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Social and Medical Ethics: Implications for Romanian Protocols Regarding the Therapy of Alcohol Withdrawal Syndrome in Trauma Patients

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Abstract

In medical practice, a particularly important therapeutic problem is the patient with traumatic injuries developing ethanol withdrawal during hospitalization. The management of such patients requires both a comprehensive approach in terms of therapy and a very delicate one regarding issues of medical ethics and social implications and costs. More medical schools, among which the ones in France, the US, the UK, etc., opt for the administration of alcoholic solutions, perfusable ones included, for preventing withdrawal symptoms. We consider that currently the relevant Romanian protocols are inappropriate as they ignore the fact that an addiction can be cured only if the patient is willing to and, even if this is the case, alcohol dependence is unlikely to be cured. Therefore, we believe that the preventive administration of certain alcoholic solutions in hospital would be beneficial both to the patient's evolution and to the prevention of the social implications of treating the alcohol withdrawal syndrome (AWS) in a trauma center or intensive care unit.

Keywords: alcohol withdrawal, social implications, alcohol addiction, alcohol withdrawal in trauma services, benzodiazepines versus alcoholic solutions

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Introduction

In medical practice, a particularly important therapeutic problem is the patient with traumatic injuries developing ethanol withdrawal during hospitalization. The management of such patients requires both a comprehensive approach in terms of therapy and a very delicate one regarding issues of medical ethics and social implications and costs. The course of treatment must take into account the ethical aspects involved and the social impact upon patients and their relationship with the medical staff and with the other patients hospitalized in the same department, as well as that between the other patients and the medical staff. One of the main social and medical problems regarding the Alcohol Use Disorder derived by the widespread opinion that it is not a disease but a fault. This judgment can win in the public opinion as well as among medical professionals. In the last few years, our knowledge about the alcoholism has been greatly increased thanks to both informative campaigns and education, and today we can assert that alcoholism is really a disease and not a moral problem (Gitto *et al.*, 2016; Postolache, Dima-Cozma, & Cojocaru, 2013). Alcohol Use Disorder is a clinical condition associated with substantial disability and loss of quality of life. Furthermore, alcohol use is a major reason of accidents and violence episodes (Ciubara *et al.*, 2016). Research on the neural substrates of drug reward, withdrawal and relapse has yet to be translated into significant advances in the treatment of addiction. One potential reason is that this research has not captured a common feature of human addiction: progressive social exclusion and marginalization (Heilig *et al.*, 2016). A careful analysis of satisfaction questionnaires and complaints about accommodation conditions, quality of medical services, and medical staff behavior revealed that more than 80% of these involve directly or indirectly a case of ethanol withdrawal (Valcea *et al.*, 2016). To assess the psychologic distress of the patients and family patient in the hospitalization period, Melfi, Croghan, & Hanna (2000) evaluated axis I of the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders. The diagnostic criteria for major depression include some neuro-vegetative symptoms, such as loss of appetite, insomnia, and fatigue. Patients' utilization of confidants was used as an indicator of social support. This information was obtained in a structured interview as we previously reported. Taken together with the results of the report, these findings suggest that alcohol withdrawal is a critical factor for the identification of psychologic distress in patients hospitalized at the same time.

Current practice

Currently, a patient in Romanian specialist clinics, with injuries that are not life-threatening so as to require surgery in the first few hours after admission to the specialist service, will develop AWS in the preoperative period because, at this moment, the infrastructure existing in specialist services and the human resources available do not allow surgery within 6 hours after patient presentation at emergency department (Lieber, 1995). Another aspect that occurs in the therapeutic conduct adopted is the poor health education of the Romanian people, which generally leads to a delayed presentation of patients with traumatic injuries in professional services (Diaconu *et al.,* 2014). A consequence of the problem mentioned previously is that, at presentation, the "golden operative moment" (the first 6 hours after injury) has passed. This involves progressive deterioration of the patient's general condition, with rapid onset of AWS against a background of secondary anemia because of intrafocal bleeding (Kosten & O'Connor 2003).

After clinical and laboratory evaluation and preanesthetic consultation, once the ethanol withdrawal symptoms are present, the patient is scheduled for psychiatric consultation. Following psychiatric consultation, the patient receives specialized treatment consisting of the administration of benzodiazepines and antipsychotics. The therapeutic psychiatric diagram also includes correction of fluid and electrolyte imbalances, the basic treatment of associated diseases, vitamin supplements, vitamin B1, folic acid, and manganese sulfate to prevent convulsions, drug induced sleep, treatment of malnutrition with which it is often associated (Jensen *et al.*, 1988; Mayo-Smith, 1997; Toader *et al.*, 2017). The remission of the AWS under treatment occurs in several days up to a week. During this period, the patient is hospitalized in the Orthopedics-Traumatology or Anesthesiology service and Intensive Care (depending on the severity of the case) and anesthesia is not recommended for adequate surgical treatment because anesthetics interfere with the evolution of AWS and may lead to aggravated symptoms and eventually to death (Amato, Minozzi, & Davoli, 2011; Spies *et al.*, 1996). It should be noted that, in the absence of proper treatment, AWS results in patient's death in 20% of cases (Moore *et al.*, 1989). The stand-by period until remission of AWS leads to worsening of the postoperative prognosis of patients through progressive deterioration of the general condition despite supportive therapy, and increases perioperative, intraoperative and postoperative risks (Chiang, 1995). Another negative aspect of traumatic pathology evolution is high intraoperative bleeding caused by intrafocal bleeding due to initiation of bone consolidation processes (Herve *et al.*, 1986). Also, in case of hallucinations and extreme psychomotor agitation, immobilization of patients is required (Iliescu-Bulgaru *et al.*, 2015). These symptoms may often lead to important local complications (secondary opening of the fracture point, extensive tissue damage), which result in poor patient prognosis (Imdahl & Imdahl, 1992; Jurkovich *et al.*, 1993).

Discussion

We believe that AWS is a social problem both in Romania and in all countries where alcohol is legally consumed, without restrictions or definite limitations (Ciubara *et al*., 2015). The literature admits that the incidence of AWS is over 8% among patients admitted to hospital and reaches over 31% in surgery services (Foy & Kay 1995). Therefore, this phenomenon and its consequences represent a challenge in clinical practice (Gentilello *et al.*, 1995). Unlike in Romania, where most withdrawal syndromes are recorded in the preoperative period, in countries with a more efficient intake and treatment, it is reported as a postoperative and intensive care event. The onset of this syndrome, the risk of complications and, mostly, the considerable risk of death even after effective treatment protocols made researchers insist even more on the prevention of the onset of AWS, which involves both the administration of benzodiazepines as well as alcoholic solutions (Craft *et al*., 1994, The Plinius Major Society, 1994). More medical schools, among which the ones in France (Societe Francaise d'Alcoologie), the US, the UK, etc., opt for the administration of alcoholic solutions, perfusable ones included, for preventing withdrawal symptoms (Spies, Rommelspacher, & Schaffartzik, 1995). Some authors report better results following the administration of alcoholic solutions compared to benzodiazepines, whereas others state that the results are similar (Weinberg- Jordan, 2008). What is important to note, however, is a medical conduct that prefers preventing AWS to treating it. In this way, perioperative and anesthetic risks are reduced for these patients, and traumatic issues come first. After surgery, the patient is referred to a service specialized in treating addictions. According to the legal regulations in force (Hospital Law 95/2006 and Patient Rights Act 46/2003), the treatment protocols completely prohibit the administration of alcoholic solutions by venous and oral route with the purpose of prevention or treatment of ethanol withdrawal syndrome. Also ethical conduct prevents the doctor from administering to a patient a substance that maintains an addiction to it. On the other hand, all professional ethics has the primordial requirement not to endanger the life of the patient, the requirement that is not satisfied, because the withdrawal syndrome is a pathology that threatens life. From a social point of view, the impact of withdrawal syndrome on other patients and their families has not yet been quantified, but the emotional impact is certainly very strong. A proof of this is to raise awareness among the media about the methods of treatment for patients with withdrawal, especially with regard to the means of contention (patient immobilization).

Conclusion

In our opinion, the relevant protocols currently in use in Romania are inappropriate as they ignore the fact that an addiction cannot be cured if patients are not willing to and, even if they were, alcohol dependence is unlikely to be cured. All of the above arguments lead to the idea that the major emergency is treating trauma and implicitly preventing withdrawal syndrome and subsequently treating alcohol addiction. Therefore, we believe that the preventive administration of certain alcoholic solutions in hospital would benefit the patient's evolution and would prevent the social implications of treating AWS in a trauma center or intensive care unit.

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