT and NA, and their respective metabolites, 5-hydroxyindole acetic acid (5-HIAA) and 4-hydroxy-3-methoxyphenyl-glycol (MHPG), were determined by microdialysis in the hypothalamus of freely moving guinea pigs. The extracellular levels of 5-HT and NA were increased (% of basal values) in a dose-dependent manner and to a similar extent after the i.p. administration of milnacipran (by 197 and 440 for 5-HT; by 211 and 497 for NA, at 10 and 40 mg/kg, respectively). The i.p. administration of venlafaxine enhanced the output of 5-HT by 432 and 428% of basal values at 10 and 40 mg/kg, respectively, while the output of NA was not modified at 10 mg/kg and was slightly increased by 111% of basal values at 40 mg/kg. The basal extracellular levels of 5-HIAA were not modified by milnacipran at 10 and 40 mg/kg whereas those of MHPG were decreased by 57 and 47% of basal values at these doses, respectively. Venlafaxine reduced the output of 5-HIAA by 70 and 60% and of MHPG by 84 and 79% of basal values after the administration of 10 and 40 mg/kg, respectively. A more evident effect on the NA system was obtained by venlafaxine when the dose of 160 mg/kg was used (1334 and 790% of basal values for 5-HT and NA, respectively, and 50% of basal values for 5-HIAA and MHPG). These results indicate that milnacipran, by blocking the uptake of 5-HT and NA, increases about equipotently the extracellular levels of 5-HT and NA, confirming previous *in vitro* studies. In contrast *in vivo* venlafaxine is more potent on 5-HT than NA systems. It has been shown previously that a major metabolite of venlafaxine is less active on NA than on 5-HT uptake which could explain this point.

## Tues-P38

### MIANSERIN UND ALPRAZOLAM IN DER BEHANDLUNG VON HERZSCHMERZ-ZUSTANDEN

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**Ziel:** Auswirkung von Mianserin und Alprazolam auf die Perzeption des Herzschmerzes. Es wurden 82 Patienten untersucht (42-koronare Herzkrankheit, 36-funktionelle Kardialgie).

**Methoden:** psychopathologische Untersuchung Hamilton - Angst Skala (HARS), Fragebogen SCL-90, MPQ, sowie Treadmill-test.

**Ergebnisse:** Nach Kriterien ICD-10 wurden in beiden Gruppen keine wesentliche Unterschiede entdeckt. Es stellten sich deutliche Angst- und Depressionstörungen heraus. Das widerspiegelte sich bei den Herzschmerzpatienten im grossen Anteil der diagnostischen Kategorien, die zum Abschnitt F 3 (affektive Störungen) gehören. Das Vorherrschen von Somatisierung, Angst, Depression und Zwangstörungen wurde mit den Daten von SCL-90 bestätigt. Die Werte der HARS bestätigen die Rolle der Angst (der somatischen und psychischen). Die MPQ - Angaben zeigen die grosse Rolle affektiver Bestandteile der subjektiven Schmerzperzeption