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Recreational amitriptyline abuse

Rekreacyjne przyjmowanie amitryptyliny

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Amitriptyline is a potent anticholinergics, rarely used as a drug of abuse. Two cases of amitriptyline dependency lasting for almost twelve months were described. According to the patients the abuse with amitriptyline guarantee them safety not to be uncovered by parents and doctors who systematically checked their urine with typical narcotic tests.

Case report: Two patients with a history of abuse with amphetamine and clonazepam were admitted to the Clinic because of intoxication with amitriptyline. They denied the suicidal attempt and explained that they used amitriptyline in a dosage of 100 to 200 mg per day as a drug of abuse. On the day of admission one of the patients had increased the dosage up to 600 mg which caused an acute intoxication. Conclusion: Antidepressants should be treated as a drugs with possible abuse ability.

Introduction

There are many papers on anticholinergics abuse, but reports of abuse with potent anticholinergic tricyclic antidepressants such as amitriptyline are extremely rare [1-3]. Two cases of amitriptyline abuse, which caused an acute intoxication were described. The most interesting aspect of this observation is the reason of amitriptyline misuse.

Case report

Mr A., a 19-year-old patient was admitted to the Department of Toxicology because of typical symptoms of acute amitriptyline intoxication (unconsciousness, HR 120-140 beats/min., BP 90/60 mmHg, respiratory rate 25 breaths/min., body temperature 38.0°C, dry skin, dilated and reactive pupils, one episode of convulsion). Serum amitriptyline level was 553.8 ng/ml. After 8 hours when the patient regained consciousness, he explained that he used amitriptyline for relaxation and contentment. Three years before starting amitriptyline abuse, the patient abused amphetamine. Because of regular controls by his parents (observation of dilated pupils and nervousness, systematic urine checking with biochemical drug screening tests) he changed the drug of abuse for benzodiazepines. He took one tablet of clonazepam (á 2 mg) every 30 minutes up to a dosage of 10 mg. One year ago the patient's mother took him to the municipal hospital because of his strange behaviour and benzodiazepines were found in his urine. Since then he started to abuse amitriptyline as a drug that is not routinely screened in drug abusers. He took from 1 to 20 tablets (á 10 mg) in two or three doses every 30 minutes just to experience euphoria and "buzz" lasting from 2 to 4 hours.

Amitriptylina jest lekiem o silnym działaniu antycholinergicznym, nie-zwykle rzadko stosowanym jako środek odurzający. W pracy przedstawiono dwa przypadki nadużywania amitryptyliny. Stosowanie leku wynikało z poczucia braku możliwości jej wykrycia przez rodziców i lekarzy, którzy systematycznie badali ich mocz w kierunku obecności substancji narkotycznych.

Opis przypadku: Dwóch chorych z wywiadem nadużywania amfetaminy oraz klonazepamu zostało przyjętych do Kliniki z powodu ostrego zatrucia amitryptyliną. Chorzy negowali dokonanie próby samobójczej i wyjaśnili, że przyjmują amitryptylinę w dawce od 100 do 200 mg w celach odurzania się. W dniu przyjęcia jeden z pacjentów zwiększył dawkę przyjętego leku do ok. 600 mg co spowodowało ostrą intoksykację. Wniosek: Leki antydepresyjne powinny być traktowane jak środki mające potencjalne działanie uzależniające.

For almost one year his mother as well as the doctors in the hospitals were not able to confirm in routine tests of his blood and urine that the patient kept on abusing with drugs. After about a year of abusing small doses of amitriptyline the patient learned from other abusers that to intensify and prolong the effects of amitriptyline he should "increase the dosage up to 12 times more than clonazepam". On the day of admission the patient took for the first time 60 tablets of amitriptyline (up to the total dose of 600 mg) what caused an acute intoxication described above. In four-month follow up it was found out that Mr A was still abusing amitriptyline and he was also seeking for a new drug difficult to be checked in the blood and urine tests.

Mr B., a 21-year-old patient was brought to hospital by his parents after amitriptyline abuse. Typical symptoms of anticholinergics' intoxication were observed (HR 110-120 beats./min., BP 110/60 mmHg, respiratory rate 21 breaths/min., dilated pupils and temperature 37.4°C). Serum amitriptyline level was 235.6 ng/ml. The patient had a contact with amphetamine three years earlier but for the last nearly 2 years he abused clonazepam. He took one tablet of clonazepam (á 2 mg) every 15 minutes up to a dosage of 8 mg. One year earlier, he started to abuse amitriptyline recommended by his colleague Mr A. Every weekend he took from 1 to 10 tablets of amitriptyline (á 10 mg) in two or three doses every 30 minutes. The total dose of 100 mg allowed him to experience relaxation and giddiness. On the day of admission the patient used his usual dosage of amitriptyline (100 mg). As he said, he was afraid to take more when he saw the state of his friend who had become unconscious. Mr B was forced by his parents to attend therapy of addiction.

Common for both the patients was that for almost a year they were checked at home and hospitals many

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times because of their strange behaviour but all tests were negative. The doctors who examined them did not assume that their behaviour could be connected with abuse of drugs like amitriptyline.

Discussion

The reports of non-suicidal intentional amitriptyline abuse are rare [1-3]. Nevertheless twenty six years ago Cohen et al. concluded that misuse of this drug is not uncommon and should be carefully considered prior to prescribing this medicine to patients dependent on or abusing other drugs [1]. In his survey of 346 persons enrolled in a methadone maintenance program, 25% admitted that they had been taking amitriptyline with the purpose of achieving eupho-

ria. Moreover 35% patients had random urine specimen positive for that drug [1]. Later that problem was a little bit forgotten probably because of a replacing of anticholinergics by "more attractive" drugs.

The most interesting aspect of this paper is the intention of those patients to abuse amitriptyline instead of newer and "more potent" drugs. According to the abusers the main reason, except to achieve the euphoric effects, was to avoid the discovery of this drug in their blood and urine. It is an example how theoretically reasonable parental and medical practice can lead to unexpected behaviour. It seems that physicians should pay more attention to prescribing

medicines for patients with drug abuse history even if it concerns drugs with low potential of abuse as tricyclic antidepressants [2].

Conclusion

Antidepressants should be treated as a drugs with possible abuse ability.

References

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