

Part B – Selected Issues

1 Buprenorphine: Treatment, Misuse and Prescription Practice

1.1 Overview

Legal situation

Buprenorphine is, alongside other substances, in particular methadone, approved since 2000 for the substitution treatment of opiate addicts in Germany. It is prescribed on the basis of the regulations of the Narcotic Law (BtMG).

The special pharmaceutical information on this substance (Fachinformation) states that buprenorphine is in the first place to be used for opioide addicts, when the duration of dependence is rather short and dependence has not yet fully stabilized. Due to its long half-life period the medicament can be applied after a phase of stabilization every two or three days instead of every day, increasing the dose accordingly. In this case additional use of other psychotropic substances has to be excluded with high certainty.

Besides a number of somatic reasons for contraindication the substance should not be applied in case of acute alcoholism. Parallel medication with benzodiazepines also is contraindicated due to increased risk of death. If such substances are found in urine tests, which have to be done on a regular basis, or if intravenous drug use takes place, especially application through 'take-home' doses has to be stopped.

It is assumed as a rule, that during the initial phase of treatment the user is generally unable to drive a car. After a stable dose has been reached, this question has to be examined individually.

Research results

The pharmacological particularity of buprenorphine, which has the effect of both an opiate agonist and antagonist, plays an important role in experts' discussions in Germany and in the comparison of the effective spectrum. However, based on present study results, opinions diverge on the question whether this substance is superior to other substitution substances (e.g. Schottenfeld 1997, Montoya 2004).

A survey by Davids and Gastpar (2004) deals with the use of buprenorphine in withdrawal and substitution treatment. Apart from the more easy administration as sublingual tablet, the work underlines the reduced respiratory depression effect which makes buprenorphine a particularly safe medication among the group of opiates. Undesired side effects are relatively rare also in clinical practice. Animal models suggest a lower addiction potential which is contradicted by anecdotal reports mainly from France, where cases of misuse have been found. The authors summarized the evaluated studies as follows: The positive effect in withdrawal and substitution treatment is proven. Buprenorphine should be seen as a valuable supplement to the various treatment possibilities, but cannot replace these.

The use of buprenorphine through General Practitioners has been examined in 2000/2001 within a prospective naturalistic study. During 12 weeks 148 subjects were examined. The substance is administered to persons who have already undergone substitution treatment or respectively to clients who have abandoned methadone treatment. The minimum age required for the participation in the study was 18 years. Information on treatment duration, dosage, drug use patterns and withdrawal symptoms were registered. Data collection took place at treatment begin as well as after 1, 5, 9 and 12 weeks. First results show, that 73% of the clients finished treatment as planned after on the average 86 days. For 55% no opiates were detected in urine afterwards. Withdrawal symptoms decreased significantly (Verthein et al. 2003).

There are more studies available, but methodological limitations reduce their power of evidence considerably:

- Paetzold et al. (2000) investigated in an open study at 15 patients if buprenorphine is adequate to assistant detoxification treatment.
- Kagerer et al. (2002) studied in an computer simulation effects of buprenorphin on car driving.

1.2 Treatment

Analysis of the substitution registers have shown, that in 2003 for about 12,3% of all reported cases of substitution buprenorphin was prescribed.

First, not yet published results of the COBRA-study show that in particular in small practices General Practitioners treat 10%-20% of their substitution patients with buprenorphine (Bayerisches Staatsministerium für Umwelt, Gesundheit und Konsumentenschutz personal communication).

In the Land Berlin, buprenorphine was administered only in 301 cases (5,6% of all registered substitution cases) in 2003. Due to higher costs, the preparation was not used as a standard medication but mainly for short transitional periods (e.g. withdrawal, final phase of the substitution treatment) (Senatsverwaltung für Gesundheit, Soziales und Konsumentenschutz Berlin personal communication).

In Saxony in 2003 a total of 74 persons were substituted with buprenorphin, a percentage of about 14% (Sächsisches Staatsministerium für Soziales personal communication).

1.3 Misuse

A reference study on the misuse of pharmaceuticals through persons in out-patient addiction treatment found in 2002 for the first time buprenorphin amongst the misuse pharmaceuticals, which has been reported 8 times (2% of all nominations). Half of the cases were related to persons with primary opiate res. cocaine dependence (Rösner and Kufner 2003).

Cases of misuse are not known according to the drug commissioners of Bavaria, Berlin and Mecklenburg West-Pomerania. Although singular cases cannot be excluded, the extent of misuse is not considered as problematic by the authorities involved.

In Bavaria, not one single monotoxic buprenorphine-related death is known (Bayerisches Staatsministerium für Umwelt, Gesundheit und Konsumentenschutz personal communication).

There are no indications of diversions of buprenorphine for the illegal market.