Serotonin syndrome is an iatrogenic disorder that was first reported in the 1950s. Serotonin syndrome is characterized by neuromuscular symptoms, alteration in mental status and derangement of autonomic function, taking into consideration that those symptoms do not evolve from psychiatric disorder. Major differential diagnosis are malignant neuroleptic syndrome, infectious causes, herpetic encephalopathy, myocardial necrosis, cerebrovascular insult, delirium tremens and intoxication by adrenergic or anticholinergic agents. The precise prevalence of the serotonin syndrome is difficult to assess and according to some authors it is reported that approximately 85 percent of clinicians are unaware of the serotonin syndrome as a clinical diagnosis. Incidence of medication induced delirium is variable, although there has been evidence about cases of delirium following tricyclic antidepressant and/or SSRI administration.

We present a patient in which case serotonin syndrome was suspected twice (in the differential diagnosis). Her first hospitalization was in 2004. (ICD X dg: X61, F33.2), after a suicidal attempt with 6 tablets of sertraline of 50 mg and 15 tablets of tianeptin. She was agitated and fearful. Therefore she was transferred to intensive care unit with consideration that she might have had serotonin syndrome. The patient was subfebrile (tax 37.6 °C), highly tremorous and had hyperreflexia. After she was released from the hospital she was not taking psychopharmachological drugs regularly. She was admitted to the hospital afterwards on two occasions, in 2005. ; (ICD X dg: X61, F33.2), and in 2006. (ICD X dg: F33.3).

Before her fourth admittance to the hospital in 2008, she has been taking amitriptylin (in unknown doses and she has been increasing the dose before admission). The patient was brought to the emergency room in the presence of police after the neighbours reported her to the police. She was fully conscious, disorientated in time, anxious, tense, agitated, fearful, presenting incoherent speech, with tongue, arms and hole body tremor. Hyperreflexia was present, and the patient was afebrile. Both serotonin syndrome and medication induced delirium were taken into consideration. During her fourth hospitalization the diagnosis was revised to BAD.